# Deutsches Gewässerkundliches Jahrbuch

## Weser- und Emsgebiet

# 2012

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**Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz**

**Norden 2014**

In Zusammenarbeit mit der Wasser- und Schifffahrtsverwaltung des Bundes und den gewässerkundlichen Dienststellen der Länder Hessen, Nordrhein-Westfalen, Thüringen, Sachsen-Anhalt und dem Deutschen Wetterdienst

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**Anhang**

**Übersichtskarte** für das Weser- und Emsgebiet

Das DGJ wird auf Grundlage der Richtlinie für die Aufstellung des Deutschen Gewässerkundlichen Jahrbuchs (LAWA, 3. Auflage 1994) erstellt.

# Vorwort

Sorgfältig erfasste und ausgewertete Daten zu Wasserständen und Abflüssen in oberirdischen Gewässern, zu Grundwasserständen und zu Niederschlägen bilden sowohl für die tägliche praktische als auch wissenschaftliche Arbeit auf dem Gebiet der Wasserwirtschaft wichtige Grundlagen. Auch für das Jahr 2012 können Vertreterinnen und Vertreter aus Wissenschaft, Verwaltung und Wirtschaft hierfür auf das Deutsche Gewässerkundliche Jahrbuch (DGJ) zurückgreifen. Wie zuvor zeichnet sich auch die aktuelle Ausgabe durch tabellarische Darstellungen der unterschiedlichen Parameter aus und sichert somit ein hohes Maß an Übersichtlichkeit und Vergleichbarkeit.

Aus hydrologischer Sicht war das Jahr 2012 überwiegend wechselhaft und in den meisten Monaten zu trocken. Einem wechselhaften und zu nassen Januar folgten bis einschließlich Juni fünf im Vergleich zum langjährigen Mittelwert zu trockene Monate, die sich ansonsten fast alle durch ebenfalls wechselhaftes Wetter auszeichneten, wobei lediglich der März als stabiler, sonniger Frühlingsmonat herausragte. Die Trockenheit sorgte dafür, dass die oberflächennahen Grundwasserstände teilweise deutlich unter dem langjährigen Mittelwert lagen.

Der Juli präsentierte sich ebenfalls wechselhaft, war mit Niederschlagsmengen von bis zu 202 Prozent des langjährigen Mittels zu nass, bevor er von einem sehr sonnigen August abgelöst wurde, der um die Monatsmitte die heißesten Tage des Jahres lieferte.

Vom ,,goldenen Oktober“ bis zum ersten Wintereinbruch zeigte dieser Monat alle Facetten, die sich mit seinem Namen verbinden. Im südlichen Niedersachsen lagen die Niederschläge unter dem langjährigen Mittel, während im nordöstlichen Landesteil die Niederschlagsmengen teilweise doppelt so hoch wie normal ausfielen.

Der darauf folgende November zeigte sich mit trübem Wetter und wenig Sonnenschein ebenfalls von seiner typischen Seite, während der Dezember mit einem Wechsel von Schnee und Regen sowie beinahe frühlingshaften Temperaturen um Weihnachten den wechselhaften Charakter dieses Jahres noch einmal unterstrich. Nach einem sehr trockenen November führten die Niederschläge gerade im südlichen Niedersachsen zu einem Auffüllen der Trinkwassertalsperren im Harz.

Der Band Weser-Ems ist einer von zehn Teilbänden, die in ihrer Gesamtheit das DGJ bilden.

Die Unterlagen zur Erstellung dieses Teilbandes wurden von den gewässerkundlichen Dienststellen der Länder Hessen, Niedersachsen, Nordrhein-Westfalen, Sachsen-Anhalt und Thüringen sowie von der Bundesanstalt für Gewässerkunde und dem Deutschen Wetterdienst erarbeitet. Alle Tabellen und Grafiken werden mit bundesweit einheitlichen EDV-Programmen erstellt.

Mein Dank gilt allen Mitarbeiterinnen und Mitarbeitern der beteiligten Dienststellen, die durch ihre Bearbeitung der Unterlagen die Herausgabe unterstutzt haben.

Norden, im März 2015

Niedersächsischer Landesbetrieb für
Wasserwirtschaft, Küsten- und Naturschutz
Direktion

Popp
Direktor

# Alphabetisches Verzeichnis der Pegel

| Meßstelle | | Gewässer oder Grundwasserlandschaft | Land | Daten verfügbar bei | | Daten veröffentlicht auf Seite | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nummer | Name | | | | | W | Q | S | Ly | WGw | Qu |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 42780500 | **Adelshausen** | Pfieffe | HE | HLUG Wiesbaden | RP Kassel | | 136 | | | | |
| 42800502 | **Affoldern** | Eder | NI | WSD Mitte | WSA Hann.-Münden | | 140 | | | | |
| 3211000000300 | **Ahlen** | Werse | NW | LANUV NRW | LANUV NRW | | 264 | | | | |
| 4639000000100 | **Ahmsen** | Werre | NW | LANUV NRW | LANUV NRW | | 162 | | | | |
| 3259000000100 | **Albersloh** | Werse | NW | LANUV NRW | LANUV NRW | | 265 | | | | |
| 4854112 | **Aligse** | Burgdorfer Aue | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 184 | | | | |
| 41900104 | **Allendorf** | Werra | HE | WSD Mitte | WSA Hann.-Münden | 47 | 107 | | | | |
| 440004 | **Alleringersleben** | Aller | ST | LHW Magdeburg | LHW Magdeburg | | 170 | | | | |
| 42880458 | **Alsfeld** | Schwalm | HE | HLUG Wiesbaden | RP Kassel | | 144 | | | | |
| 4821103 | **Altenau O** | Oker | NI | NLWKN | Harzwasserwerke | | 176 | | | | |
| 3267000000100 | **Amelsbüren** | Emmerbach | NW | LANUV NRW | LANUV NRW | | 266 | | | | |
| 3723105 | **Apeldorn** | Nordradde | NI | NLWKN | NLWKN, Bst. Meppen | | 279 | | | | |
| 447000 | **Arenshausen** | Leine | TH | TLUG Jena | SUA Sondershausen | | 187 | | | | |
| 4281334000100 | **Aue** | Preisdorf | NW | LANUV NRW | LANUV NRW | | 142 | | | | |
| 3672106 | **Augustenfeld** | Südradde | NI | NLWKN | NLWKN, Bst. Cloppenburg | | 277 | | | | |
| 42810204 | **Auhammer** | Eder | HE | HLUG Wiesbaden | RP Kassel | | 138 | | | | |
| 26184561 | **Axstedt** | Bederkesaer-Zevener Geest | NI | NLWKN | NLWKN, Bst. Stade | | | | | 32 | |
| 42710050 | **Bad Hersfeld 1** | Fulda | HE | HLUG Wiesbaden | RP Kassel | | 126 | | | | |
| 42430156 | **Bad Salzschlirf** | Altefeld | HE | HLUG Wiesbaden | RP Kassel | | 133 | | | | |
| 3926104 | **Bagband** | Bagbander Tief | NI | NLWKN | NLWKN, Bst. Aurich | | 282 | | | | |
| 4882173 | **Berka Rhume** | Rhume | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 193 | | | | |
| 4745000000100 | **Bierde** | Gehle | NW | LANUV NRW | LANUV NRW | | 166 | | | | |
| 41850054 | **Bischhausen** | Wehre | HE | HLUG Wiesbaden | RP Kassel | | 121 | | | | |
| 45300200 | **Bodenwerder** | Weser | NI | WSD Mitte | WSA Hann.-Münden | 39 | 94 | 216 | | | |
| 4961112 | **Bohmte** | Hunte | NI | NLWKN | NLWKN, Bst. Cloppenburg | | 208 | | | | |
| 49700200 | **Brake** | Weser | NI | WSD Nordwest | WSA Bremen | 73 | | | | | |
| 3633101 | **Bramsche** | Hase | NI | NLWKN | NLWKN, Bst. Cloppenburg | | 272 | | | | |
| 44430055 | **Braunsen** | Twiste | HE | HLUG Wiesbaden | RP Kassel | | 152 | | | | |
| 4442700000100 | **Bredelar** | Hoppecke | NW | LANUV NRW | LANUV NRW | | 151 | | | | |
| 49100509 | **Bremen, Gr. Weserbrücke** | Weser | HB | WSD Nordwest | WSA Bremen | 64 | | | | | |
| 49900108 | **Bremerhaven, Alter LT** | Weser | HB | WSD Nordwest | WSA Bremerhaven | 76 | | | | | |
| 4819102 | **Brenneckenbrück** | Aller | NI | NLWKN | NLWKN, Bst. Süd, BS | 53 | 172 | | | | |
| 444210 | **Bühne-Hoppenstedt** | Ilse | ST | LHW Magdeburg | LHW Magdeburg | | 180 | | | | |
| 33225991 | **Büren I** | Rehburger Stadium | NI | NLWKN | NLWKN, Bst. Hann-Hild | | | | | 33 | |
| 3655101 | **Bunnen** | Hase | NI | NLWKN | NLWKN, Bst. Cloppenburg | | 273 | | | | |
| 48300105 | **Celle** | Aller | NI | WSD Mitte | WSD Mitte | 54 | 173 | | | | |
| 4965116 | **Colnrade OP** | Hunte | NI | NLWKN | NLWKN, Bst. Brake | | 210 | | | | |
| 35500407 | **Dalum** | Ems | NI | WSD West | WSA Meppen | 238 | 261 | | | | |
| 47900209 | **Dörverden** | Weser | NI | WSD Mitte | WSA Verden | 44 | 98 | | | | |
| 4976103 | **Dorfhagen** | Drepte | NI | NLWKN | NLWKN, Bst. Stade | | 212 | | | | |
| 426000 | **Dorndorf 2** | Felda | TH | TLUG Jena | SUA Suhl | | 115 | | | | |
| 420011 | **Ebenhards** | Werra | TH | TLUG Jena | SUA Suhl | | 101 | | | | |
| 44480552 | **Ehringen** | Erpe | HE | HLUG Wiesbaden | RP Kassel | | 154 | | | | |
| 3171000000100 | **Einen** | Ems | NW | LANUV NRW | LANUV NRW | 235 | 258 | | | | |
| 429600 | **Eisenach-Nessemühle** | Nesse | TH | TLUG Jena | SUA Suhl | | 120 | | | | |
| 429010 | **Eisenach-Petersberg** | Hörsel | TH | TLUG Jena | SUA Suhl | | 119 | | | | |
| 420001 | **Eisfeld, Bahnbrücke** | Werra | TH | TLUG Jena | SUA Suhl | | 100 | | | | |
| 422000 | **Ellingshausen** | Hasel | TH | TLUG Jena | SUA Suhl | | 111 | | | | |
| 39700102 | **Emden, Neue Seeschleuse** | Ems | NI | WSD Nordwest | WSA Emden | 250 | | | | | |
| 30114082 | **Esterwegen II** | Vechte-Ems-Niederung | NI | NLWKN | NLWKN, Bst. Meppen | | | | | 233 | |
| 49500201 | **Farge** | Weser | HB | WSD Nordwest | WSA Bremen | 70 | | | | | |
| 4995105 | **Fedderwardersiel** | Weser | NI | NLWKN | NLWKN, Bst. Brake | 82 | | | | | |
| 4869108 | **Feuerschützenbostel** | Oertze | NI | NLWKN | NLWKN, Bst. Verden | | 185 | | | | |
| 4761500000100 | **Fiestel** | Große Aue | NW | LANUV NRW | LANUV NRW | | 167 | | | | |
| 420190 | **Frankenroda** | Werra | TH | TLUG Jena | SUA Suhl | | 105 | | | | |
| 42870057 | **Fritzlar** | Eder | HE | HLUG Wiesbaden | RP Kassel | | 141 | | | | |
| 488501 | **Fuldaquelle Gersfeld** | Rhön | HE | HLUG Wiesbaden | RP Kassel | | | | | 214 | |
| 4885116 | **Gandersheim** | Gande | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 199 | | | | |
| 420170 | **Gerstungen** | Werra | TH | TLUG Jena | SUA Suhl | | 104 | | | | |
| 384509 | **Glockenbrunnen Calden** | Diemelplatte | HE | HLUG Wiesbaden | RP Kassel | | | | | | 214 |
| 4881142 | **Göttingen** | Leine | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 188 | | | | |
| 42700202 | **Grebenau** | Fulda | HE | WSD Mitte | WSA Hann.-Münden | 50 | 128 | | | | |
| 4885118 | **Greene** | Leine | NI | NLWKN | NLWKN, Bst. Süd, GÖ | 58 | 189 | | | | |
| 33300101 | **Greven** | Ems | NW | LANUV NRW | LANUV NRW | 236 | 259 | | | | |

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| 39284451 | **Groß Mahner** | Kluftgrundwasserleiter | NI | NLWKN | NLWKN, Bst. Süd | | | | | 34 | |
| 26124101 | **Groß Odendorf** | Oldenburgisch-Ostfriesische Geest | NI | NLWKN | NLWKN, Bst. Aurich | | | | | 233 | |
| 4829102 | **Groß Schwülper** | Oker | NI | NLWKN | NLWKN, Bst. Süd, BS | 57 | 178 | | | | |
| 41450056 | **Günthers** | Ulster | HE | HLUG Wiesbaden | RP Kassel | 116 | | | | | |
| 42900100 | **Guntershausen** | Fulda | HE | WSD Mitte | WSA Hann.-Münden | 51 | 129 | | | | |
| 45700207 | **Hameln-Wehrbergen** | Weser | NI | WSD Mitte | WSA Hann.-Münden | 40 | | | | | |
| 38224041 | **Hamelquelle** | Kluftgrundwasserleiter | NI | NLWKN | NLWKN, Bst. Hann-Hild | | | | | | 214 |
| 43100109 | **Hann.-Münden** | Weser | NI | WSD Mitte | WSA Hann.-Münden | 36 | 91 | | | | |
| 42906106 | **Hann.-Münden.F.** | Werra | NI | WSD Mitte | WSA Hann.-Münden | | | 215 | | | |
| 41906100 | **Hann.-Münden.W.** | Fulda | NI | WSD Mitte | WSA Hann.-Münden | | | 215 | | | |
| 4828140 | **Harxbüttel** | Schunter | NI | NLWKN | NLWKN, Bst. Süd, BS | | 181 | | | | |
| 4821122 | **Harzburg** | Radau | NI | NLWKN | Harzwasserwerke | | 179 | | | | |
| 4882168 | **Hattorf** | Sieber | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 196 | | | | |
| 42883558 | **Hebel** | Efze | HE | HLUG Wiesbaden | RP Kassel | | 146 | | | | |
| 4767109 | **Heide OP** | Große Aue | NI | NLWKN | NLWKN, Bst. Sulingen | 52 | 168 | | | | |
| 4886168 | **Heinde** | Innerste | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 201 | | | | |
| 41700105 | **Heldra** | Werra | HE | WSD Mitte | WSA Hann.-Münden | 46 | 106 | | | | |
| 4945108 | **Hellwege-Schleuse** | Wümme | NI | NLWKN | NLWKN, Bst. Verden | 62 | 206 | | | | |
| 44950055 | **Helmarshausen** | Diemel | HE | HLUG Wiesbaden | RP Kassel | | 150 | | | | |
| 44100206 | **Helminghausen** | Diemel | NW | WSD Mitte | WSA Hann.-Münden | | 148 | | | | |
| 37700300 | **Herbrum-Hafendamm** | Ems | NI | WSD West | WSA Meppen | 241 | | | | | |
| 4651000000100 | **Herford** | Werre | NW | LANUV NRW | LANUV NRW | | 163 | | | | |
| 42670557 | **Hermannspiegel** | Haune | HE | HLUG Wiesbaden | RP Kassel | 135 | | | | | |
| 48800108 | **Herrenhausen** | Leine | NI | WSD Mitte | WSA Braunschweig | 60 | 191 | 218 | | | |
| 38264751 | **Herrenquelle** | Schichtgebundener GW-Abfluß | NI | NLWKN | NLWKN, Bst. Hann-Hild | | | | | | 214 |
| 3671101 | **Herzlake** | Hase | NI | NLWKN | NLWKN, Bst. Meppen | 240 | 274 | | | | |
| 42110304 | **Hettenhausen** | Fulda | HE | HLUG Wiesbaden | RP Kassel | 124 | | | | | |
| 421600 | **Hinternah** | Nahe | TH | TLUG Jena | SUA Suhl | | 110 | | | | |
| 3448390000200 | **Hörstel** | Hörsteler Aa | NW | LANUV NRW | LANUV NRW | | 271 | | | | |
| 44840308 | **Hofgeismar** | Lempe | HE | HLUG Wiesbaden | RP Kassel | | 155 | | | | |
| 4928107 | **Holzkamp** | Delme | NI | NLWKN | NLWKN, Bst. Brake | | 204 | | | | |
| 4963101 | **Hoopen OP** | Hunte | NI | NLWKN | NLWKN, Bst. Sulingen | 63 | 209 | | | | |
| 3445900000100 | **Hopsten** | Hopstener Aa | NW | LANUV NRW | LANUV NRW | | 269 | | | | |
| 463502 | **Hünbornquelle Großentaft** | Rhön | HE | HLUG Wiesbaden | RP Kassel | | | | | | 214 |
| 49100101 | **Intschede** | Weser | NI | WSD Mitte | WSA Verden | 45 | 99 | 217 | | | |
| 42350057 | **Kämmerzell** | Fulda | HE | HLUG Wiesbaden | RP Kassel | | 125 | | | | |
| 45100100 | **Karlshafen** | Weser | NI | WSD Mitte | WSA Hann.-Münden | 38 | 93 | | | | |
| 410503 | **Kressenteichquelle Breitau** | Ringgau | HE | HLUG Wiesbaden | RP Kassel | | | | | | 214 |
| 4836129 | **Lachendorf** | Lachte | NI | NLWKN | NLWKN, Bst. Verden | | 182 | | | | |
| 33145761 | **Langwege** | Baw.,-Quak.,-K.,-Bar.-Becken | NI | NLWKN | NLWKN, Bst. Cloppenburg | | | | | 234 | |
| 37306100 | **Lathen** | Ems | NI | WSD-West | WSA-Meppen | | | 286 | | | |
| 4941116 | **Lauenbrück B 75** | Wüemme | NI | NLWKN | NLWKN, Bst. Verden | | 205 | | | | |
| 3895101 | **Leer** | Leda | NI | NLWKN | NLWKN, Bst. Aurich | | 284 | | | | |
| 39100105 | **Leerort** | Ems | NI | WSD Nordwest | WSA Emden | 247 | | | | | |
| 3448310000600 | **Lehen II** | Ibbenbürener Aa | NW | LANUV NRW | LANUV NRW | | 270 | | | | |
| 4898107 | **Lehringen** | Lehrde | NI | NLWKN | NLWKN, Bst. Verden | | 203 | | | | |
| 41900206 | **Letzter Heller** | Werra | NI | WSD Mitte | WSA Hann.-Münden | 48 | 108 | | | | |
| 47500200 | **Liebenau** | Weser | NI | WSD Mitte | WSA Verden | 43 | 97 | | | | |
| 4627000000200 | **Lindemannsheide Neu** | Bega | NW | LANUV NRW | LANUV NRW | | 165 | | | | |
| 4670000000100 | **Löhne** | Werre | NW | LANUV NRW | LANUV NRW | | 164 | | | | |
| 3676106 | **Lotten** | Lotter Beeke | NI | NLWKN | NLWKN, Bst. Meppen | | 278 | | | | |
| 42360550 | **Lütterz** | Lüder | HE | HLUG Wiesbaden | RP Kassel | | 131 | | | | |
| 42650050 | **Melzdorf** | Haune | HE | HLUG Wiesbaden | RP Kassel | | 134 | | | | |
| 48700103 | **Marklendorf** | Aller | NI | WSD Mitte | WSA Verden | 55 | 174 | 217 | | | |
| 4885150 | **Mehle** | Saale | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 200 | | | | |
| 420020 | **Meiningen** | Werra | TH | TLUG Jena | SUA Suhl | | 102 | | | | |
| 4872119 | **Meitze** | Wietze | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 186 | | | | |
| 3169000000100 | **Milte** | Hessel | NW | LANUV NRW | LANUV NRW | | 263 | | | | |
| 424000 | **Mittelschmalkalden** | Schmalkalde | TH | TLUG Jena | SUA Suhl | | 114 | | | | |
| 4281319000100 | **Müsse** | Eder | NW | LANUV NRW | LANUV NRW | | 137 | | | | |
| 41890059 | **Niddawitzhausen** | Wehre | HE | HLUG Wiesbaden | RP Kassel | | 122 | | | | |
| 47906103 | **Nienburg** | Weser | NW | WSD Mitte | WSA Minden | | | 216 | | | |
| 4882198 | **Northeim** | Rhume | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 194 | | | | |

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| Nummer | Name | | | | | W | Q | S | Ly | WGw | Qu |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 3889102 | **Nortmoor** | Jümme | NI | NLWKN | NLWKN, Bst. Aurich | 253 | 283 | | | | |
| 4966112 | **Oberlethe** | Lethe | NI | NLWKN | NLWKN, Bst. Brake | | 211 | | | | |
| 4545104 | **Oelkassen** | Lenne | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 158 | | | | |
| 4825109 | **Ohrum** | Oker | NI | NLWKN | NLWKN, Bst. Süd, BS | | 177 | | | | |
| 49600308 | **Oldenburg-Drielake** | Hunte | NI | WSD Nordwest | WSA Bremen | 79 | | | | | |
| 4884110 | **Oldendorf** | Ilme | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 198 | | | | |
| 4529500000100 | **Ottbergen** | Nethe | NW | LANUV NRW | StUA Bielefeld | | 156 | | | | |
| 37900100 | **Papenburg** | Ems | NI | WSD Nordwest | WSA Emden | 244 | | | | | |
| 4845103 | **Peine** | Fuhse | NI | NLWKN | NLWKN, Bst. Süd, BS | | 183 | | | | |
| 4882161 | **Pionierbrücke** | Sieber | NI | NLWKN | Harzwasserwerke | | 195 | | | | |
| 4885154 | **Poppenburg** | Leine | NI | NLWKN | NLWKN, Bst. Hann-Hild | 59 | 190 | | | | |
| 47100100 | **Porta** | Weser | NW | WSD Mitte | WSA Minden | 42 | 96 | | | | |
| 421510 | **Rappelsdorf** | Schleuse | TH | TLUG Jena | SUA Suhl | | 109 | | | | |
| 4281490000100 | **Raumland** | Oldeborn | NW | LANUV NRW | LANUV NRW | | 143 | | | | |
| 31165531 | **Rechterfeld** | Hümm.-,Clp.-Bassumer Geest | NI | NLWKN | NLWKN, Bst. Cloppenburg | | | | | 33 | |
| 28244571 | **Reinsehlen I** | Lüneb. Heide-Görde | NI | NLWKN | Hamburger Wasserwerk | | | | | 32 | |
| 48900204 | **Rethem** | Aller | NI | WSD Mitte | WSA Verden | 56 | 175 | 218 | | | |
| 3119000000200 | **Rheda** | Ems | NW | LANUV NRW | LANUV NRW | | 257 | | | | |
| 33900200 | **Rheine-UW** | Ems | NW | WSD West | WSA Rheine | 237 | 260 | 286 | | | |
| 4882176 | **Riefensbeek** | Söse | NI | NLWKN | Harzwasserwerke | | 197 | | | | |
| 42700100 | **Rotenburg** | Fulda | HE | WSD Mitte | WSA Hann.-Münden | 49 | 127 | | | | |
| 42260250 | **Rothemann** | Döllbach | HE | HLUG Wiesbaden | RP Kassel | 130 | | | | | |
| 4526900000100 | **Rustenhof** | Aa | NW | LANUV NRW | LANUV NRW | | 157 | | | | |
| 4568900000100 | **Schieder** | Niese | NW | LANUV NRW | LANUV NRW | | 160 | | | | |
| 4567000000100 | **Schieder-Nessenberg** | Emmer | NW | LANUV NRW | LANUV NRW | | 159 | | | | |
| 42410104 | **Schlechtenwegen** | Altefeld | HE | HLUG Wiesbaden | RP Kassel | | 132 | | | | |
| 42800309 | **Schmittlotheim** | Eder | HE | WSD Mitte | WSA Hann.-Münden | | 139 | | | | |
| 434027 | **Schönberg** | Fulda-Bergland mit Knüll | HE | HLUG Wiesbaden | RP Kassel | | | | | 34 | |
| 48800301 | **Schwarmstedt** | Leine | NI | WSD Mitte | WSA Verden | 61 | 192 | | | | |
| 422300 | **Schwarza** | Schwarza | TH | TLUG Jena | SUA Suhl | | 113 | | | | |
| 462528 | **Schwarzenbachquelle Grebenau** | Mittelhessische Senke | HE | HLUG Wiesbaden | RP Gießen | | | | | | 214 |
| 3283000000100 | **Sendenhorst** | Angel | NW | LANUV NRW | LANUV NRW | | 267 | | | | |
| 770104058 | **Senne 205 flach** | Senne | NW | LANUV NRW | LANUV NRW | | | | | 234 | |
| 4768111 | **Sieden** | Siede | NI | NLWKN | NLWKN, Bst. Sullingen | | 169 | | | | |
| 4797105 | **Spieka Neufeld** | Weser | NI | NLWKN | NLWKN, Bst. Stade | 88 | | | | | |
| 44254621 | **Springmühle Grone** | Schichtgebundener Grundwasserabfluß | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | | | | | 214 |
| 3881105 | **Stedingsmühlen** | Soeste | NI | NLWKN | NLWKN, Bst. Cloppenburg | | 281 | | | | |
| 4364106 | **Steimke A** | Ahle | NI | NLWKN | NLWKN, Bst. Süd, GÖ | | 147 | | | | |
| 3113000000100 | **Steinhorst** | Ems | NW | LANUV NRW | LANUV NRW | | 256 | | | | |
| 422200 | **Suhl** | Lauter | TH | TLUG Jena | SUA Suhl | | 112 | | | | |
| 429050 | **Teutleben** | Hörsel | TH | TLUG Jena | SUA Erfurt | | 118 | | | | |
| 55290500 | **Themar** | Tafeldeckgebirge Meininger Mulde | TH | TLUG Jena | SUA Suhl | | | | | 35 | |
| 4589101 | **Uchtdorf** | Exter | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 161 | | | | |
| 427010 | **Unterbreizbach-Räsa** | Ulster | TH | TLUG Jena | SUA Suhl | | 117 | | | | |
| 3647101 | **Uptloh** | Lager Hase | NI | NLWKN | NLWKN, Bst. Cloppenburg | | 276 | | | | |
| 42882806 | **Uttershausen** | Schwalm | HE | HLUG Wiesbaden | RP Kassel | | 145 | | | | |
| 420120 | **Vacha** | Werra | TH | TLUG Jena | SUA Suhl | | 103 | | | | |
| 49500100 | **Vegesack** | Weser | HB | WSD Nordwest | WSA Bremen | 67 | | | | | |
| 37300103 | **Versen-Wehrdurchstich** | Ems | NI | WSD West | WSA Meppen | 239 | 262 | | | | |
| 45900208 | **Vlotho** | Weser | NW | WSD Mitte | WSA Minden | 41 | 95 | | | | |
| 43900105 | **Wahmbeck** | Weser | HE | WSD Mitte | WSA Hann.-Münden | 37 | 92 | | | | |
| 3749101 | **Walchum** | Walchumer Schloot | NI | NLWKN | NLWKN, Bst. Meppen | | 280 | | | | |
| 440010 | **Weferlingen** | Aller | ST | LHW Magdeburg | LHW Magdeburg | | 171 | | | | |
| 4449900000100 | **Welda** | Twiste | NW | LANUV NRW | LANUV NRW | | 153 | | | | |
| 3629101 | **Wersen** | Düte | NI | NLWKN | NLWKN, BSt. Cloppenburg | | 275 | | | | |
| 4433000000100 | **Westheim** | Diemel | NW | LANUV NRW | LANUV NRW | | 149 | | | | |
| 3289100000100 | **Wolbeck** | Angel | NW | LANUV NRW | LANUV NRW | | 268 | | | | |
| 4944120 | **Worth** | Wiedau | NI | NLWKN | NLWKN, Bst. Verden | | 207 | | | | |
| 4995110 | **Wremertief** | Weser | NI | NLWKN | NLWKN, Bst. Stade | 85 | | | | | |
| 4888139 | **Wunstorf** | Westaue | NI | NLWKN | NLWKN, Bst. Hann-Hild | | 202 | | | | |
| 41980355 | **Ziegenhagen 1** | Rautenbach | HE | HLUG Wiesbaden | RP Kassel | | 123 | | | | |

# Gewässerkundliche Hauptwerte

| Beschreibung | Wasserstand W cm | Tidehochwasser Thw cm | Tideniedrigwasser Tnw cm | Abfluss Q $m^3/s$ | Abflussspende q $l/(skm^2)$ | Wassertemperatur $T_W$ °C | Erläuterungen |
|---|---|---|---|---|---|---|---|
| **a) Höchster bekannter Wert [HH]** | HHW | HHThw | HHTnw | HHQ | HHq | HHTw | Bisher bekannt gewordener höchster Wert - zum Beispiel ist HHW der höchste Wasserstand, der an der betreffenden Messstelle jemals festgestellt worden ist. Der Zeitpunkt des Auftretens ist anzugeben. |
| **b) Höchster Wert [H] gleichartiger Zeitabschnitte in der betrachteten Zeitspanne** | HW | HThw | HTnw | HQ | Hq | $HT_W$ | Im Gegensatz zu a) höchster Wert gleichartiger Zeitabschnitte einer bestimmten Zeitspanne. Wenn dieser Wert alle bisher - also auch außerhalb dieser Zeitspanne - bekannt gewordenen Werte übersteigt, ist er zugleich der HH-Wert nach a).<br>Der höchste Wert [H] erlangt seine Bedeutung in Verbindung mit der Angabe eines Zeitabschnittes und einer Zeitspanne. Der Zeitabschnitt kann ein Monat, ein Halbjahr, ein Jahr sein. Ist kein Zeitabschnitt (Monat, Halbjahr) hinzugefügt, so ist stets das volle Jahr gemeint.<br>Zum Beispiel ist HW 1971/1980 der höchst in den Jahren 1971 bis 1980 festgestellte Wasserstand, WiHW 1971/1980 der höchst in den Wintern 1971 bis 1980 beobachtete und NovHW 1971/1980 der höchste in den Novembermonaten der Jahre 1971 bis 1980 aufgetretene Wasserstand. |
| **c) Mittlerer höchster Wert [MH] gleichartiger Zeitabschnitte in der betrachteten Zeitspanne** | MHW | MHThw | MHTnw | MHQ | MHq | $MHT_W$ | Arithmetisches Mittel der höchsten Werte [H] gleichartiger Zeitabschnitte der einzelnen Jahre in der betrachteten Zeitspanne. Der mittlerer höchste Wert erlangt seine Bedeutung in Verbindung mit der Angabe der Zeitspanne und Zeitabschnitte. Hierfür gilt das zu b) Gesagte.<br>Zum Beispiel ist MHW 1971/1980 das Mittel aus den HW-Werten der 10 Einzeljahre 1971 bis 1980, WiMHW 1971/1980 das Mittel aus den WiHW-Werten der 10 Einzeljahre 1971 bis 1980 und NovMHW 1971/1980 das Mittel der 10 Höchstwasserstände der einzelnen Novembermonate der Jahre 1971 bis 1980 |
| **d) Mittelwert [M] gleichartiger Zeitabschnitte in der betrachteten Zeitspanne** | MW | MThw | MTnw | MQ | Mq | $MT_W$ | Arithmetisches Mittel aller Tageswerte gleichartiger Zeitabschnitte der betrachteten Zeitspanne. Der Mittelwert erlangt seine Bedeutung in Verbindung mit der Angabe der Zeitspanne und des Zeitabschnitts. Hierfür gilt das zu b) gesagte.<br>Für Zeitabschnitte in einer Zeitspanne von einem Jahr wird dieser Wert als arithmetisches Mittel aus allen Tageswerten - also Summe der Tageswerte geteilt durch ihre Anzahl -, für eine mehrjährige Zeitspanne dagegen aus den betreffenden Zeitabschnitten wie Monats-, Halbjahres- oder Jahresmitteln - dies bedeutet Mittel aus Mitteln - gebildet.<br>Zum Beispiel ist MW 1976 das arithmetische Mittel der 366 Tageswerte des Jahre 1976, MW 1971/1980 das Mittel aus den 10 mittleren Jahreswasserständen in den Jahren 1971 bis 1980 und SoMW 1971/1980 das Mittel aus den 10 mittleren Sommerwasserständen in den Jahren 1971 bis 1980. Das NovMW 1971/1980 wird errechnet, indem man das Mittel aus den mittleren Wasserständen der 10 Novembermonate der Jahr 1971 bis 1980 bildet. |
| **e) Mittlerer niedrigster Wert [MN] gleichartiger Zeitabschnitte in der betrachteten Zeitspanne** | MNW | MNThw | MNTnw | MNQ | MNq | $MNT_W$ | Die Erläuterungen zu c) gelten sinngemäß, jedoch sind die mittleren niedrigsten Werte Tageswerte. |
| **f) Niedrigster Wert [N] gleichartiger Zeitabschnitte in der betrachteten Zeitspanne** | NW | NThw | NTnw | NQ | Nq | $NT_W$ | Die Erläuterungen zu b) gelten sinngemäß, jedoch sind die niedrigsten Werte Tageswerte. |
| **g) Niedrigster bekannter Wert [NN]** | NNW | NNThw | NNTnw | NNQ | NNq | $NNT_W$ | Die Erläuterungen zu a) gelten sinngemäß, jedoch ist der niedrigste bekannte Wert ein Tageswert. |
| **h) Scheitelwert, der in der betrachteten Zeitspanne von T Jahren durchschnittlich einmal erreicht oder überschritten wird** | | | | $HQ_T$ | | | Hochwasserabfluss, der aus der Zeitspanne von T aufeinanderfolgenden Jahren ermittelt wird. Die Scheitelwerte $HQ_T$ werden im allgemeinen für Jahre und Halbjahre (Winter oder Sommer) gebildet. Zur Ermittlung werden die Abflüsse von Hochwasserscheiteln berücksichtigt, die einen Mindestabstand von 7 Tagen aufweisen. Bei kürzerem zeitlichen Abstand muß dagegen der Abfluss zwischen den benachbarten Scheitelabflüssen mindestens bis auf die halbe Höhe - bezogen auf die Differenz zwischen dem kleineren Scheitelabfluss und dem MQ der betrachteten Jahresreihe - abgesunken sein. Bei kleineren Wasserläufen ist je nach Charakteristik der Abflussganglinien auch ein kürzerer Mindestabstand zulässig. Die Ermittlung dieser Werte wird sicherer mit wachsender Länge der zugrundegelegten Reihe. Das Kollektiv der Scheitelwerte ist aus allen hydrologisch unabhängigen Hochwasser-Ereignissen der betrachteten Zeitspanne zu bilden. Aus diesem der Größe nach geordneten Kollektiv ist die partielle Serie der n-größten Werte zu entnehmen (n=Anzahl der Beobachtungs-jahre). Der HQ1-Wert ist der kleinste Wert der partiellen Serie. Die Werte mit T>1 sind aus Verteilungsfunktionen zu ermitteln. Die Vergleichsfunktion ist anzugeben. |

**Allgemeine Begriffe**

| Zeichen | Bedeutung |
|---|---|
| TK 25 | Topographische Karte, Maßstab 1:25000 |
| NN | Normal Null |

**Hydrologische Begriffe**

| Zeichen | Bedeutung | |
|---|---|---|
| $A_{Eo}$ | oberirdisches Einzugsgebiet | in $km^2$ |
| PNP | Pegelnullpunkt | in NN + m bzw. in HN + m |
| W | Wasserstand | in cm am Pegel |
| Tnw | Tideniedrigwasserstand | in cm am Pegel |
| Thw | Tidehochwasserstand | in cm am Pegel |
| Thb | Tidehub | in m |
| Q | Abfluss | in $m^3/s$ oder l/s |
| q | Abflussspende | in l (s $km^2$) |
| $Q_{Qu}$ | Quellschüttung | in $m^3/s$ oder l/s |
| $Qu_a$ | Quellaustritt (natürlich) | |
| $Qu_f$ | Quellfassung | |
| $W_{Gw}$ | Grundwasser mit freier Oberfläche | |
| g | Grundwasser mit gespannter Oberfläche | |
| R | Beobachtungsrohr | |
| Bb | Bohrbrunnen | |
| SB | Schachtbrunnen | |
| S | Schwebstoff | |
| $C_s$ | - konzentration | in $g/m^3$ |
| | - fracht | in t |
| | - abtrag | in $t/km^2$ |
| $m_s$ | - transport | in kg/s |
| $h_N$ | Gebietsniederschlagshöhe | in mm |
| $h_A$ | Abflusshöhe | in mm |
| $T_L$ | Lufttemperatur | in °C |
| $T_W$ | Wassertemperatur | in °C |

**Kennzeichnung von Tageswerten**

| Zeichen | Bedeutung |
|---|---|
| D | Eisdecke |
| G | Grundeis |
| V | Eisversetzung, Eisstau |
| R | Randeis |
| T | Treibeis, Eisgang |
| K | Verkrautung |
| / | Entkrautung |
| ● | Neumond |
| ○ | Vollmond |
| b | Wert ist beeinflußt |
| e | Wert ist errechnet, ergänzt, geändert |
| + | Wert ist im Beobachtungszeitraum nach angegebenem Datum wiederholt aufgetreten |

**Kennzeichnung von Pegeln nach der Lage**

| Zeichen | Bedeutung |
|---|---|
| AP | Außenpegel |
| BP | Binnenpegel |
| OP | Oberpegel: Pegel im Oberwasser einer Fallstufe |
| UP | Unterpegel: Pegel im Unterwasser einer Fallstufe |

**Ergänzende Einrichtungen von Pegeln**

| Zeichen | Bedeutung |
|---|---|
| S | Schreibpegel |
| D | Schreibpegel, ergänzt durch digitale Registriersysteme |
| . s | Messwertaufnehmer nach dem Schwimmersystem |
| . d | Messwertaufnehmer nach dem Drucksystem |
| . u | Echolotung (mit Ultraschall) |
| .. F | Fernübertragung |
| .. A | Anrufbeantworter |
| .. 2 | Fernübertragung + Anrufbeantworter |

**Länder**

| Zeichen | Bedeutung |
|---|---|
| HE | Hessen |
| NI | Niedersachsen |
| NW | Nordrhein-Westfalen |
| ST | Sachsen-Anhalt |
| TH | Thüringen |

**Dienststellen**

| Zeichen | Bedeutung |
|---|---|
| BfG | Bundesanstalt für Gewässerkunde in Koblenz |
| WSD | Wasser- und Schifffahrtsdirektion<br>- Nordwest in Aurich<br>- West in Münster<br>- Mitte in Hannover |
| WSA | Wasser- und Schifffahrtsamt (der WSD) |
| HLUG | Hessisches Landesamt für Umwelt und Geologie in Wiesbaden |
| RP | Regierungspräsidium Kassel, Gießen; Abteilung Staatliches Umweltamt (HE) |
| LHW | Landesbetrieb für Hochwasserschutz und Wasserwirtschaft Sachsen-Anhalt |
| LHW | Landesbetrieb für Hochwasserschutz und Wasserwirtschaft Magdeburg (ST) |
| LANUV | Landesamt für Natur, Umwelt und Verbraucherschutz Nordrhein-Westfalen in Essen |
| NLWKN | Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz |
| NLWKN, Bst. | Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz, Betriebsstelle (NI) |
| TLUG | Thüringer Landesamt für Umwelt und Geologie in Jena |
| SUA | Staatliches Umweltamt (TH) |

# Wesergebiet

# Hydrographisches Verzeichnis der Pegel

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| Meßstelle Nummer | Gewässer Gewässerteil (nachfolgende Gewässer) | Meßstelle Nummer | Ergänzende Einrichtungen | Höhe des PNP NN+m HN+m m ü. NHN | Oberirdisches Einzugsgebiet in km² | Lage am Gewässer in km | Gebietskennzahl | Lagekoordinaten TK 25 | Rechtswert Hochwert | Daten vorhanden seit | veröffentlicht Art | veröffentlicht Seite |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 | 11 | 12 |
| 43100109 | **Weser** | Hann.-Münden | Ds2 | 114.95 | 12442 | 0.7 | 4310000 | 4523 | 354464<br>569919 | 01.01.1830<br>01.01.1830 | Q<br>W | 91<br>36 |
| 43900105 | **Weser** | Wahmbeck | DsF | 98.00 | 12996 | 36.0 | 4390000 | 4323 | 353607<br>572136 | 01.01.1973<br>01.01.1973 | Q<br>W | 92<br>37 |
| 45100100 | **Weser** | Karlshafen | Ds2 | 94.05 | 14794 | 45.5 | 4511000 | 4322 | 353042<br>572386 | 01.11.1935<br>01.12.1827 | Q<br>W | 93<br>38 |
| 45300200 | **Weser** | Bodenwerder | DdF | 69.39 | 15924 | 110.7 | 4539900 | 4023 | 353550<br>576008 | 01.04.1839<br>01.04.1839 | Q<br>W | 94<br>39 |
| 45700207 | **Weser** | Hameln-Wehrbergen | Dd2 | 57.84 | 17094 | 139.7 | 4575100 | 3821 | 352110<br>577675 | <br>01.11.1987 | <br>W | <br>40 |
| 45900208 | **Weser** | Vlotho | Ds2 | 41.66 | 17618 | 184.0 | 4599000 | 3819 | 349066<br>578254 | 01.07.1820<br>01.02.1820 | Q<br>W | 95<br>41 |
| 47100100 | **Weser** | Porta | Ds2 | 37.04 | 19162 | 198.4 | 4713000 | 3719 | 349476<br>579058 | 01.11.1935<br>15.10.1935 | Q<br>W | 96<br>42 |
| 47500200 | **Weser** | Liebenau | DdF | 20.00 | 19910 | 256.0 | 4759000 | 3420 | 350771<br>582903 | 01.11.1953<br>01.11.1953 | Q<br>W | 97<br>43 |
| 47900209 | **Weser** | Dörverden | DsF | 7.99 | 22110 | 309.0 | 4799100 | 3121 | 341427<br>585772 | 01.11.1954<br>01.11.1839 | Q<br>W | 98<br>44 |
| 49100101 | **Weser** | Intschede | Ds2 | 4.79 | 37720 | 331.3 | 4911000 | 3020 | 350850<br>587014 | 01.11.1857<br>01.07.1856 | Q<br>W | 99<br>45 |
| 49100509 | **Weser** | Bremen, Gr. Weserbrücke | Ss2 | -5.00 | 38150 | 0.0 | 4919300 | 2918 | 348691<br>588232 | <br>03.09.1966 | <br>W | <br>64 |
| 49500100 | **Weser** | Vegesack | Ss2 | -5.00 | 41360 | 17.9 | 4953000 | 2818 | 347461<br>589311 | <br>01.04.1876 | <br>W | <br>67 |
| 49500201 | **Weser** | Farge | Ss | -5.00 | 41530 | 26.3 | 4957000 | 2717 | 346734<br>589707 | <br>01.11.1900 | <br>W | <br>70 |
| 49700200 | **Weser** | Brake | Ss2 | -5.00 | 44350 | 39.2 | 4975100 | 2616 | 346585<br>590947 | <br>01.11.1886 | <br>W | <br>73 |
| 49900108 | **Weser** | Bremerhaven, Alter LT | Ss2 | -4,98 | 45600 | 66.7 | 4993190 | 2417 | 347144<br>593491 | <br>01.11.1976 | <br>W | <br>76 |
| 4995105 | **Weser** | Fedderwardersiel | Ds2 | -5,03 | 46138 | 82.3 | 4995500 | 2416 | 345732<br>594080 | <br>01.11.1953 | <br>W | <br>82 |
| 4995110 | **Weser** | Wremertief | Dd | -5,00 | 45825 | 78.4 | 4995300 | 2316 | 346669<br>594651 | <br>01.11.1924 | <br>W | <br>85 |
| 4997105 | **Weser** | Spieka Neufeld | Dd2 | -5,01 | 46020 | 83.5 | 4997100 | 2217 | 347062<br>596198 | <br>01.07.1951 | <br>W | <br>88 |
| 420001 | **Werra**<br>(Weser) | Eisfeld, Bahnbrücke | S | 427.86 | 51.2 | 283.0 | 41133 | 5531 | 442175<br>558750 | 01.11.1975 | Q | 100 |
| 420011 | **Werra**<br>(Weser) | Ebenhards | SF | 355.00 | 221 | 260.0 | 41155 | 5530 | 440623<br>559106 | 01.11.1991 | Q | 101 |
| 420020 | **Werra**<br>(Weser) | Meiningen | SF | 281.65 | 1170 | 223.0 | 41333 | 5428 | 360033<br>560524 | 01.11.1918 | Q | 102 |
| 420120 | **Werra**<br>(Weser) | Vacha | SF | 222.72 | 2246 | 164.0 | 41393 | 5126 | 357388<br>563370 | 01.11.1990 | Q | 103 |
| 420170 | **Werra**<br>(Weser) | Gerstungen | SF | 203.39 | 3039 | 137.8 | 41571 | 5026 | 357534<br>564790 | 01.11.1931 | Q | 104 |
| 420190 | **Werra**<br>(Weser) | Frankenroda | SF | 178.06 | 4214 | 90.5 | 41737 | 4927 | 358932<br>566314 | 01.11.1935 | Q | 105 |
| 41700105 | **Werra**<br>(Weser) | Heldra | Ds2 | 168.02 | 4302 | 77.3 | 4175000 | 4827 | 358389<br>566625 | 01.11.1950<br>01.11.1950 | Q<br>W | 106<br>46 |
| 41900104 | **Werra**<br>(Weser) | Allendorf | DsF | 143.52 | 5166 | 40.7 | 4193700 | 4715 | 356752<br>568288 | 01.11.1940<br>01.11.1940 | Q<br>W | 107<br>47 |
| 41900206 | **Werra**<br>(Weser) | Letzter Heller | DdF | 117.40 | 5487 | 2.3 | 4199500 | 4524 | 354940<br>569728 | 01.11.1941<br>01.11.1941 | Q<br>W | 108<br>48 |
| 421510 | **Schleuse**<br>(Werra, Weser) | Rappelsdorf | SF | 355.52 | 256 | 9.0 | 41169 | 5530 | 440964<br>559640 | 01.11.1950 | Q | 109 |
| 421600 | **Nahe**<br>Schleuse, Werra, Weser) | Hinternah | S | 408.00 | 35.3 | 5.0 | 41168 | 5430 | 441451<br>559879 | 01.11.1955 | Q | 110 |
| 422000 | **Hasel**<br>(Werra, Weser) | Ellingshausen | SF | 306.59 | 321 | 4.0 | 41290 | 5428 | 439206<br>560220 | 01.11.1935 | Q | 111 |
| 422200 | **Lauter**<br>(Hasel, Werra, Weser) | Suhl | - | 410.27 | 41.4 | 0.3 | 41229 | 5330 | 440645<br>560870 | 01.11.1955 | Q | 112 |
| 422300 | **Schwarza**<br>(Hasel, Werra, Weser) | Schwarza | S | 344.07 | 151 | 5.0 | 41289 | 5329 | 439578<br>560966 | 01.11.1955 | Q | 113 |
| 424000 | **Schmalkalde**<br>(Werra, Weser) | Mittelschmalkalden | SF | 268.58 | 153 | 3.0 | 41369 | 5228 | 359860<br>562120 | 01.11.1954 | Q | 114 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 | 11 | 12 |
| 426000 | **Felda** (Werra, Weser) | Dorndorf 2 | S | 234.02 | 214 | 2.0 | 41389 | 5126 | 357626 563248 | 01.11.1935 | Q | 115 |
| 41450056 | **Ulster** (Werra, Weser) | Günthers | Ss2 | 333.90 | 182 | 30.0 | 4145000 | 5326 | 357114 561387 | 01.11.1955 | Q | 116 |
| 427010 | **Ulster** (Werra, Weser) | Unterbreizbach-Räsa | SF | 233.59 | 399 | 5.0 | 41495 | 5125 | 356892 563063 | 01.11.1940 | Q | 117 |
| 429050 | **Hörsel** (Werra, Weser) | Teutleben | SF | 283.10 | 105 | 30.5 | 41639 | 5029 | 439880 564636 | 01.11.1963 | Q | 118 |
| 429010 | **Hörsel** (Werra, Weser) | Eisenach-Petersberg | SF | 216.31 | 305 | 10.6 | 41679 | 5028 | 359446 564970 | 01.11.1939 | Q | 119 |
| 429600 | **Nesse** (Hörsel, Werra, Weser) | Eisenach-Nessemühle | SF | 215.20 | 426 | 0.3 | 41689 | 5028 | 359484 565020 | 01.11.1939 | Q | 120 |
| 41850054 | **Wehre** (Werra, Weser) | Bischhausen | Ss2 | 194.32 | 149 | 13.5 | 4185000 | 4825 | 356576 566744 | 01.11.1969 | Q | 121 |
| 41890059 | **Wehre** (Werra, Weser) | Niddawitzhausen | Ss | 166.50 | 430 | 5.0 | 4189000 | 4825 | 356936 567119 | 01.11.1960 | Q | 122 |
| 41980355 | **Rautenbach** (Werra, Weser) | Ziegenhagen 1 | Ss | 191.43 | 14.3 | 3.5 | 4198000 | 4624 | 355281 569272 | 01.09.1955 | Q | 123 |
| 42110304 | **Fulda** (Weser) | Hettenhausen | Ss2 | 365.07 | 55.5 | 202.0 | 4211000 | 5524 | 355788 559074 | 01.11.1971 | Q | 124 |
| 42350057 | **Fulda** (Weser) | Kämmerzell | Ss2 | 232.08 | 561 | 172.0 | 4235000 | 5423 | 354514 560712 | 08.08.1953 | Q | 125 |
| 42710050 | **Fulda** (Weser) | Bad Hersfeld 1 | Ss2 | 193.89 | 2120 | 119.8 | 4271100 | 5124 | 355076 563675 | 01.11.1967 | Q | 126 |
| 42700100 | **Fulda** (Weser) | Rotenburg | Ds2 | 179.54 | 2523 | 95.7 | 4275130 | 4924 | 355060 565231 | 01.01.1900<br>01.11.1872 | Q<br>W | 127<br>49 |
| 42700202 | **Fulda** (Weser) | Grebenau | DsF | 151.03 | 2975 | 55.5 | 4279700 | 4822 | 353492 567321 | 01.11.1950<br>01.11.1950 | Q<br>W | 128<br>50 |
| 42900100 | **Fulda** (Weser) | Guntershausen | Ds2 | 140.89 | 6366 | 44.0 | 4291000 | 4722 | 353286 567698 | 01.11.1900<br>01.04.1894 | Q<br>W | 129<br>51 |
| 42260250 | **Döllbach** (Fliede, Fulda, Weser) | Rothemann | Ss | 286.92 | 68.7 | 4.8 | 4226000 | 5524 | 355005 559245 | 01.11.1970 | Q | 130 |
| 42360550 | **Lüder** (Fulda, Weser) | Lütterz | Ss2 | 231.83 | 182 | 3.0 | 4236000 | 5423 | 354184 560594 | 01.11.1959 | Q | 131 |
| 42410104 | **Altefeld** (Schlitz, Fulda, Weser) | Schlechtenwegen | SsA | 364.71 | 29.1 | 16.0 | 4241000 | 5422 | 353034 560058 | 01.11.1971 | Q | 132 |
| 42430156 | **Altefeld** (Schlitz, Fulda, Weser) | Bad Salzschlirf | SsA | 238.09 | 135 | 0.5 | 4243000 | 5323 | 353581 560983 | 01.10.1964 | Q | 133 |
| 42650050 | **Haune** (Fulda, Weser) | Melzdorf | Ss2 | 291.62 | 107.7 | 47.0 | 4265000 | 5424 | 355425 560569 | 01.07.1975 | Q | 134 |
| 42670557 | **Haune** (Fulda, Weser) | Hermannspiegel | Ss2 | 209.09 | 422 | 8.2 | 4267900 | 5124 | 355179 563050 | 01.09.1958 | Q | 135 |
| 42780500 | **Pfieffe** (Fulda, Weser) | Adelshausen | Ss2 | 171.24 | 116 | 1.0 | 4278900 | 4823 | 353930 566415 | 01.11.1980 | Q | 136 |
| 4281319000100 | **Eder** (Fulda, Weser) | Müsse | SsF | 430.44 | 124 | 153.5 | 4281310 | 4915 | 344988 565744 | 01.11.1970 | Q | 137 |
| 42810204 | **Eder** (Fulda, Weser) | Auhammer | Ss2 | 298.22 | 489.3 | 110.0 | 4281750 | 4917 | 347368 565564 | 01.05.1959 | Q | 138 |
| 42800309 | **Eder** (Fulda, Weser) | Schmittlotheim | DsF | 245.87 | 1202 | 74.5 | 4285130 | 4819 | 349295 566897 | 01.11.1930 | Q | 139 |
| 42800502 | **Eder** (Fulda, Weser) | Affoldern | DsF | 193.19 | 1452 | 44.0 | 4285510 | 4820 | 350600 566991 | 01.11.1940 | Q | 140 |
| 42870057 | **Eder** (Fulda, Weser) | Fritzlar | Ss2 | 164.64 | 1806.4 | 25.5 | 4287000 | 4821 | 352075 566562 | 01.11.1965 | Q | 141 |
| 4281334000100 | **Preisdorf** (Eder, Fulda, Weser) | Aue | Ss2 | 427.73 | 8.42 | 0.5 | 4281330 | 4915 | 345220 565746 | 01.11.1975 | Q | 142 |
| 4281490000100 | **Oldeborn** (Eder, Fulda, Weser) | Raumland | Ss | 400.26 | 84.6 | 0.3 | 4281490 | 4916 | 345700 565534 | 01.11.1950 | Q | 143 |
| 42880458 | **Schwalm** (Eder, Fulda, Weser) | Alsfeld | SsA | 237.68 | 131.4 | 74.2 | 4288100 | 5221 | 352019 562473 | 19.10.1967 | Q | 144 |
| 42882806 | **Schwalm** (Eder, Fulda, Weser) | Uttershausen | Ss2 | 164.41 | 986 | 9.4 | 4288770 | 4921 | 352312 565965 | 01.05.1957 | Q | 145 |
| 42883558 | **Efze** (Schwalm, Eder, Fulda, Weser) | Hebel | Ss2 | 165.71 | 219.8 | 1.3 | 4288890 | 4922 | 352582 565980 | 01.11.1962 | Q | 146 |
| 4364106 | **Ahle** (Schwülme, Weser) | Steimke A | Ds | 141.93 | 79.9 | 3.2 | 4364700 | 4323 | 354440 572340 | 01.11.1961 | Q | 147 |

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**Abflussjahr 2012**

| Meßstelle Nummer | Gewässer Gewässerteil (nachfolgende Gewässer) | Meßstelle Nummer | Ergänzende Einrichtungen | Höhe des PNP NN+m HN+m m ü. NHN | Oberirdisches Einzugsgebiet in km² | Lage am Gewässer in km | Gebietskennzahl | Lagekoordinaten TK 25 | Rechtswert Hochwert | Daten vorhanden seit | veröffentlicht Art | veröffentlicht Seite |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 | 11 | 12 |
| 44100206 | **Diemel** (Weser) | Helminghausen | DsF | 336.97 | 103 | 90.0 | 4417000 | 4618 | 348133 569412 | 01.11.1940 | Q | 148 |
| 4433000000100 | **Diemel** (Weser) | Westheim | SsA | 220.41 | 363 | 65.0 | 4433000 | 4519 | 349410 570643 | 01.11.1977 | Q | 149 |
| 44950055 | **Diemel** (Weser) | Helmarshausen | Sd2 | 98.56 | 1757.1 | 6.5 | 4495000 | 4322 | 353128 572018 | 01.11.1955 | Q | 150 |
| 4427000000100 | **Hoppecke** (Diemel, Weser) | Bredelar | Ss2 | 295.30 | 77.4 | 0.76 | 4427000 | 4518 | 348377 579729 | 15.04.1975 | Q | 151 |
| 44430055 | **Twiste** (Diemel, Weser) | Braunsen | SsA | 213.75 | 117.1 | 19.8 | 4443000 | 4620 | 350270 569073 | 01.11.1976 | Q | 152 |
| 4449900000100 | **Twiste** (Diemel, Weser) | Welda | SsA | 165.32 | 433 | 4.7 | 4449900 | 4520 | 350807 570208 | 01.11.1968 | Q | 153 |
| 44480552 | **Erpe** (Twiste, Diemel, Weser) | Ehringen | Ss2 | 191.75 | 137 | 5.6 | 4448700 | 4620 | 351018 569434 | 01.04.1961 | Q | 154 |
| 44840308 | **Lempe** (Esse, Diemel, Weser) | Hofgeismar | Ss | 152.79 | 46.7 | 2.0 | 4484900 | 4422 | 352910 570724 | 01.11.1975 | Q | 155 |
| 4529500000100 | **Nethe** (Weser) | Ottbergen | Ss2 | 101.40 | 432 | 5.1 | 4529500 | 4221 | 352233 573052 | 01.11.1987 | Q | 156 |
| 4526900000100 | **Aa** (Nethe, Weser) | Rustenhof | Ss2 | 139.04 | 78.5 | 2.9 | 4526900 | 4220 | 350940 573025 | 01.11.1987 | Q | 157 |
| 4545104 | **Lenne** (Weser) | Oelkassen | Ds | 125.01 | 65.1 | 8.9 | 4545100 | 4023 | 354215 575687 | 01.02.1961 | Q | 158 |
| 4567000000100 | **Emmer** (Weser) | Schieder-Nessenberg | Ds2 | 118.01 | 267 | 33.4 | 456 | 4020 | 350902 575301 | 01.11.1988 | Q | 159 |
| 4568900000100 | **Niese** (Emmer, Weser) | Schieder | Ds2 | 119.25 | 69.3 | 0.5 | 4568900 | 4020 | 351004 575335 | 01.11.1980 | Q | 160 |
| 4589101 | **Exter** (Weser) | Uchtdorf | Ds | 70.41 | 99.3 | 4.6 | 4589000 | 3820 | 350641 577992 | 01.11.1960 | Q | 161 |
| 4639000000100 | **Werre** (Weser) | Ahmsen | Dd2 | 63.62 | 598 | 27.7 | 4639000 | 3918 | 347961 577307 | 01.11.1963 | Q | 162 |
| 4651000000100 | **Werre** (Weser) | Herford | Ds2 | 56.27 | 874 | 21.8 | 4651000 | 3818 | 347754 577780 | 01.11.1955 | Q | 163 |
| 4670000000100 | **Werre** (Weser) | Löhne | Dd2 | 47.00 | 1335 | 10.4 | 4670000 | 3818 | 348022 578486 | 01.11.1980 | Q | 164 |
| 4627000000200 | **Bega** (Werre, Weser) | Lindemannsheide Neu | DdF | 72.56 | 294 | 4.7 | 4627100 | 3918 | 348441 576882 | 01.11.1987 | Q | 165 |
| 4745000000100 | **Gehle** (Weser) | Bierde | Ds2 | 35.45 | 120 | 11.2 | 4745000 | 3620 | 350292 580412 | 01.11.1973 | Q | 166 |
| 4761500000100 | **Große Aue** (Weser) | Fiestel | Ds2 | 43.88 | 100 | 72.0 | 4761500 | 3617 | 346997 580232 | 01.11.1977 | Q | 167 |
| 4767109 | **Große Aue** (Weser) | Heide OP | Ds | 27.18 | 1016 | 22.7 | 4767900 | 3319 | 349348 582975 | 01.11.1964 01.11.1964 | Q W | 168 52 |
| 4768111 | **Siede** (Gr.Aue, Weser) | Sieden | Ds | 32.48 | 163 | 8.4 | 4768700 | 3319 | 349484 583650 | 01.11.1978 | Q | 169 |
| 440004 | **Aller** (Weser) | Alleringersleben | Ss | 113.22 | 152 | 237.0 | 48113 | 3732 | 444092 578693 | 01.11.1970 | Q | 170 |
| 440010 | **Aller** (Weser) | Weferlingen | SsF | 84.27 | 249 | 222.5 | 48115 | 3632 | 443574 579832 | 01.11.1970 | Q | 171 |
| 4819102 | **Aller** (Weser) | Brenneckenbrück | Ds2 | 46.32 | 1638 | 154.9 | 4819300 | 3528 | 359965 581741 | 01.11.1945 01.11.1945 | Q W | 172 53 |
| 48300105 | **Aller** (Weser) | Celle | Dd2 | 31.80 | 4374 | 111.6 | 4837000 | 3326 | 357204 583270 | 01.11.1890 01.05.1889 | Q W | 173 54 |
| 48700103 | **Aller** (Weser) | Marklendorf | DdF | 23.01 | 7209 | 75.7 | 4875000 | 3324 | 354766 583906 | 01.11.1940 01.12.1917 | Q W | 174 55 |
| 48900204 | **Aller** (Weser) | Rethem | Dd2 | 14.31 | 14730 | 34.2 | 4895900 | 3222 | 352590 585078 | 01.11.1953 01.11.1953 | Q W | 175 56 |
| 4821103 | **Oker** (Aller, Weser) | Altenau O | SsF | 417.49 | 31.2 | 120.0 | 4821119 | 4128 | 359929 574342 | 01.11.1948 | Q | 176 |
| 4825109 | **Oker** (Aller, Weser) | Ohrum | Ds2 | 75.54 | 813 | 73.1 | 4825700 | 3829 | 440186 577739 | 01.11.1925 | Q | 177 |
| 4829102 | **Oker** (Aller, Weser) | Groß Schwülper | Ds2 | 55.99 | 1734 | 29.5 | 4829300 | 3628 | 359754 580300 | 01.11.1925 01.11.1925 | Q W | 178 57 |
| 4821122 | **Radau** (Oker, Aller, Weser) | Harzburg | Ss | 407.27 | 18.3 | 14.0 | 4821851 | 4129 | 440000 574746 | 01.11.1940 | Q | 179 |
| 444210 | **Ilse** (Oker, Aller, Weser) | Bühne-Hoppenstedt | SsF | 97.76 | 160 | 11.3 | 48245 | 4029 | 440755 576320 | 01.11.1929 | Q | 180 |

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**Abflussjahr 2012**

| Meßstelle Nummer | Gewässer Gewässerteil (nachfolgende Gewässer) | Meßstelle Nummer | Ergänzende Einrichtungen | Höhe des PNP NN+m HN+m m ü. NHN | Oberirdisches Einzugsgebiet in km² | Lage am Gewässer in km | Gebietskennzahl | Lagekoordinaten TK 25 | Rechtswert Hochwert | Daten vorhanden seit | veröffentlicht Art | veröffentlicht Seite |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 | 11 | 12 |
| 4828140 | **Schunter** (Oker, Aller, Weser) | Harxbüttel | Ds2 | 60.92 | 592 | 3.6 | 4828970 | 3628 | 360152 580138 | 01.11.1960 | Q | 181 |
| 4836129 | **Lachte** (Aller, Weser) | Lachendorf | Ss | 43.65 | 433 | 9.4 | 4836710 | 3327 | 358406 583294 | 01.11.1960 | Q | 182 |
| 4845103 | **Fuhse** (Aller, Weser) | Peine | Ds2 | 60.11 | 360 | 45.0 | 4845500 | 3627 | 358287 579973 | 01.11.1964 | Q | 183 |
| 4854112 | **Burgdorfer Aue** (Fuhse, Aller, Weser) | Aligse | Ds | 51.06 | 180 | 31.7 | 4854530 | 3525 | 366717 580845 | 01.04.1984 | Q | 184 |
| 4869108 | **Oertze** (Aller, Weser) | Feuerschützenbostel | Ds | 40.05 | 738 | 13.6 | 4869700 | 3226 | 356988 584562 | 01.11.1960 | Q | 185 |
| 4872119 | **Wietze** (Aller, Weser) | Meitze | Ds | 36.14 | 242 | 16.3 | 4872530 | 3424 | 355432 582596 | 01.11.1966 | Q | 186 |
| 447000 | **Leine** (Aller, Weser) | Arenshausen | Ss | 196.98 | 275 | 247.1 | 48813 | 4625 | 356762 569422 | 01.11.1959 | Q | 187 |
| 4881142 | **Leine** (Aller, Weser) | Göttingen | Ds2 | 140.43 | 633 | 227.0 | 4881730 | 4425 | 356368 571351 | 01.11.1958 | Q | 188 |
| 4885118 | **Leine** (Aller, Weser) | Greene | Ds2 | 94.98 | 2916 | 177.0 | 4885310 | 4125 | 356498 574810 | 01.11.1940<br>01.01.1936 | Q<br>W | 189<br>58 |
| 4885154 | **Leine** (Aller, Weser) | Poppenburg | Ds2 | 68.46 | 3463 | 130.0 | 4885710 | 3824 | 355217 577821 | 01.11.1952<br>01.11.1951 | Q<br>W | 190<br>59 |
| 48800108 | **Leine** (Aller, Weser) | Herrenhausen | Ds2 | 43.81 | 5304 | 87.1 | 4887730 | 3624 | 354608 580629 | 01.11.1940<br>01.01.1901 | Q<br>W | 191<br>60 |
| 48800301 | **Leine** (Aller, Weser) | Schwarmstedt | DdF | 21.00 | 6443 | 6.2 | 4889710 | 3323 | 354092 583912 | 01.11.1940<br>01.11.1952 | Q<br>W | 192<br>61 |
| 4882173 | **Rhume** (Leine, Aller, Weser) | Berka Rhume | Ds2 | 130.43 | 895 | 15.5 | 4882790 | 4326 | 357664 572834 | 01.11.1955 | Q | 193 |
| 4882198 | **Rhume** (Leine, Aller, Weser) | Northeim | DsF | 113.85 | 1176 | 5.1 | 4882990 | 4226 | 356913 573155 | 01.11.1993 | Q | 194 |
| 4882161 | **Sieber** (Oder, Rhume, Leine, Aller, Weser) | Pionierbrücke | Ss | 338.35 | 44.5 | 20.0 | 4882683 | 4228 | 359905 573050 | 01.11.1929 | Q | 195 |
| 4882168 | **Sieber** (Oder, Rhume, Leine, Aller, Weser) | Hattorf | Ds2 | 179.62 | 129 | 1.2 | 4882689 | 4327 | 358694 572484 | 01.11.1950 | Q | 196 |
| 4882176 | **Söse** (Rhume, Leine, Aller, Weser) | Riefensbeek | Ss | 342.82 | 24.2 | 30.0 | 4882813 | 4228 | 359488 573611 | 01.11.1931 | Q | 197 |
| 4884110 | **Ilme** (Leine, Aller, Weser) | Oldendorf | Ds | 127.83 | 149 | 12.1 | 4884300 | 4124 | 355320 574219 | 01.11.1961 | Q | 198 |
| 4885116 | **Gande** (Leine, Aller, Weser) | Gandersheim | Ds | 116.14 | 95.4 | 7.0 | 4885270 | 4126 | 356968 574872 | 01.11.1960 | Q | 199 |
| 4885150 | **Saale** (Leine, Aller, Weser) | Mehle | Ds | 81.58 | 136 | 6.3 | 4885670 | 3824 | 354788 577508 | 01.11.1961 | Q | 200 |
| 4886168 | **Innerste** (Leine, Aller, Weser) | Heinde | Dd2 | 78.88 | 897 | 26.0 | 4886710 | 3826 | 357034 577478 | 01.11.1952 | Q | 201 |
| 4888139 | **Westaue** (Leine, Aller, Weser) | Wunstorf | Ds2 | 38.55 | 558 | 5.2 | 4888700 | 3522 | 352843 581062 | 01.11.1978 | Q | 202 |
| 4898107 | **Lehrde** (Aller, Weser) | Lehringen | Ds | 23.51 | 100 | 11.0 | 4898700 | 3122 | 356813 586149 | 01.11.1954 | Q | 203 |
| 4928107 | **Delme** (Ochtum, Weser) | Holzkamp | DsA | 10.00 | 103 | 12.4 | 4928390 | 2917 | 347136 587460 | 01.11.1966 | Q | 204 |
| 4941116 | **Wüemme** (Lesum, Weser) | Lauenbrück B 75 | Ds | 25.66 | 248 | 78.4 | 4941500 | 2423 | 353566 589670 | 01.11.1968 | Q | 205 |
| 4945108 | **Wümme** (Lesum, Weser) | Hellwege-Schleuse | Ds2 | 9.60 | 908 | 44.0 | 4945330 | 2921 | 351385 588262 | 01.11.1960<br>01.11.1960 | Q<br>W | 206<br>62 |
| 4944120 | **Wiedau** (Wümme, Lesum, Weser) | Worth | Ds | 20.82 | 149 | 3.1 | 4944710 | 2922 | 352981 588459 | 01.11.1982 | Q | 207 |
| 4961112 | **Hunte** (Weser) | Bohmte | DsdA | 40.48 | 179 | 139.7 | 4961139 | 3615 | 345237 580556 | 01.11.1961 | Q | 208 |
| 4963101 | **Hunte** (Weser) | Hoopen OP | Ds | 29.95 | 772 | 104.6 | 4963100 | 3316 | 345987 583528 | 01.11.1964<br>01.11.1964 | Q<br>W | 209<br>63 |
| 4965116 | **Hunte** (Weser) | Colnrade OP | DsF | 18.99 | 1318 | 80.1 | 4965331 | 3116 | 346464 585521 | 01.11.1957 | Q | 210 |
| 49600308 | **Hunte** (Weser) | Oldenburg-Drielake | Ss | -5.01 | 2207 | 0.5 | 4969100 | 2815 | 344880 589008 | 01.01.1900 | W | 79 |
| 4966112 | **Lethe** (Osternburger Kanal, Hunte, Weser) | Oberlethe | Ds | 0.00 | 160 | 5.9 | 4966250 | 2915 | 344514 588201 | 01.11.1972 | Q | 211 |
| 4976103 | **Drepte** (Weser) | Dorfhagen | Dd | 4.17 | 40.0 | 17.1 | 4976300 | 2617 | 347700 591154 | 01.11.1980 | Q | 212 |

# Witterungsverhältnisse, oberirdische Gewässer, Grundwasser, Schwebstoffe

## Witterungsverhältnisse

Als Grundlage für die nachfolgenden Beschreibungen der Witterungsverhältnisse im Wesereinzugsgebiet dienten die Klimadaten des Deutschen Wetterdienstes. Als Vergleichsreihen wurden für die Lufttemperatur und die Gebietsniederschlagshöhe die Reihen 1951/2012 herangezogen. Die Beschreibung der Witterungsverhältnisse wird durch die Einzelwerte der auf den Seiten 22 und 23 graphisch dargestellten Lufttemperaturen und Niederschlagshöhen der ausgewählten Klimastationen Göttingen (obere Leine), Braunlage (Oberharz) und Hannover-Langenhagen (untere Leine) ergänzt, deren punktuelle Information als weitgehend repräsentativ für das Gesamteinzugsgebiet angesehen werden kann. Ab 2012 wird die Messstation Clausthal-Zellerfeld, deren Messbetrieb eingestellt wurde, durch die Station Braunlage fortgeführt.

Das **Abflussjahr** 2012 war mit einer Durchschnittstemperatur von 9,3°C um 1,0°C wärmer als die Periode 1951/2012. An den drei betrachteten Stationen lagen die Durchschnittstemperaturen zwischen 7,4°C (Braunlage) und 10,5°C (Hannover). Das Mittel der Gebietsniederschlagshöhen dieser drei Stationen lag mit 754 mm um ca. 14 % unter dem Vergleichswert der Reihe 1951/2012 von 880 mm. Insgesamt kann das Abflussjahr als zu warm und zu trocken eingestuft werden.

Das **Winterhalbjahr** (November 2011 bis April 2012) lag mit einer Durchschnittstemperatur von 4,8°C um ca. 1,9°C über dem Wert der mehrjährigen Reihe; es ist damit als deutlich zu warm einzustufen. Die Gebietsniederschlagshöhe lag mit 330 mm um ca. 21 % unter dem mehrjährigen Vergleichswert von 418 mm. Das Winterhalbjahr war damit zu trocken.

Im **Sommerhalbjahr** (Mai bis Oktober 2012) lag die mittlere Temperatur mit 13,8°C um ca. 0,1°C über dem Wert der mehrjährigen Reihe. Die Gebietsniederschlagshöhe lag mit 423 mm um 8 % unter dem Wert des mehrjährigen Mittels von 462 mm. Das Sommerhalbjahr war im Vergleich zu den mehrjährigen Jahresdurchschnittswerten zu trocken und durchschnittlich warm.

Der **November 2011** war durchschnittlich warm und extrem trocken. Die Temperatur lag mit 4,4°C um 0,2°C über dem Wert des mehrjährigen Durchschnitts. Die Gebietsniederschlagshöhe war mit 4 mm extrem niedrig und erreichte nur ca. 5% der mehrjährigen Reihe von 74 mm.

Der **Dezember 2011** war deutlich zu feucht und sehr warm. Die Gebietsniederschlagshöhe lag mit 113 mm um ca. 35% über dem Vergleichswert der mehrjährigen Reihe von 84 mm. Das Monatsmittel der Temperatur lag mit 3,8°C um 2,7°C über dem mehrjährigen Mittelwert.

Der **Januar** war extrem warm und sehr feucht. Die Durchschnittstemperatur lag mit einem Wert von 8,3°C um 8,1°C über dem Mittelwert der mehrjährigen Reihe von 0,2°C. Die Gebietsniederschlagshöhe erreichte 140 mm und lag damit um ca. 80 % über dem mehrjährigen Vergleichswert von 79 mm.

Der **Februar** war im Vergleich zu den mehrjährigen Durchschnittswerten durchschnittlich deutlich zu kalt und deutlich zu trocken. Die Durchschnittstemperatur lag mit -2,5°C um 2,9°C unter dem mehrjährigen Mittelwert. Die Gebietsniederschlagshöhe lag mit 26 mm um ca. 55 % unter dem Wert des Vergleichszeitraumes von 59 mm.

Der **März** war bei sehr geringen Niederschlägen deutlich zu warm. Die mittlere Temperatur betrug 6,8°C und lag damit um 3,2°C über dem Wert der mehrjährigen Reihe. Die Niederschlagshöhe lag mit 16 mm um 76 % unter dem Wert des mehrjährigen Mittelwertes von 66 mm.

Der **April** war deutlich zu trocken und etwas zu warm. Die Gebietsniederschlagshöhe erreichte 32 mm und lag damit um ca. 44 % unter dem Wert des Vergleichszeitraumes von 57 mm. Die Lufttemperatur lag mit 7,7°C um 0,3°C über dem mehrjährigen Mittelwert.

Der **Mai** war durchschnittlich feucht und zu warm. Mit 74 mm lag der Gebietsniederschlag um ca. 2 % über dem mehrjährigen Reihenwert von 73 mm. Die mittlere Temperatur von 13,5°C überschritt den mehrjährigen Vergleichswert um 1,5°C.

Der **Juni** war zu kalt und geringfügig zu trocken. Die Durchschnittstemperatur betrug 14,2°C und lag damit um 0,8°C unter dem mehrjährigen Mittel. Die Gebietsniederschlagshöhe lag mit 80 mm um etwa 6 % unter dem mehrjährigen Durchschnitt von 85 mm.

Der **Juli** war bei leicht unterdurchschnittlichen Temperaturen zu feucht. Die Durchschnittstemperatur lag mit 16,3°C um 0,4°C unter dem mehrjährigen Vergleichswert. Die Gebietsniederschlagshöhe überschritt mit 112 mm den mehrjährigen Reihenwert von 87 mm um etwa 29 %.

Der **August** war zu warm und deutlich zu trocken. Die mittlere Temperatur lag mit 17,5°C um 1,1°C über dem mehrjährigen Mittel. Die Gebietsniederschlagshöhe lag mit 61 mm ca. 26 % unter dem mehrjährigen Vergleichswert von 82 mm.

Der **September** war deutlich zu trocken und durchschnittlich warm. Der mittlere Gebietsniederschlag lag mit 33 mm um ca. 52 % unter dem mehrjährigen Vergleichswert von 68 mm. Die mittlere Temperatur von 13,0°C erreichte exakt den Wert der mehrjährigen Reihe.

Der **Oktober** war zu kalt und annähernd durchschnittlich feucht. Die mittlere Gebietsniederschlagshöhe lag mit 63 mm um 5 % unter dem mehrjährigen Mittel von 66 mm. Das Monatsmittel der Temperatur lag mit 8,4°C um 0,6°C unter dem mehrjährigen Vergleichswert.

Der **November** war zu warm und deutlich zu trocken. Die Temperatur lag mit 4,9°C um 0,6°C über dem Wert des mehrjährigen Durchschnitts. Die Gebietsniederschlagshöhe lag mit 49 mm um ca. 33% unter dem Wert der mehrjährigen Reihe von 73 mm.

Der **Dezember** war deutlich zu feucht und sehr warm. Die Gebietsniederschlagshöhe lag mit 112 mm um ca. 33% über dem Vergleichswert der mehrjährigen Reihe von 84 mm. Das Monatsmittel der Temperatur lag mit 1,7°C um 0,5°C über dem mehrjährigen Mittelwert.

## Oberirdische Gewässer

Die folgende Beschreibung für die größeren Gewässer im Wesereinzugsgebiet enthält allgemeine Aussagen über das Abflussgeschehen im Berichtsjahr im Vergleich zu mehrjährigen Mittelwerten. Weitere Einzelheiten können den nachfolgenden Tabellen und Abbildungen entnommen werden. Genauere bzw. regional begrenzte Betrachtungen lassen sich anhand der bei den zuständigen Dienststellen vorliegenden Datenbeständen durchführen.

**Weser**

Das gesamte Wesereinzugsgebiet umfasst 46.306 km², davon entfallen auf die Bundesländer

| | | |
|---|---|---|
| Niedersachsen | 26.729 km² | 57,7% |
| Hessen | 8.969 km² | 19,4% |
| Nordrhein-Westfalen | 4.963 km² | 10,7% |
| Thüringen | 4.490 km² | 9,7% |
| Sachsen-Anhalt | 710 km² | 1,5% |
| Bremen | 397 km² | 0,9% |
| Bayern | 48 km² | 0,1% |

Die Weser entsteht durch den Zusammenfluss von Werra und Fulda bei Hann.-Münden. Sie weist bereits hier mit 12.441 km² etwa ein Viertel ihres Gesamteinzugsgebietes auf. Nach ca. 432 km Lauflänge mündet sie bei Bremerhaven in die Nordsee.

Geographisch wird die Weser in Ober-, Mittel,- und Unterweser unterteilt. Die Abflusswerte der Gewässer des Wesergebietes lagen bei unterdurchschnittlichen Niederschlägen, bezogen auf das Abflussjahr, überwiegend deutlich unter den langjährigen Vergleichswerten. Die Abflusswerte lagen an den Weserpegeln im Winter- und im Sommerhalbjahr unter den mehrjährigen Reihenwerten.

Die mittleren Jahresabflüsse (MQ) erreichten an den Pegeln der Weser ca. 72-79 % der Vergleichswerte der mehrjährigen Reihen. Im Winterhalbjahr lagen die Werte im Mittel ca. 23 % unter den Durchschnittswerten; im Sommerhalbjahr lagen sie im Mittel ca. 25 % unter den Mittelwerten, dabei lagen die durchschnittlichen Niederschläge sowohl im Winter- als auch im Sommerhalbjahr unter den langjährigen Mittelwerten.

Von Dezember 2011 bis Februar 2012 und im Dezember 2012 kam es zu hohen Abflüssen, wobei die höchsten Werte im Januar erreicht wurden, die jedoch meist deutlich unter den Werten des mittleren Hochwasserabflusses (MHQ) lagen. Niedrige Abflüsse wurden von November 2011 bis Anfang Dezember 2011und von Mai bis November gemessen. Die niedrigsten Werte traten vor allem im November 2011 und von August bis Dezember 2012 auf.

**Werra**

Die Werra entspringt im südlichen Thüringer Wald und mündet nach etwa 298 km Lauflänge und einem $A_{E0}$ von 5.496 km² bei Hann.-Münden in die Weser.

Zur Beurteilung des Abflussverhaltens der Werra wird der Pegel Letzter Heller herangezogen. Der mittlere Jahresabfluss lag mit 39,0 m³/s deutlich unter dem Vergleichswert der mehrjährigen Reihe (MQ) von

50,3 m³/s. Das Wintermittel wurde um ca. 19 % unterschritten, wobei das Sommermittel sogar um ca. 29 % unterschritten wurde. Der kleinste Abflusswert trat am 26.11.2011 auf und lag mit 13,4 m³/s um ca. 8 % unter dem Wert des mittleren Niedrigwasserabflusses (MNQ) der mehrjährigen Reihe von 14,6 m³/s. Der höchste Jahresabfluss wurde am 23.01.2012 mit 212 m³/s gemessen und lag damit um 20 % unter dem Wert des mittleren Hochwasserabflusses (MHQ) der mehrjährigen Reihe von 266 m³/s.

**Fulda**

Die Fulda entspringt in der Rhön und mündet nach etwa 220 km Lauflänge und einem $A_{Eo}$ von 6945 km² bei Hann.-Münden in die Weser.

Der Pegel Guntershausen mit einer Einzugsgebietsgröße von ca. 6.350 km² wird verwendet, um die Abflussverhältnisse die Fulda zu charakterisieren. Der mittlere Jahresabfluss lag mit 47,4 m³/s um 18 % unter dem Wert der mehrjährigen Reihe (MQ) von 57,5 m³/s. Das Defizit des Sommerhalbjahres lag bei 10 %. Im Winterhalbjahr betrug das Defizit sogar 22 %. Der höchste Abflusswert trat am 07.01.2012 mit 300 m³/s auf und lag um 25 % unter dem MHQ der mehrjährigen Reihe von 398 m³/s. Der niedrigste Wert wurde am 30.11.2011 mit 13,9 m³/s gemessen, der ca. 17 % unter dem MNQ des Reihenwertes von 16,8 m³/s lag.

**Oberweser**

Der 205 km lange Lauf der Weser von Hannoversch-Münden bis zur Porta Westfalica bei Minden mit einem $A_{Eo}$ von etwa 19.162 km² wird als Oberweser bezeichnet.

Der Pegel Porta wird zur Charakterisierung dieses Gebietes herangezogen. Der mittlere Jahresabfluss von 141 m³/s unterschritt den Vergleichswert der mehrjährigen Reihe (MQ) von 187 m³/s um 25 %. Das Wintermittel wurde um 24 % unterschritten, wobei das Sommermittel um 26 % unterschritten wurde. Der niedrigste Wert wurde am 01.12.2011 mit 57,3 m³/s gemessen und lag damit um ca. 15 % unter dem langjährigen mittleren Niedrigwasserabfluss (MNQ) von 67,6 m³/s. Am 09.01.2012 wurde der höchste Abfluss mit 670 m³/s gemessen, der um ca. 17 % unter dem mittleren langjährigen Wert von 805 m³/s lag.

**Aller**

Die Aller entspringt auf den Helmstedt-Alvenslebener Höhen. Mit einer Lauflänge von etwa 240 km und einem $A_{Eo}$ von 15.743 km² mündet sie bei Verden in die Weser (Mittelweser). Sie nimmt in ihrem Verlauf hydrologisch sehr unterschiedliche Teileinzugsgebiete auf: Die Bördengebiete und Teile der Lüneburger Heide, mit der Oker das nördliche Harzgebiet und mit der Leine den Westharz und das Harzvorlandgebiet.

Die Abflüsse am Pegel Rethem mit einer Einzugsgebietsgröße von 14.482 km² werden zur Beschreibung des Abflussgeschehens der Aller herangezogen. Der mittlere Jahresabfluss unterschritt mit 81 m³/s den mehrjährigen Reihenwert von 115 m³/s um 30 %. Das Wintermittel wurde um ca. 26 % unterschritten; das Sommermittel wurde sogar um ca. 37 % unterschritten. Der höchste Abfluss wurde am 26.01.2012 mit 327 m³/s gemessen, der damit um ca. 24 % unter dem MHQ der mehrjährigen Reihe von 430 m³/s lag. Der niedrigste Abflusswert wurde mit 35,4 m³/s am 23.09.2012 ermittelt und lag damit um ca. 15 % unter dem mehrjährigen Reihenwert des MNQ von 41,9 m³/s.

**Leine**

Als hydrologisch eigenständiges Teilgebiet der Aller stellt sich das Einzugsgebiet der Leine dar. Die Leine entspringt im Eichsfeld. Nach einer Lauflänge von etwa 280 km und einem $A_{Eo}$ von 6.526 km² mündet sie nördlich von Hannover in die Aller.

Am Pegel Schwarmstedt ($A_{Eo}$ 6.443 km²) wird der gesamte Abfluss der Leine registriert. Der mittlere Jahresabfluss betrug 39,3 m³/s und lag damit um ca. 36 % unter dem MQ-Wert der mehrjährigen Reihe von 61,3 m³/s . Das Wintermittel von 56,4 m³/s wurde um ca. 31 % unterschritten, wobei das Sommermittel um 45 % unterschritten wurde. Der niedrigste Abflusswert trat am 02.10.2012 mit 10,2 m³/s auf, der um ca. 50 % unter dem Wert der mehrjährigen Reihe von 20,4 m³/s lag. Der höchste Abflusswert trat mit 186 m³/s am 25.01.2012 auf und lag damit um ca. 34 % unter dem Wert des mehrjährigen mittleren Hochwasserabflusses (MHQ) von 280 m³/s.

**Mittelweser**

Die 157 km lange Flussstrecke unterhalb der Porta Westfalica bis zur Tidegrenze bei Bremen wird Mittelweser genannt.

Der mittlere Jahresabfluss am Pegel Intschede mit einem $A_{Eo}$ von 37.495 km² betrug 234 m³/s und unterschritt damit den mehrjährigen Mittelwert (MQ) von 324 m³/s um ca. 28 %. Das Wintermittel wurde um ca. 25 % unterschritten, wobei das Sommermittel um ca. 34 % unterschritten wurde. Der kleinste Abflusswert wurde am 21.11.2012 mit 98,2 m³/s gemessen. Er lag damit um 15 % unter dem mehrjährigen mittleren Niedrigwasserabfluss (MNQ) von 116 m³/s. Der höchste Abfluss wurde am 26.01.2012 mit 1.010 m³/s ermittelt und lag damit um 17 % über dem mehrjährigen Reihenwert (MHQ) von 1220 m³/s.

**Lesum**

Die Lesum mündet unterhalb von Bremen in die Weser (Unterweser), die Einzugsgebietsgröße beträgt hier 2.190 km². Sie vereinigt ca. 10 km oberhalb ihrer Mündung die Flüsse Wümme und Hamme. Da der Tideeinfluss weit in die Unterläufe dieser Flüsse hineinreicht und in diesem Bereich z. Zt. keine Abflussmengen ermittelt werden, kann eine Beurteilung des Abflussgeschehens lediglich bis zum Pegel Hellwege/Wümme erfolgen. Das Einzugsgebiet an diesem Pegel hat eine Größe von ca. 900 km² und umfasst damit ca. 40 % des Lesum-Einzugsgebietes.

Der mittlere Jahresabfluss lag mit 9,85 m³/s um ca. 0,2 % geringfügig unter dem mehrjährigen Reihenwert (MQ) von 9,83 m³/s. Das Wintermittel lag mit 15,9 m³/s um ca. 17 % über dem langjährigen Mittelwert von 13,6 m³/s. Das Sommermittel wurde mit 3,89 m³/s um ca. 37 % unterschritten. Der am 11.09.2012 kleinste gemessene Abfluss betrug 2,21 m³/s und lag damit um ca. 7 % unter dem mehrjährigen MNQ von 2,38 m³/s. Der höchste Abflusswert wurde am 24.01.2012 mit 59,8 m³/s gemessen und lag damit um ca. 19 % über dem mittleren Hochwasserabfluss (MHQ) der mehrjährigen Reihe von 50,2 m³/s.

**Hunte**

Die Hunte entspringt im Wiehengebirge und mündet nach etwa 165 km Lauflänge mit einem $A_{Eo}$ von 2.639 km² oberhalb von Brake in die Weser (Unterweser). Bis Oldenburg ist die Hunte tidebeeinflusst.

Das Abflussgeschehen der Hunte wird durch den Pegel Colnrade OP ($A_{Eo}$ 1.318 km²) verdeutlicht. Der mittlere Jahresabfluss von 7,83 m³/s lag um ca. 23 % unter dem mehrjährigen Mittelwert (MNQ) von 10,2 m³/s. Das Wintermittel wurde um 15,4 % unterschritten, wobei das Sommermittel um 43,6 % unterschritten wurde. Der höchste Abflusswert wurde am 23.01.2012 mit 57,8 m³/s gemessen. Damit wurde der mehrjährige Vergleichswert von 49,6 m³/s um ca. 16 % überschritten. Der niedrigste Abfluss lag am 24.08.2012 mit 1,72 m³/s um ca. 28 % unter dem Wert der mehrjährigen Reihe (MNQ) von 2,39 m³/s.

**Unterweser**

Der tidebeeinflusste Bereich der Weser, ab Bremen bis zur Mündung in die Nordsee (Stromgebietsgrenze), wird Unterweser genannt.

Das höchste Tidehochwasser wurde in Bremen, Vegesack und Farge am 13.01.2012, in Brake am 05.01.2012, in Bremerhaven am 28.01.2012 und in Oldenburg am 24.01.2012 gemessen. Es lag in Bremen um 1,95 m und in Bremerhaven um 1,79 m über dem mittleren Tidehochwasser (MThw) der Reihe 2003/2012.

## Grundwasser

Das Wesergebiet lässt sich grob in zwei Grundwasserregionen einteilen: In das Lockergesteinsgebiet des Norddeutschen Tieflandes und in die Festgesteinsgebiete des sich südlich anschließenden Berglandes. Die Lockergesteinsgebiete haben im Känozoikum - hauptsächlich im Quartär - ihre heutigen Oberflächenformen erhalten, während das vielfältig gegliederte Bergland vorwiegend aus mesozoischen Formationen aufgebaut ist.

Der Vergleich des Grundwasserverhaltens zwischen den beiden Regionen ergibt, dass die Grundwasserstände im Festgesteinsgebiet auf Niederschlagsereignisse meistens schneller und stärker reagieren.

Im Wesergebiet gehören ca. 880 Messstellen zu den Landesgrundwasserdiensten (Grundmessnetze). Im niedersächsischen Teil gibt es zusätzlich noch ca. 1350 staatliche Sondermessstellen.

Darüber hinaus gibt es noch eine große Zahl Sondermessstellen Dritter (Wasserwerks-, Deponiebetreiber usw.). Viele Messstellen der Landesgrundwasserdienste sind in den 50er- und 60er-Jahren eingerichtet worden. Von der ältesten niedersächsischen Messstelle liegen Beobachtungsergebnisse ab 1914 vor.

Die 7 Grundwassermessstellen aus dem Wesergebiet, deren Daten von 1993 bis 2012 auf den Seiten 32 bis 35 in Form von Ganglinien dargestellt sind, haben eine lange Beobachtungsdauer, sind repräsentativ für eine größere Grundwasserregion und ungestört von anthropogenen Einflüssen.

Die Messstellen Groß Mahner, Schönberg und Themar repräsentieren die Verhältnisse im Festgesteinsgebiet. Die Messstellen Axstedt, Reinsehlen I, Rechterfeld und Büren I liegen im Lockergestein.

Die Stammdaten der Messstellen sind auf Seite 213 aufgelistet.

Die nachfolgenden Aussagen über die Grundwassersituation 2012 im Wesergebiet können nur das Durchschnittsverhalten des Grundwassers

wiedergeben. Genauere bzw. regional begrenzte Aussagen über die Veränderung von Grundwasserständen lassen sich nur aus den Daten aller Grundwassermessstellen des Landesgrundwasserdienstes und Sondermessnetzen gewinnen.

Die Grundwasserstände hatten, bezogen auf die langjährigen Monatsmittelwerte, die geringste Abweichung im Januar (- 16,6 cm unter dem langjährigen Monatsmittelwert für alle 7 Messstellen). Im Dezember wurde die maximale Abweichung verzeichnet (- 62,3 cm unter dem langjährigen Monatsmittelwert für alle 7 Messstellen). Dieser Monat weist zugleich die geringste Schwankungsbreite in den Abweichungen auf: - 163,0 cm in Schönberg bis - 11,0 cm in Axstedt. Die höchste Schwankungsbreite ergab sich im Juli mit Werten von – 183,4 cm (Schönberg) bis + 22,0 cm (Groß Mahner).

Insgesamt lagen die Jahresniederschläge im Wesergebiet unter dem langjährigen Mittel. Der Jahresmittelwert der Abweichungen für die untersuchten Grundwassermessstellen lag mit - 35,4 cm deutlich unter dem langjährigen Jahresmittel.

NLWKN Betriebsstelle Hannover-Hildesheim

## Schwebstoffe

Im Wesergebiet bestehen zehn Schwebstoffmessstellen, fünf an der Weser, zwei an der Aller und jeweils eine an Werra, Fulda und Leine. Das vorliegende Jahrbuch enthält eine Auswahl der Schwebstoffdaten von acht Messstellen.

Die Ermittlung der Schwebstoffkonzentration erfolgte entsprechend den Richtlinien für Schwebstoffmessungen (DVWK-Regeln zur Wasserwirtschaft, Schwebstoffmessungen, H. 125/1986) aufgrund von Einpunktmessungen als Oberflächenentnahme von je 5 l-Schöpfproben und Filterung an den Messstellen (gravimetrische Filtermethode).

Die Probenahme wurde durchgeführt:

- Hannoversch-Münden/Fulda im rechten Fulda-Arm, in Strommitte
- Hannoversch-Münden/Werra im linken Werra-Arm, unterhalb des Wehres
- Bodenwerder/Weser in Strommitte von der Straßenbrücke
- Nienburg/Weser in Strommitte von der Straßenbrücke
- Intschede/Weser im Turbinenauslauf des Kraftwerks Langwedel
- Marklendorf/Aller im Turbinenauslauf des Kraftwerks
- Rethem/Aller vom linken Ufer
- Herrenhausen/Leine im Unterwasser der Staustufe

In Herrenhausen/Leine war der Messbetrieb 2012 eingestellt. An den Messstellen Hann.-Münden/Werra, Hann.-Münden/Fulda, Bodenwerder/Weser, Bodenwerder/Weser und Rethem/Aller liegen jeweils keine vollständigen Messreihen vor. Die Angaben spiegeln daher die tatsächlichen Schwebstoffverhältnisse an diesen Messstellen nur mit Einschränkungen wieder.

Die **jährliche Schwebstofffracht** lag an den Messstellen Hann.-Münden/Fulda um rd. 51 %, in Hann.-Münden/Werra um rd. 47 %, an der Weser in Bodenwerder um rd. 69 %, in Nienburg um rd. 53 %, in Intschede um rd. 60 % und an der Aller in Marklendorf um rd. 42 % und in Rethem um rd. 62 % unter dem langjährigen Mittelwert.

Die höchste **monatliche Schwebstofffracht** war je Messstelle an der Weser in Bodenwerder und Nienburg jeweils mit rd. 44 % und in Intschede mit rd. 59 % an der jeweiligen Jahresschwebstofffracht beteiligt, in der Fulda mit rd. 60 %, in der Werra mit rd. 51 % und in der Aller in Marklendorf mit rd. 45 % und in Rethem mit rd. 30 %. Der schwebstoffreichste Monat war in allen Flussgebieten der Januar.

Die niedrigsten monatlichen Schwebstofffrachten wurden an Werra, Fulda und Weser im Oktober und November und an der Aller im August und September beobachtet; sie lagen zwischen 0,9 % und 2,2 % der entsprechenden Jahresschwebstofffracht.

Die höchste **tägliche Schwebstofffracht** wurde in Hann.-Münden/Werra mit 3.322 t am 10. Januar und in Hann.-Münden/Fulda mit 2.540 t am 12. Januar ermittelt. In Nienburg wurden mit 5.313 t am 6. Januar, in Bodenwerder mit 2.748 t am, in Intschede mit 14.522 t und in Rethem mit 936 t jeweils am 7. Januar, sowie in Marklendorf mit 767 t am 26. Januar die höchsten Tagesfrachten gemessen.

Die niedrigste tägliche Schwebstofffracht lag an den Weser-Messstellen zwischen 15 t und 29 t, an den Messstellen von Werra und Fulda bei 12 t bzw. 9 t, an der Aller bei 3 t, bzw. 6 t. Die Werte traten an der Werra und Fulda im Oktober und an der Weser im August bzw. Oktober auf, an der Aller im August und September.

Die mittlere **jährliche Schwebstoffkonzentration** (arithmetisches Mittel der Tageswerte) lag in Hann.-Münden/Werra mit 31 g/m$^3$ rd. 41 %, in Hann.-Münden/Fulda mit 15 g/m$^3$ um rd. 37 %, in Bodenwerden/Weser mit 16 g/m$^3$ um rd. 51 % , in Nienburg/Weser mit 19 g/m$^3$ um rd. 38 %, in Intschede/Weser mit 17 g/m$^3$ rd. 54 %, in Marklendorf/Aller mit 10 g/m$^3$ rd. 37 % und in Rethem/Aller mit 11 g/m$^3$ rd. 52 % unter dem langjährigen Mittelwert.

Die größte tägliche Schwebstoffkonzentration wurde an den Weser-Messstellen in Bodenwerder mit 60 g/m$^3$ jeweils am 6. und 7. Januar, in Nienburg mit 111 g/m$^3$ am 6. Januar und in Intschede mit 207 g/m$^3$ am 7. Januar beobachtet, in Hann.-Münden/Werra mit 267 g/m$^3$ am 10. Januar, in Hann.-Münden/Fulda mit 140 g/m$^3$ am 12. Januar, in Marklendorf/Aller mit 58 g/m$^3$ am 26. Januar und in Rethem/Aller mit 56 g/m$^3$ am 19. Dezember.

BfG Koblenz

Hinweis:
Die Einarbeitung der Niederschlagsdaten des Deutschen Wetterdienstes konnte für das DGJ 2012 wegen fehlender Daten nicht durgeführt werden.

# Übersichtskarte

## Meßstellen, von denen Daten nachfolgend graphisch dargestellt sind

### Meteorologische Stationen

Klimahauptstationen des DWD

Göttingen
Clausthal−Zellerfeld
Langenhagen

### Gewässerkundliche Meßstellen

Oberirdische Gewässer

Hannoversch-Münden
Intschede
Guntershausen
Rethem
Groß−Schwülper
Greene

Grundwasser

Schönberg
Groß−Mahner
Rechterfeld
Axstedt
Themar
Reinsehlen
Büren

# Hydrologischer Längsschnitt der Weser

# Lufttemperaturen $T_L$ und Niederschlagshöhen $h_N$ ab 1978

Monatsmittel, Jahresmittel Jahressumme aus Monatsummen

Nach Unterlagen des DWD

# Lufttemperaturen $T_L$ und Niederschlagshöhen $h_N$ im Berichtszeitraum

Tagesmittel, mittl. Jahresgang Monatsummen aus Tagessummen

Nach Unterlagen des DWD

# Abflüsse Q und Abflussspenden q ab 1978

Monatsmittel, Jahresmittel, mehrjährige Mittel

# Abflüsse Q und Abflussspenden q im Berichtszeitraum

Tagesmittel, Monatsmittel, Dauerlinien

# Abflüsse Q und Abflussspenden q ab 1978

Monatsmittel, Jahresmittel, mehrjährige Mittel

# Abflüsse Q und Abflussspenden q im Berichtszeitraum

Tagesmittel, Monatsmittel, Dauerlinien

# Abflüsse Q und Abflußspenden q ab 1978

Monatsmittel, Jahresmittel, langjähriges Mittel

# Abflüsse Q und Abflußspenden q im Berichtszeitraum

Tagesmittel, Monatsmittel, Dauerlinien

# Wasserstände W oberirdischer Gewässer im Berichtszeitraum

Tagesmittel, mittlerer Jahresgang

# Abflüsse Q und Schwebstoffe ab 1978

Monatsmittel, Jahresmittel, mehrjährige Mittel

## Intschede / Weser

$A_{Eo}$ = 37718 km$^2$

# Grundwasserstände $W_{Gw}$ ab 1993

Monatsmittel, mehrjährige Monatsmittel

# Grundwasserstände $W_{Gw}$ ab 1993

Monatsmittel, mehrjährige Monatsmittel

# Grundwasserstände $W_{Gw}$ ab 1993

Monatsmittel, mehrjährige Monatsmittel

# Grundwasserstände $W_{Gw}$ ab 1993

Monatsmittel, mehrjährige Monatsmittel

$A_{Eo}$ : 12444 km²
PNP : NN + 114.95 m
Lage: 0.7 km unterhalb von Werra und Fulda, links

W
cm

Pegel : Hann.-Münden Nr. 43100109
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 99 | 87 | 292 | 223 | 172 | 134 | 117 | 139 | 127 | 146 | 121 | 120 | 120 | 130 |
| 2. | 96 | 89 | 302 | 202 | 180 | 129 | 121 | 131 | 135 | 133 | 119 | 122 | 120 | 126 |
| 3. | 102 | 89 | 333 | 195 | 182 | 126 | 123 | 120 | 127 | 134 | 118 | 122 | 128 | 119 |
| 4. | 117 | 94 | 353 | 189 | 185 | 129 | 131 | 126 | 121 | 130 | 120 | 129 | 145 | 121 |
| 5. | 109 | 107 | 366 | 184 | 186 | 144 | 128 | 144 | 129 | 121 | 128 | 136 | 156 | 123 |
| 6. | 93 | 146 | 419 | 176 | 185 | 139 | 142 | 144 | 131 | 151 | 130 | 142 | 151 | 122 |
| 7. | 93 | 167 | 428 | 166 | 182 | 131 | 148 | 132 | 144 | 156 | 130 | 132 | 141 | 119 |
| 8. | 93 | 148 | 437 | 171 | 184 | 129 | 145 | 127 | 127 | 134 | 131 | 127 | 136 | 116 |
| 9. | 92 | 159 | 415 | 170 | 182 | 128 | 137 | 118 | 122 | 122 | 141 | 130 | 134 | 116 |
| 10. | 92 | 161 | 398 | 171 | 179 | 135 | 130 | 118 | 121 | 122 | 148 | 123 | 132 | 137 |
| 11. | 91 | 171 | 384 | 164 | 171 | 131 | 126 | 121 | 125 | 120 | 151 | 125 | 133 | 143 |
| 12. | 90 | 152 | 368 | 159 | 167 | 133 | 130 | 129 | 131 | 118 | 134 | 125 | 146 | 144 |
| 13. | 90 | 143 | 356 | 162 | 166 | 141 | 135 | 126 | 136 | 119 | 139 | 124 | 135 | 137 |
| 14. | 99 | 149 | 345 | 161 | 163 | 135 | 126 | 123 | 200 | 121 | 127 | 126 | 125 | 140 |
| 15. | 89 | 174 | 320 | 172 | 161 | 130 | 120 | 136 | 234 | 119 | 118 | 136 | 120 | 186 |
| 16. | 89 | 208 | 297 | 176 | 160 | 127 | 123 | 129 | 239 | 126 | 122 | 133 | 122 | 246 |
| 17. | 89 | 253 | 272 | 174 | 157 | 124 | 124 | 127 | 221 | 128 | 121 | 123 | 122 | 307 |
| 18. | 89 | 273 | 250 | 188 | 157 | 121 | 121 | 124 | 216 | 125 | 122 | 122 | 121 | 321 |
| 19. | 89 | 247 | 266 | 203 | 156 | 122 | 121 | 118 | 217 | 118 | 123 | 123 | 123 | 308 |
| 20. | 89 | 212 | 331 | 236 | 156 | 122 | 123 | 146 | 194 | 123 | 121 | 120 | 117 | 279 |
| 21. | 89 | 204 | 372 | 226 | 153 | 121 | 122 | 165 | 185 | 122 | 123 | 119 | 116 | 255 |
| 22. | 89 | 203 | 399 | 183 | 149 | 131 | 119 | 162 | 182 | 121 | 122 | 121 | 117 | 248 |
| 23. | 88 | 213 | 417 | 168 | 147 | 128 | 115 | 154 | 170 | 120 | 120 | 121 | 115 | 287 |
| 24. | 88 | 229 | 414 | 165 | 144 | 128 | 118 | 137 | 155 | 127 | 125 | 122 | 117 | 379 |
| 25. | 88 | 243 | 386 | 169 | 142 | 127 | 121 | 127 | 146 | 144 | 126 | 122 | 116 | 402 |
| 26. | 88 | 240 | 355 | 178 | 139 | 126 | 121 | 123 | 141 | 133 | 120 | 123 | 115 | 404 |
| 27. | 88 | 225 | 316 | 178 | 137 | 124 | 122 | 124 | 142 | 126 | 126 | 125 | 116 | 391 |
| 28. | 88 | 226 | 283 | 172 | 136 | 121 | 124 | 119 | 154 | 124 | 128 | 126 | 118 | 393 |
| 29. | 88 | 233 | 265 | 168 | 133 | 119 | 124 | 123 | 153 | 123 | 125 | 120 | 118 | 394 |
| 30. | 88 | 256 | 248 | | 133 | 118 | 123 | 123 | 178 | 120 | 121 | 117 | 124 | 388 |
| 31. | | 284 | 238 | | 132 | | 127 | | 183 | 119 | | 118 | | 352 |

## Hauptwerte

| | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23.+ | 1. | 31. | 12. | 31. | 30. | 23. | 9.+ | 4.+ | 12.+ | 3.+ | 30. | 23.+ | 8.+ |
| NW | 88 | 87 | 238 | 159 | 132 | 118 | 115 | 118 | 121 | 118 | 118 | 117 | 115 | 116 |
| MW | 92 | 187 | 343 | 181 | 161 | 128 | 126 | 131 | 161 | 127 | 127 | 125 | 127 | 237 |
| HW | 124 | 300 | 444 | 258 | 194 | 146 | 150 | 174 | 248 | 173 | 159 | 151 | 157 | 409 |
| Tag | 4. | 31. | 8. | 20. | 6. | 5.+ | 7. | 20.+ | 16. | 6. | 11. | 6. | 6. | 24.+ |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2011 | 2006 | 2006 | 2004 | 2012 | 2012 | 2011 | 2010 | 2011 | 2003 | 2003 | 2003 | 2011 |
| NW | 79 | 87 | 108 | 110 | 127 | 118 | 115 | 113 | 112 | 98 | 77 | 87 | 79 | 87 |
| MNW | 114 | 135 | 162 | 163 | 178 | 145 | 127 | 120 | 116 | 116 | 109 | 110 | 106 | 129 |
| MW | 163 | 191 | 249 | 219 | 233 | 186 | 158 | 141 | 135 | 136 | 127 | 131 | 146 | 191 |
| MHW | 246 | 300 | 399 | 344 | 332 | 266 | 253 | 211 | 195 | 187 | 207 | 196 | 217 | 291 |
| HW | 451 | 503 | 620 | 504 | 480 | 518 | 436 | 306 | 248 | 356 | 544 | 452 | 369 | 452 |
| Jahr | 2002 | 2002 | 2011 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 87 | am 01.12.2011 | 87 | 115 | 115 | am 23.05.2012 |
| MW | cm | 158 | | 183 | 133 | 165 | |
| HW | cm | 444 | am 08.01.2012 | 444 | 248 | 444 | am 08.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 77 | am 25.09.2003 | 79 | 77 | 77 | am 25.09.2003 |
| MNW | cm | 90 | | 108 | 101 | 100 | |
| MW | cm | 172 | | 207 | 138 | 171 | |
| MHW | cm | 497 | | 476 | 298 | 488 | |
| HW | cm | 620 | am 09.01.2011 | 620 | 544 | 620 | am 09.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 59 | 14.10.1921 | 836*) | 17.05.1943 |
| 2 | 63 | 17.09.1959 | 766 | 10.02.1946 |
| 3 | 64 | 15.09.1991 | 722 | 01.01.1926 |
| 4 | 66 | 02.11.1949 | 652 | 06.11.1940 |
| 5 | 70 | 13.09.1964 | 652 | 29.11.1939 |
| 6 | 71 | 31.10.1976 | 642 | 15.03.1947 |
| 7 | 71 | 28.08.1934 | 633 | 31.01.1995 |
| 8 | 74 | 06.01.1938 | 629 | 20.03.1942 |
| 9 | 75 | 07.01.1954 | 620 | 09.01.2011 |
| 10 | 77 | 25.09.2003 | 615 | 05.01.2003 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 437 | 437 | | | |
| 364 | 428 | 428 | 603 | 529 | 347 |
| 363 | 419 | 419 | 577 | 485 | 347 |
| 362 | 417 | 417 | 572 | 456 | 345 |
| 361 | 415 | 415 | 570 | 431 | 325 |
| 360 | 414 | 414 | 549 | 416 | 316 |
| 359 | 399 | 404 | 549 | 404 | 307 |
| 358 | 398 | 402 | 547 | 391 | 297 |
| 357 | 386 | 399 | 536 | 381 | 293 |
| 356 | 384 | 398 | 526 | 375 | 289 |
| 350 | 353 | 384 | 399 | 328 | 273 |
| 340 | 283 | 333 | 351 | 297 | 263 |
| 330 | 243 | 287 | 321 | 272 | 242 |
| 320 | 225 | 246 | 303 | 258 | 225 |
| 300 | 185 | 186 | 273 | 228 | 186 |
| 270 | 168 | 167 | 250 | 195 | 157 |
| 240 | 149 | 147 | 230 | 172 | 142 |
| 210 | 137 | 139 | 209 | 156 | 129 |
| 183 | 132 | 133 | 199 | 145 | 125 |
| 150 | 128 | 128 | 177 | 134 | 121 |
| 130 | 126 | 127 | 167 | 130 | 118 |
| 120 | 125 | 126 | 164 | 128 | 115 |
| 110 | 124 | 125 | 159 | 126 | 112 |
| 100 | 123 | 124 | 157 | 125 | 110 |
| 90 | 123 | 123 | 155 | 124 | 107 |
| 80 | 122 | 123 | 150 | 123 | 100 |
| 70 | 122 | 122 | 146 | 122 | 97 |
| 60 | 121 | 122 | 142 | 121 | 94 |
| 50 | 120 | 122 | 139 | 120 | 93 |
| 40 | 119 | 121 | 136 | 117 | 92 |
| 30 | 102 | 120 | 132 | 112 | 90 |
| 25 | 94 | 119 | 129 | 108 | 90 |
| 20 | 91 | 119 | 126 | 103 | 88 |
| 15 | 90 | 119 | 125 | 98 | 86 |
| 10 | 90 | 118 | 124 | 93 | 84 |
| 9 | 89 | 118 | 123 | 92 | 83 |
| 8 | 89 | 117 | 122 | 92 | 82 |
| 7 | 89 | 117 | 122 | 91 | 82 |
| 6 | 89 | 117 | 122 | 90 | 81 |
| 5 | 89 | 117 | 122 | 90 | 80 |
| 4 | 89 | 117 | 121 | 90 | 80 |
| 3 | 89 | 116 | 121 | 89 | 80 |
| 2 | 89 | 116 | 120 | 88 | 80 |
| 1 | 88 | 116 | 120 | 84 | 79 |
| 0 | 87 | 115 | 119 | 77 | 77 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
Wasserstände bis 1954 für Weser-Km -0,08
*) durch Bruch der Edertalsperre
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 12996 km²
PNP : NN + 98.00 m
Lage: 36.0 km unterhalb von Werra und Fulda, rechts

W
cm

Pegel : Wahmbeck Nr. 43900105
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 126 | 112 | 315 | 253 | 198 | 162 | 143 | 167 | 154 | 181 | 147 | 147 | 148 | 157 |
| 2. | 125 | 115 | 321 | 234 | 206 | 157 | 146 | 162 | 160 | 162 | 146 | 147 | 149 | 156 |
| 3. | 124 | 118 | 347 | 228 | 208 | 154 | 147 | 150 | 158 | 161 | 145 | 149 | 152 | 150 |
| 4. | 142 | 120 | 370 | 218 | 211 | 154 | 155 | 153 | 149 | 159 | 145 | 151 | 168 | 147 |
| 5. | 142 | 129 | 384 | 214 | 212 | 168 | 154 | 174 | 151 | 152 | 150 | 164 | 181 | 152 |
| 6. | 123 | 153 | 429 | 208 | 212 | 168 | 164 | 169 | 160 | 162 | 156 | 166 | 181 | 150 |
| 7. | 121 | 195 | 443 | 200 | 209 | 159 | 172 | 168 | 168 | 187 | 156 | 165 | 173 | 149 |
| 8. | 120 | 180 | 456 | 197 | 210 | 156 | 171 | 154 | 160 | 169 | 157 | 151 | 167 | 145 |
| 9. | 121 | 180 | 439 | 197 | 210 | 155 | 166 | 149 | 152 | 150 | 162 | 160 | 162 | 144 |
| 10. | 119 | 187 | 418 | 198 | 207 | 159 | 157 | 144 | 148 | 149 | 172 | 148 | 162 | 156 |
| 11. | 120 | 196 | 403 | 194 | 200 | 159 | 151 | 147 | 151 | 147 | 175 | 151 | 161 | 172 |
| 12. | 118 | 183 | 388 | 189 | 195 | 159 | 154 | 152 | 157 | 146 | 170 | 150 | 170 | 172 |
| 13. | 118 | 172 | 378 | 189 | 194 | 167 | 157 | 156 | 164 | 145 | 160 | 152 | 169 | 166 |
| 14. | 121 | 174 | 369 | 188 | 191 | 162 | 157 | 150 | 202 | 148 | 162 | 151 | 158 | 164 |
| 15. | 122 | 190 | 346 | 197 | 189 | 156 | 147 | 160 | 258 | 146 | 146 | 161 | 151 | 197 |
| 16. | 117 | 227 | 323 | 202 | 187 | 153 | 151 | 157 | 265 | 151 | 146 | 160 | 150 | 257 |
| 17. | 117 | 268 | 302 | 202 | 185 | 151 | 151 | 156 | 257 | 154 | 148 | 155 | 150 | 319 |
| 18. | 117 | 293 | 279 | 211 | 184 | 149 | 149 | 153 | 245 | 153 | 147 | 147 | 149 | 343 |
| 19. | 117 | 279 | 284 | 226 | 184 | 148 | 149 | 147 | 247 | 147 | 150 | 149 | 150 | 334 |
| 20. | 116 | 242 | 342 | 249 | 183 | 150 | 149 | 158 | 229 | 146 | 148 | 148 | 147 | 308 |
| 21. | 117 | 233 | 387 | 260 | 181 | 148 | 150 | 194 | 214 | 148 | 149 | 146 | 145 | 282 |
| 22. | 116 | 230 | 415 | 217 | 177 | 154 | 147 | 187 | 213 | 147 | 148 | 146 | 144 | 272 |
| 23. | 116 | 239 | 435 | 199 | 175 | 157 | 144 | 185 | 201 | 145 | 146 | 147 | 144 | 307 |
| 24. | 116 | 250 | 432 | 193 | 172 | 155 | 144 | 169 | 187 | 149 | 149 | 148 | 146 | 392 |
| 25. | 115 | 267 | 409 | 197 | 170 | 154 | 147 | 157 | 176 | 163 | 155 | 149 | 144 | 418 |
| 26. | 113 | 268 | 380 | 203 | 167 | 152 | 148 | 151 | 170 | 167 | 147 | 149 | 144 | 418 |
| 27. | 113 | 252 | 348 | 206 | 164 | 152 | 148 | 152 | 170 | 155 | 150 | 150 | 145 | 412 |
| 28. | 114 | 248 | 312 | 201 | 164 | 147 | 150 | 148 | 181 | 150 | 154 | 152 | 145 | 413 |
| 29. | 114 | 256 | 293 | 197 | 160 | 146 | 151 | 148 | 178 | 151 | 153 | 148 | 147 | 410 |
| 30. | 112 | 276 | 277 | | 161 | 144 | 150 | 152 | 195 | 147 | 148 | 144 | 148 | 406 |
| 31. | | 302 | 265 | | 159 | | 151 | | 215 | 147 | | 145 | | 380 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 14. | 31. | 30. | 1. | 10. | 10. | 13.+ | 3.+ | 30. | 22.+ | 9. |
| NW | 112 | 112 | 265 | 188 | 159 | 144 | 143 | 144 | 148 | 145 | 145 | 144 | 144 | 144 |
| MW | 120 | 211 | 364 | 209 | 188 | 155 | 152 | 159 | 188 | 154 | 153 | 151 | 155 | 260 |
| HW | 147 | 315 | 465 | 277 | 218 | 172 | 175 | 199 | 270 | 200 | 189 | 174 | 193 | 422 |
| Tag | 4. | 31. | 8. | 21. | 6. | 5.+ | 7.+ | 21. | 16. | 1. | 12. | 6. | 5. | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2011 | 2006 | 2006 | 2004 | 2012 | 2011 | 2011 | 2010 | 2011 | 2003 | 2011 | 2003 | 2011 |
| NW | 106 | 112 | 140 | 140 | 157 | 144 | 142 | 140 | 137 | 123 | 106 | 114 | 106 | 112 |
| MNW | 142 | 163 | 190 | 192 | 206 | 173 | 155 | 147 | 144 | 144 | 137 | 138 | 134 | 158 |
| MW | 191 | 217 | 275 | 245 | 258 | 213 | 185 | 169 | 162 | 162 | 154 | 159 | 174 | 218 |
| MHW | 270 | 317 | 412 | 362 | 350 | 287 | 273 | 230 | 215 | 210 | 231 | 218 | 243 | 309 |
| HW | 461 | 506 | 601 | 510 | 492 | 511 | 444 | 325 | 270 | 367 | 568 | 479 | 397 | 462 |
| Jahr | 2002 | 2002 | 2011 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 112 | am 30.11.2011 | 112 | 143 | 143 | am 01.05.2012 |
| MW cm | 184 | | 209 | 160 | 191 | |
| HW cm | 465 | am 08.01.2012 | 465 | 270 | 465 | am 08.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 106 | am 25.09.2003 | 106 | 106 | 106 | am 25.09.2003 |
| MNW cm | 118 | | 135 | 129 | 128 | |
| MW cm | 199 | | 233 | 165 | 198 | |
| MHW cm | 502 | | 480 | 315 | 494 | |
| HW cm | 601 | am 10.01.2011 | 601 | 568 | 601 | am 10.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 87 | 14.09.1991 | 611 | 01.02.1995 |
| 2 | 105 | 26.01.1996 | 601 | 10.01.2011 |
| 3 | 105 | 14.12.1991 | 597 | 05.01.2003 |
| 4 | 106 | 16.11.2003 | 571 | 12.03.1981 |
| 5 | 106 | 25.09.2003 | 568 | 29.09.2007 |
| 6 | 108 | 14.11.1983 | 561 | 01.11.1998 |
| 7 | 108 | 01.11.1976 | 560 | 09.02.1984 |
| 8 | 109 | 31.12.1976 | 559 | 23.12.1993 |
| 9 | 110 | 24.10.1990 | 559 | 01.06.1984 |
| 10 | 112 | 30.11.2011 | 558 | 16.04.1994 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 456 | 456 | | | |
| 364 | 443 | 443 | 594 | 539 | 372 |
| 363 | 439 | 439 | 567 | 495 | 365 |
| 362 | 435 | 435 | 562 | 458 | 362 |
| 361 | 432 | 432 | 556 | 443 | 346 |
| 360 | 429 | 429 | 552 | 433 | 341 |
| 359 | 418 | 429 | 552 | 419 | 328 |
| 358 | 415 | 429 | 547 | 410 | 326 |
| 357 | 409 | 418 | 542 | 398 | 320 |
| 356 | 403 | 415 | 526 | 391 | 315 |
| 350 | 370 | 403 | 417 | 350 | 299 |
| 340 | 312 | 348 | 372 | 320 | 289 |
| 330 | 268 | 312 | 346 | 297 | 267 |
| 320 | 250 | 272 | 328 | 283 | 246 |
| 300 | 213 | 213 | 298 | 255 | 213 |
| 270 | 196 | 195 | 278 | 222 | 184 |
| 240 | 176 | 173 | 258 | 199 | 168 |
| 210 | 165 | 165 | 239 | 184 | 156 |
| 183 | 159 | 160 | 230 | 173 | 152 |
| 150 | 154 | 155 | 207 | 162 | 148 |
| 130 | 152 | 153 | 197 | 157 | 144 |
| 120 | 151 | 152 | 192 | 156 | 140 |
| 110 | 151 | 152 | 190 | 154 | 137 |
| 100 | 150 | 151 | 187 | 153 | 136 |
| 90 | 149 | 150 | 185 | 151 | 134 |
| 80 | 149 | 150 | 181 | 150 | 128 |
| 70 | 148 | 149 | 177 | 149 | 124 |
| 60 | 148 | 149 | 172 | 148 | 121 |
| 50 | 147 | 148 | 170 | 147 | 120 |
| 40 | 145 | 148 | 165 | 145 | 119 |
| 30 | 125 | 147 | 161 | 140 | 118 |
| 25 | 122 | 147 | 160 | 136 | 117 |
| 20 | 119 | 146 | 156 | 132 | 116 |
| 15 | 118 | 146 | 154 | 125 | 115 |
| 10 | 117 | 145 | 153 | 121 | 112 |
| 9 | 117 | 145 | 153 | 120 | 112 |
| 8 | 116 | 145 | 153 | 120 | 110 |
| 7 | 116 | 145 | 152 | 119 | 109 |
| 6 | 115 | 145 | 152 | 119 | 109 |
| 5 | 115 | 145 | 152 | 118 | 109 |
| 4 | 114 | 145 | 151 | 117 | 108 |
| 3 | 114 | 145 | 151 | 116 | 107 |
| 2 | 113 | 145 | 150 | 115 | 107 |
| 1 | 113 | 144 | 150 | 112 | 107 |
| 0 | 112 | 143 | 149 | 106 | 106 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1973
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 14794 km²
PNP : NN + 94.05 m
Lage: 45.5 km unterhalb von Werra und Fulda, rechts

W
cm

Pegel : Karlshafen Nr. 45100100
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 86 | 72 | 292 | 229 | 170 | 126 | 107 | 130 | 116 | 144 | 107 | 105 | 107 | 113 |
| 2. | 86 | 75 | 298 | R 209 | 178 | 122 | 108 | 124 | 121 | 122 | 104 | 104 | 108 | 114 |
| 3. | 83 | 79 | 328 | R 198 | 180 | 118 | 113 | 112 | 121 | 120 | 104 | 106 | 110 | 109 |
| 4. | 99 | 80 | 352 | R 189 | 183 | 118 | 118 | 117 | 112 | 119 | 104 | 108 | 126 | 105 |
| 5. | 103 | 88 | 368 | R 184 | 184 | 129 | 118 | 142 | 111 | 112 | 108 | 123 | 138 | 111 |
| 6. | 85 | 109 | 425 | R 176 | 182 | 133 | 128 | 132 | 122 | 117 | 114 | 126 | 141 | 110 |
| 7. | 81 | 153 | 439 | R 167 | 178 | 124 | 135 | 132 | 128 | 148 | 114 | 125 | 132 | 108 |
| 8. | 80 | 142 | 449 | R 163 | 181 | 120 | 134 | 117 | 124 | 131 | 115 | 111 | 127 | 105 |
| 9. | 80 | 140 | 436 | R 166 | 180 | 119 | 129 | 112 | 115 | 110 | 118 | 119 | 121 | 102 |
| 10. | 79 | 151 | 412 | R 166 | 177 | 122 | 120 | 105 | 108 | 109 | 129 | 107 | 121 | 114 |
| 11. | 79 | 157 | 395 | R 163 | 169 | 124 | 115 | 108 | 113 | 107 | 132 | 109 | 121 | 133 |
| 12. | 78 | 145 | 379 | R 156 | 163 | 122 | 116 | 113 | 118 | 105 | 133 | 109 | 127 | 134 |
| 13. | 78 | 135 | 367 | R 156 | 161 | 133 | 119 | 118 | 125 | 104 | 118 | 111 | 129 | 128 |
| 14. | 79 | 136 | 357 | R 154 | 159 | 128 | 121 | 112 | 161 | 107 | 122 | 110 | 116 | 125 |
| 15. | 84 | 150 | 333 | R 164 | 156 | 121 | 110 | 120 | 224 | 104 | 106 | 120 | 109 | 155 |
| 16. | 76 | 187 | 307 | R 172 | 153 | 117 | 115 | 119 | 232 | 110 | 104 | 122 | 106 | 221 |
| 17. | 76 | 237 | 285 | R 170 | 151 | 114 | 114 | 118 | 226 | 115 | 107 | 115 | 106 | 286 |
| 18. | 77 | 266 | 259 | 184 | 149 | 112 | 112 | 114 | 214 | 112 | 106 | 106 | 105 | 315 |
| 19. | 76 | 254 | 263 | 198 | 149 | 110 | 112 | 108 | 213 | 106 | 108 | 108 | 105 | 310 |
| 20. | 75 | 213 | 332 | 218 | 147 | 113 | 112 | 116 | 196 | 105 | 106 | 107 | 104 | 283 |
| 21. | 77 | 204 | 377 | 235 | 146 | 111 | 114 | 157 | 178 | 107 | 106 | 104 | 100 | 254 |
| 22. | 76 | 203 | 414 | 190 | 142 | 116 | 110 | 149 | 175 | 108 | 106 | 104 | 99 | 244 |
| 23. | 75 | 215 | 434 | 170 | 139 | 121 | 106 | 147 | 163 | 105 | 104 | 105 | 101 | 280 |
| 24. | 75 | 228 | 433 | 163 | 137 | 118 | 106 | 132 | 150 | 107 | 106 | 106 | 104 | 385 |
| 25. | 75 | 253 | 409 | 169 | 134 | 118 | 108 | 120 | 138 | 122 | 114 | 107 | 102 | 409 |
| 26. | 73 | 248 | 375 | 175 | 131 | 116 | 110 | 114 | 131 | 128 | 105 | 108 | 101 | 404 |
| 27. | 73 | 230 | 341 | 179 | 128 | 115 | 110 | 114 | 129 | 115 | 106 | 109 | 103 | 398 |
| 28. | 74 | 221 | 300 | 174 | 128 | 111 | 111 | 111 | 143 | 110 | 111 | 111 | 103 | 402 |
| 29. | 73 | 229 | 278 | 170 | 124 | 109 | 112 | 110 | 140 | 109 | 111 | 108 | 105 | 397 |
| 30. | 72 | 248 | 260 | | 125 | 107 | 111 | 117 | 153 | 106 | 105 | 104 | 105 | 391 |
| 31. | | 279 | 244 | | 124 | | 111 | | 175 | 107 | | 104 | | 365 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 14. | 29.+ | 30. | 23.+ | 10. | 10. | 13.+ | 2.+ | 2.+ | 22. | 9. |
| NW | 72 | 72 | 244 | 154 | 124 | 107 | 106 | 105 | 108 | 104 | 104 | 104 | 99 | 102 |
| MW | 79 | 178 | 353 | 180 | 155 | 119 | 115 | 121 | 151 | 114 | 111 | 110 | 113 | 229 |
| HW | 105 | 290 | 458 | 249 | 186 | 137 | 137 | 163 | 236 | 166 | 147 | 137 | 150 | 414 |
| Tag | 4.+ | 31. | 8. | 21. | 6. | 13. | 7.+ | 21. | 16. | 1. | 12. | 6. | 5.+ | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2011 | 2006 + | 2006 | 2004 | 2012 | 2011 | 2011 | 2010 | 2011 | 2003 | 2011 | 2003 | 2011 |
| NW | 67 | 72 | 101 | 102 | 123 | 107 | 103 | 102 | 99 | 87 | 65 | 75 | 67 | 72 |
| MNW | 106 | 128 | 158 | 160 | 176 | 139 | 120 | 110 | 105 | 104 | 99 | 99 | 95 | 122 |
| MW | 160 | 187 | 251 | 221 | 234 | 184 | 151 | 133 | 125 | 125 | 117 | 122 | 140 | 186 |
| MHW | 249 | 294 | 399 | 350 | 335 | 265 | 242 | 195 | 179 | 174 | 198 | 184 | 218 | 284 |
| HW | 463 | 517 | 607 | 502 | 482 | 502 | 437 | 308 | 236 | 347 | 573 | 484 | 416 | 451 |
| Jahr | 2002 | 2002 | 2011 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 72 | am 30.11.2011 | 72 | 104 | 99 | am 22.11.2012 |
| MW cm | 149 | | 178 | 120 | 156 | |
| HW cm | 458 | am 08.01.2012 | 458 | 236 | 458 | am 08.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 65 | am 26.09.2003 | 67 | 65 | 65 | am 26.09.2003 |
| MNW cm | 78 | | 98 | 90 | 88 | |
| MW cm | 167 | | 206 | 129 | 166 | |
| MHW cm | 498 | | 474 | 289 | 490 | |
| HW cm | 607 | am 10.01.2011 | 607 | 573 | 607 | am 10.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 43 | 13.10.1921 | 756*) | 18.05.1943 |
| 2 | 48 | 18.09.1959 | 746 | 10.02.1946 |
| 3 | 49 | 09.11.1949 | 691 | 02.01.1926 |
| 4 | 50 | 14.09.1991 | 660 | 15.03.1947 |
| 5 | 50 | 14.09.1964 | 629 | 30.11.1939 |
| 6 | 52 | 24.09.1934 | 625 | 17.07.1965 |
| 7 | 54 | 22.09.1976 | 618 | 06.11.1940 |
| 8 | 56 | 31.12.1976 | 617 | 01.02.1995 |
| 9 | 57 | 14.09.1947 | 607 | 10.01.2011 |
| 10 | 60 | 19.12.1953 | 604 | 20.03.1942 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 449 | 449 | | | |
| 364 | 439 | 439 | 598 | 537 | 361 |
| 363 | 436 | 436 | 581 | 490 | 361 |
| 362 | 434 | 434 | 556 | 449 | 357 |
| 361 | 433 | 433 | 554 | 438 | 332 |
| 360 | 425 | 425 | 550 | 428 | 325 |
| 359 | 414 | 414 | 543 | 413 | 319 |
| 358 | 412 | 412 | 541 | 399 | 313 |
| 357 | 409 | 412 | 539 | 391 | 313 |
| 356 | 395 | 409 | 516 | 385 | 303 |
| 350 | 357 | 391 | 411 | 338 | 286 |
| 340 | 285 | 341 | 371 | 305 | 273 |
| 330 | 248 | 286 | 332 | 280 | 244 |
| 320 | 224 | 244 | 323 | 263 | 228 |
| 300 | 182 | 182 | 279 | 230 | 182 |
| 270 | 163 | 163 | 256 | 192 | 150 |
| 240 | 140 | 135 | 233 | 168 | 135 |
| 210 | 128 | 127 | 211 | 149 | 118 |
| 183 | 121 | 122 | 199 | 137 | 114 |
| 150 | 116 | 117 | 173 | 125 | 110 |
| 130 | 113 | 115 | 166 | 120 | 107 |
| 120 | 112 | 113 | 161 | 118 | 103 |
| 110 | 111 | 112 | 158 | 116 | 99 |
| 100 | 110 | 112 | 153 | 114 | 98 |
| 90 | 109 | 111 | 151 | 113 | 96 |
| 80 | 108 | 110 | 147 | 112 | 90 |
| 70 | 108 | 109 | 142 | 110 | 86 |
| 60 | 107 | 108 | 140 | 109 | 83 |
| 50 | 106 | 107 | 136 | 107 | 82 |
| 40 | 105 | 107 | 132 | 106 | 81 |
| 30 | 86 | 106 | 125 | 101 | 79 |
| 25 | 81 | 106 | 123 | 98 | 79 |
| 20 | 80 | 105 | 120 | 93 | 76 |
| 15 | 77 | 105 | 117 | 87 | 76 |
| 10 | 76 | 105 | 116 | 82 | 73 |
| 9 | 76 | 105 | 115 | 81 | 73 |
| 8 | 76 | 104 | 115 | 81 | 71 |
| 7 | 76 | 104 | 114 | 80 | 69 |
| 6 | 75 | 103 | 114 | 80 | 69 |
| 5 | 74 | 103 | 114 | 79 | 69 |
| 4 | 74 | 102 | 114 | 77 | 69 |
| 3 | 74 | 102 | 114 | 76 | 68 |
| 2 | 73 | 101 | 113 | 75 | 68 |
| 1 | 73 | 100 | 113 | 72 | 67 |
| 0 | 72 | 99 | 111 | 65 | 65 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
Wasserstände bis 1951 für Weser-Km 44,60
*) durch Bruch der Edertalsperre
16 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 15924 km²
PNP : NN + 69.39 m
Lage: 110.7 km unterhalb von Werra und Fulda, rechts

W
cm

Pegel : Bodenwerder Nr. 45300200
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 116 | 100 | 312 | 269 | 202 | 154 | 136 | 147 | 142 | 188 | 132 | 131 | 131 | 132 |
| 2. | 113 | 100 | 317 | 254 | 205 | 155 | 136 | 155 | 143 | 160 | 133 | 130 | 132 | 139 |
| 3. | 112 | 104 | 341 | 235 | 210 | 151 | 140 | 149 | 147 | 149 | 131 | 131 | 134 | 137 |
| 4. | 117 | 108 | 364 | 232 | 209 | 149 | 143 | 143 | 143 | 148 | 130 | 136 | 139 | 133 |
| 5. | 130 | 110 | 389 | 227 | 212 | 151 | 147 | 158 | 137 | 145 | 131 | 143 | 153 | 133 |
| 6. | 126 | 121 | 431 | 222 | 211 | 161 | 148 | 168 | 142 | 140 | 136 | 150 | 163 | 137 |
| 7. | 113 | 151 | 458 | 213 | 208 | 159 | 158 | 161 | 146 | 160 | 139 | 154 | 160 | 134 |
| 8. | 110 | 176 | 466 | 203 | 208 | 152 | 161 | 152 | 158 | 165 | 139 | 145 | 155 | 132 |
| 9. | 109 | 164 | 471 | 209 | 212 | 149 | 159 | 144 | 147 | 149 | 140 | 138 | 150 | 129 |
| 10. | 109 | 173 | 445 | 204 | 207 | 149 | 153 | 137 | 139 | 137 | 147 | 141 | 147 | 132 |
| 11. | 108 | 173 | 426 | 208 | 202 | 154 | 147 | 135 | 138 | 137 | 154 | 134 | 146 | 152 |
| 12. | 107 | 180 | 411 | 202 | 195 | 152 | 142 | 137 | 144 | 134 | 161 | 136 | 146 | 157 |
| 13. | 107 | 167 | 398 | 190 | 191 | 157 | 145 | 143 | 149 | 133 | 149 | 136 | 154 | 155 |
| 14. | 106 | 164 | 389 | 191 | 189 | 161 | 148 | 142 | 159 | 132 | 147 | 136 | 148 | 149 |
| 15. | 111 | 170 | 370 | 192 | 187 | 154 | 144 | 138 | 222 | 134 | 141 | 138 | 139 | 156 |
| 16. | 108 | 194 | 343 | 206 | 184 | 149 | 140 | 148 | 245 | 133 | 131 | 148 | 134 | 207 |
| 17. | 106 | 245 | 325 | 205 | 182 | 146 | 142 | 145 | 253 | 140 | 132 | 145 | 133 | 271 |
| 18. | 104 | 282 | 297 | 212 | 180 | 144 | 141 | 142 | 249 | 140 | 132 | 137 | 133 | 320 |
| 19. | 104 | 286 | 288 | 222 | 179 | 142 | 140 | 139 | 236 | 138 | 132 | 133 | 132 | 328 |
| 20. | 104 | 255 | 341 | 234 | 177 | 142 | 140 | 135 | 231 | 132 | 133 | 134 | 133 | 312 |
| 21. | 103 | 235 | 389 | 261 | 177 | 142 | 141 | 158 | 210 | 133 | 132 | 132 | 129 | 284 |
| 22. | 104 | 237 | 427 | 239 | 174 | 142 | 140 | 174 | 200 | 134 | 133 | 131 | 127 | 266 |
| 23. | 103 | 241 | 456 | 210 | 170 | 149 | 137 | 172 | 195 | 133 | 132 | 131 | 127 | 279 |
| 24. | 102 | 252 | 458 | 203 | 168 | 148 | 133 | 164 | 184 | 132 | 131 | 132 | 128 | 385 |
| 25. | 102 | 274 | 446 | 205 | 166 | 147 | 134 | 153 | 171 | 139 | 135 | 132 | 130 | 424 |
| 26. | 102 | 276 | 414 | 208 | 163 | 146 | 136 | 144 | 163 | 152 | 137 | 133 | 127 | 419 |
| 27. | 101 | 263 | 385 | 213 | 160 | 144 | 136 | 139 | 158 | 148 | 131 | 133 | 128 | 419 |
| 28. | 101 | 248 | 345 | 209 | 158 | 142 | 137 | 140 | 162 | 140 | 134 | 134 | 129 | 416 |
| 29. | 101 | 249 | 317 | 204 | 157 | 140 | 138 | 138 | 170 | 136 | 137 | 135 | 129 | 413 |
| 30. | 100 | 264 | 300 | | 155 | 138 | 138 | 145 | 168 | 135 | 135 | 132 | 130 | 408 |
| 31. | | 296 | 282 | | 156 | | 137 | | 186 | 134 | | 130 | | 394 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1.+ | 31. | 13. | 30. | 30. | 24. | 11.+ | 5. | 14.+ | 4. | 2.+ | 22.+ | 9. |
| NW | 100 | 100 | 282 | 190 | 155 | 138 | 133 | 135 | 137 | 132 | 130 | 130 | 127 | 129 |
| MW | 108 | 202 | 381 | 217 | 186 | 149 | 142 | 148 | 175 | 142 | 137 | 136 | 138 | 247 |
| HW | 121 | 302 | 478 | 277 | 213 | 163 | 162 | 180 | 261 | 199 | 166 | 159 | 167 | 429 |
| Tag | 5. | 31. | 9. | 1. | 5. | 6.+ | 8. | 21.+ | 17.+ | 1. | 12. | 7. | 6. | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2006 | 2012 | 2012 | 2012 | 2011 | 2010 | 2011 | 2003 | 2011 | 2011 | 2011 |
| NW | 100 | 100 | 131 | 135 | 155 | 138 | 133 | 132 | 128 | 119 | 99 | 103 | 100 | 100 |
| MNW | 137 | 159 | 192 | 195 | 210 | 173 | 152 | 142 | 136 | 134 | 128 | 129 | 126 | 152 |
| MW | 189 | 216 | 282 | 254 | 266 | 217 | 182 | 164 | 154 | 154 | 146 | 152 | 169 | 214 |
| MHW | 274 | 315 | 417 | 375 | 361 | 293 | 263 | 220 | 202 | 197 | 217 | 212 | 243 | 305 |
| HW | 475 | 522 | 605 | 515 | 512 | 511 | 446 | 331 | 261 | 359 | 557 | 556 | 444 | 474 |
| Jahr | 2002 | 2002 | 2011 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 100 | am 30.11.2011 | 100 | 130 | 127 | am 22.11.2012 |
| MW cm | 177 | | 208 | 147 | 183 | |
| HW cm | 478 | am 09.01.2012 | 478 | 261 | 478 | am 09.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 99 | am 26.09.2003 | 100 | 99 | 99 | am 26.09.2003 |
| MNW cm | 109 | | 129 | 121 | 119 | |
| MW cm | 198 | | 238 | 159 | 196 | |
| MHW cm | 507 | | 488 | 304 | 501 | |
| HW cm | 605 | am 10.01.2011 | 605 | 557 | 605 | am 10.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 80 | 15.09.1991 | 729 | 11.02.1946 |
| 2 | 87 | 19.09.1959 | 687 | 15.03.1947 |
| 3 | 89 | 01.11.1976 | 680 | 02.01.1926 |
| 4 | 89 | 14.10.1921 | 676*) | 17.05.1943 |
| 5 | 92 | 08.09.1964 | 642 | 30.11.1939 |
| 6 | 94 | 01.01.1977 | 627 | 01.02.1995 |
| 7 | 95 | 25.09.1934 | 621 | 21.06.1956 |
| 8 | 96 | 25.10.1949 | 617 | 07.11.1940 |
| 9 | 97 | 22.09.1947 | 610 | 21.03.1942 |
| 10 | 98 | 15.12.1991 | 605 | 10.01.2011 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 471 | 471 | | | |
| 364 | 466 | 466 | 599 | 553 | 402 |
| 363 | 466 | 466 | 592 | 512 | 397 |
| 362 | 458 | 458 | 587 | 484 | 366 |
| 361 | 456 | 456 | 576 | 464 | 359 |
| 360 | 446 | 446 | 570 | 447 | 341 |
| 359 | 445 | 445 | 567 | 433 | 340 |
| 358 | 431 | 431 | 565 | 426 | 336 |
| 357 | 427 | 427 | 553 | 418 | 334 |
| 356 | 426 | 426 | 552 | 408 | 332 |
| 350 | 389 | 413 | 425 | 366 | 322 |
| 340 | 317 | 370 | 393 | 334 | 300 |
| 330 | 274 | 317 | 365 | 313 | 275 |
| 320 | 249 | 269 | 347 | 295 | 260 |
| 300 | 213 | 213 | 315 | 260 | 213 |
| 270 | 192 | 192 | 287 | 224 | 182 |
| 240 | 165 | 162 | 264 | 199 | 162 |
| 210 | 155 | 155 | 245 | 181 | 148 |
| 183 | 149 | 149 | 232 | 168 | 143 |
| 150 | 143 | 144 | 206 | 156 | 139 |
| 130 | 141 | 142 | 199 | 150 | 138 |
| 120 | 140 | 141 | 195 | 148 | 134 |
| 110 | 139 | 140 | 193 | 146 | 131 |
| 100 | 138 | 139 | 189 | 144 | 128 |
| 90 | 137 | 138 | 185 | 142 | 127 |
| 80 | 135 | 137 | 181 | 141 | 123 |
| 70 | 134 | 135 | 177 | 139 | 119 |
| 60 | 133 | 135 | 174 | 138 | 115 |
| 50 | 133 | 134 | 170 | 136 | 114 |
| 40 | 132 | 133 | 166 | 134 | 111 |
| 30 | 116 | 133 | 160 | 130 | 108 |
| 25 | 110 | 133 | 158 | 127 | 107 |
| 20 | 108 | 132 | 154 | 123 | 105 |
| 15 | 106 | 132 | 152 | 118 | 105 |
| 10 | 104 | 131 | 150 | 113 | 104 |
| 9 | 103 | 130 | 150 | 113 | 103 |
| 8 | 103 | 130 | 150 | 112 | 103 |
| 7 | 103 | 130 | 150 | 111 | 103 |
| 6 | 102 | 130 | 150 | 110 | 102 |
| 5 | 102 | 129 | 148 | 109 | 102 |
| 4 | 102 | 129 | 147 | 107 | 102 |
| 3 | 101 | 128 | 146 | 105 | 101 |
| 2 | 101 | 128 | 146 | 104 | 101 |
| 1 | 101 | 128 | 146 | 102 | 100 |
| 0 | 100 | 127 | 145 | 99 | 99 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
Wasserstände bis 1954 für Weser-Km 110,80
*) durch Bruch der Edertalsperre

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 17094 km²
PNP : NN + 57.85 m
Lage: 139.7 km unterhalb von Werra und Fulda, rechts

W
cm

Pegel : Hameln-Wehrbergen Nr. 45700207
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 86 | 71 | 308 | 263 | 193 | 134 | 112 | 116 | 118 | 170 | 106 | 104 | 103 | 103 |
| 2. | 84 | 72 | 323 | 247 | 193 | 137 | 110 | 129 | 117 | 144 | 106 | 102 | 105 | 110 |
| 3. | 83 | 77 | 343 | 223 | 198 | 132 | 112 | 126 | 121 | 127 | 104 | 100 | 107 | 113 |
| 4. | 84 | 84 | 365 | 216 | 197 | 130 | 118 | 121 | 119 | 124 | 103 | 113 | 109 | 110 |
| 5. | 97 | 85 | 407 | R 207 | 200 | 130 | 121 | 133 | 112 | 125 | 103 | 117 | 122 | 111 |
| 6. | 99 | 92 | 455 | R 202 | 198 | 139 | 122 | 147 | 112 | 117 | 105 | 123 | 134 | 114 |
| 7. | 86 | 119 | 480 | R 193 | 194 | 141 | 130 | 137 | 118 | 124 | 112 | 127 | 136 | 110 |
| 8. | 85 | 161 | 497 | R 186 | 196 | 133 | 135 | 133 | 127 | 146 | 111 | 123 | 138 | 108 |
| 9. | 85 | 151 | 509 | R 185 | 199 | 130 | 136 | 120 | 123 | 133 | 112 | 111 | 126 | 104 |
| 10. | 83 | 150 | 473 | R 184 | 195 | 129 | 132 | 114 | 115 | 115 | 116 | 118 | 119 | 111 |
| 11. | 80 | 152 | 444 | R 180 | 191 | 132 | 127 | 108 | 112 | 112 | 127 | 107 | 116 | 127 |
| 12. | 78 | 158 | 427 | 176 | 183 | 131 | 121 | 110 | 118 | 110 | 131 | 109 | 118 | 134 |
| 13. | 78 | 151 | 415 | 174 | 178 | 134 | 120 | 115 | 123 | 105 | 127 | 109 | 124 | 132 |
| 14. | 78 | 150 | 401 | 174 | 176 | 141 | 122 | 117 | 134 | 104 | 118 | 110 | 125 | 126 |
| 15. | 79 | 158 | 380 | 181 | 172 | 135 | 124 | 114 | 183 | 107 | 119 | 111 | 114 | 142 |
| 16. | 83 | 178 | 352 | 190 | 169 | 129 | 118 | 119 | 224 | 107 | 105 | 120 | 109 | 184 |
| 17. | 77 | 249 | 327 | 192 | 166 | 125 | 118 | 119 | 239 | 111 | 104 | 120 | 108 | 248 |
| 18. | 77 | 275 | 299 | 197 | 164 | 122 | 116 | 118 | 241 | 113 | 105 | 114 | 108 | 300 |
| 19. | 77 | 281 | 288 | 209 | 162 | 120 | 115 | 114 | 222 | 110 | 105 | 105 | 106 | 320 |
| 20. | 77 | 253 | 340 | 219 | 160 | 119 | 115 | 109 | 218 | 105 | 106 | 107 | 106 | 311 |
| 21. | 75 | 232 | 393 | 243 | 159 | 119 | 113 | 121 | 196 | 105 | 104 | 106 | 104 | 280 |
| 22. | 77 | 234 | 444 | 234 | 157 | 120 | 113 | 150 | 182 | 109 | 105 | 104 | 100 | 259 |
| 23. | 76 | 238 | 488 | 202 | 153 | 124 | 111 | 146 | 175 | 108 | 105 | 103 | 101 | 284 |
| 24. | 75 | 249 | 487 | 194 | 149 | 126 | 107 | 143 | 163 | 105 | 103 | 105 | 103 | 394 |
| 25. | 76 | 267 | 476 | 198 | 147 | 124 | 106 | 134 | 151 | 109 | 105 | 105 | 104 | 438 |
| 26. | 76 | 271 | 439 | 198 | 143 | 123 | 107 | 123 | 142 | 121 | 111 | 107 | 100 | 436 |
| 27. | 75 | 260 | 401 | 200 | 141 | 121 | 108 | 117 | 136 | 126 | 105 | 104 | 102 | 435 |
| 28. | 74 | 242 | 357 | 200 | 138 | 119 | 108 | 119 | 146 | 114 | 107 | 105 | 103 | 430 |
| 29. | 75 | 238 | 322 | 197 | 138 | 116 | 111 | 114 | 149 | 109 | 111 | 106 | 103 | 426 |
| 30. | 72 | 260 | 301 | | 136 | 115 | 111 | 121 | 143 | 108 | 109 | 106 | 103 | 418 |
| 31. | | 291 | 281 | | 137 | | 111 | | 157 | 107 | | 104 | | 406 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 13.+ | 30. | 30. | 25. | 11. | 5.+ | 14. | 4.+ | 3. | 22.+ | 1. |
| NW | 72 | 71 | 281 | 174 | 136 | 115 | 106 | 108 | 112 | 104 | 103 | 100 | 100 | 103 |
| MW | 80 | 189 | 394 | 202 | 170 | 128 | 117 | 124 | 153 | 117 | 110 | 110 | 112 | 236 |
| HW | 102 | 301 | 515 | 273 | 202 | 143 | 138 | 156 | 250 | 180 | 140 | 130 | 156 | 448 |
| Tag | 6. | 31. | 9. | 1. | 9. | 6.+ | 9.+ | 24. | 18. | 1. | 11.+ | 8.+ | 8. | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2006 | 2012 | 2012 | 2012 | 2011 | 2010 | 2003 + | 2003 | 2011 | 2011 | 2011 |
| NW | 72 | 71 | 97 | 112 | 136 | 115 | 106 | 107 | 102 | 93 | 70 | 75 | 72 | 71 |
| MNW | 114 | 139 | 178 | 181 | 198 | 155 | 129 | 117 | 110 | 108 | 101 | 103 | 101 | 131 |
| MW | 174 | 204 | 281 | 249 | 262 | 204 | 163 | 142 | 130 | 131 | 121 | 129 | 151 | 202 |
| MHW | 270 | 318 | 434 | 390 | 368 | 291 | 249 | 204 | 181 | 180 | 203 | 196 | 236 | 308 |
| HW | 497 | 552 | 639 | 602 | 556 | 538 | 448 | 338 | 250 | 379 | 601 | 602 | 465 | 512 |
| Jahr | 2002 | 2002 | 2003 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2010 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 71 | am 01.12.2011 | 71 | 100 | 100 | am 03.10.2012 |
| MW cm | 158 | | 195 | 122 | 165 | |
| HW cm | 515 | am 09.01.2012 | 515 | 250 | 515 | am 09.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 70 | am 26.09.2003 | 71 | 70 | 70 | am 26.09.2003 |
| MNW cm | 81 | | 104 | 92 | 91 | |
| MW cm | 182 | | 229 | 136 | 180 | |
| MHW cm | 540 | | 519 | 296 | 534 | |
| HW cm | 639 | am 06.01.2003 | 639 | 602 | 639 | am 06.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 28 | 30.11.1921 | 770 | 09.02.1946 |
| 2 | 49 | 15.09.1991 | 724 | 03.01.1926 |
| 3 | 58 | 23.11.1976 | 718 | 16.03.1947 |
| 4 | 61 | 06.11.1949 | 692*) | 17.05.1943 |
| 5 | 67 | 09.10.1973 | 687 | 01.12.1939 |
| 6 | 67 | 24.10.1943 | 660 | 31.01.1995 |
| 7 | 69 | 15.11.1983 | 655 | 13.03.1981 |
| 8 | 69 | 13.09.1959 | 655 | 21.03.1942 |
| 9 | 69 | 16.12.1920 | 648 | 07.11.1940 |
| 10 | 70 | 26.09.2003 | 646 | 03.01.1987 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 509 | 509 | | | |
| 364 | 497 | 497 | 635 | 597 | 419 |
| 363 | 488 | 488 | 634 | 556 | 400 |
| 362 | 487 | 487 | 634 | 509 | 400 |
| 361 | 480 | 480 | 628 | 488 | 369 |
| 360 | 476 | 476 | 611 | 473 | 349 |
| 359 | 473 | 473 | 608 | 450 | 343 |
| 358 | 455 | 455 | 606 | 440 | 342 |
| 357 | 455 | 455 | 599 | 433 | 342 |
| 356 | 444 | 444 | 597 | 427 | 341 |
| 350 | 401 | 427 | 448 | 378 | 330 |
| 340 | 322 | 380 | 409 | 341 | 305 |
| 330 | 267 | 311 | 376 | 316 | 271 |
| 320 | 241 | 259 | 357 | 293 | 252 |
| 300 | 199 | 199 | 319 | 255 | 199 |
| 270 | 176 | 176 | 285 | 213 | 165 |
| 240 | 147 | 142 | 259 | 184 | 142 |
| 210 | 133 | 132 | 238 | 162 | 126 |
| 183 | 124 | 125 | 220 | 148 | 119 |
| 150 | 119 | 120 | 195 | 134 | 114 |
| 130 | 116 | 117 | 185 | 127 | 110 |
| 120 | 114 | 115 | 179 | 124 | 107 |
| 110 | 113 | 114 | 177 | 121 | 103 |
| 100 | 112 | 112 | 172 | 119 | 100 |
| 90 | 110 | 112 | 168 | 117 | 98 |
| 80 | 108 | 110 | 164 | 115 | 96 |
| 70 | 107 | 109 | 160 | 114 | 93 |
| 60 | 106 | 108 | 157 | 112 | 88 |
| 50 | 105 | 107 | 152 | 110 | 86 |
| 40 | 104 | 106 | 148 | 107 | 85 |
| 30 | 86 | 106 | 143 | 104 | 80 |
| 25 | 84 | 105 | 140 | 101 | 79 |
| 20 | 79 | 105 | 134 | 98 | 78 |
| 15 | 78 | 104 | 133 | 92 | 77 |
| 10 | 77 | 104 | 128 | 86 | 76 |
| 9 | 77 | 104 | 127 | 85 | 76 |
| 8 | 76 | 104 | 126 | 84 | 76 |
| 7 | 76 | 104 | 126 | 84 | 75 |
| 6 | 76 | 103 | 125 | 83 | 75 |
| 5 | 76 | 103 | 125 | 80 | 75 |
| 4 | 75 | 102 | 124 | 79 | 73 |
| 3 | 74 | 101 | 124 | 78 | 73 |
| 2 | 74 | 101 | 123 | 76 | 72 |
| 1 | 72 | 101 | 122 | 74 | 72 |
| 0 | 71 | 100 | 121 | 70 | 70 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
seit 1.10.1988 Verlegung des Pegels von Km 135,29 nach Km 139,7
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
*) durch Bruch der Edertalsperre
7 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 17618 km²
PNP : NN + 41.66 m
Lage: 184.0 km unterhalb von Werra und Fulda, links

W
cm

Pegel : Vlotho — Nr. 45900208
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 123 | 103 | 324 | 301 | 228 | 168 | 147 | 144 | 151 | 193 | 136 | 137 | 134 | 133 |
| 2. | 121 | 103 | 345 | 286 | 225 | 166 | 145 | 151 | 147 | 190 | 135 | 134 | 134 | 135 |
| 3. | 120 | 105 | 358 | 267 | 225 | 167 | 143 | 158 | 147 | 168 | 135 | 134 | 136 | 140 |
| 4. | 119 | 112 | 379 | 251 | 228 | 165 | 146 | 156 | 150 | 157 | 135 | 141 | 137 | 140 |
| 5. | 120 | 117 | 414 | 244 | 228 | 162 | 150 | 155 | 146 | 156 | 134 | 153 | 142 | 140 |
| 6. | 130 | 117 | 466 | 237 | 229 | 164 | 153 | 169 | 142 | 153 | 134 | 155 | 154 | 140 |
| 7. | 128 | 131 | 493 | 229 | 227 | 172 | 155 | 172 | 146 | 148 | 137 | 158 | 165 | 141 |
| 8. | 118 | 172 | 516 | 223 | 226 | 170 | 163 | 167 | 151 | 166 | 142 | 159 | 165 | 139 |
| 9. | 118 | 188 | 528 | 215 | 229 | 165 | 166 | 157 | 160 | 169 | 142 | 150 | 160 | 137 |
| 10. | 117 | 180 | 512 | 217 | 228 | 162 | 167 | 150 | 151 | 154 | 142 | 143 | 154 | 137 |
| 11. | 115 | 183 | 478 | 214 | 225 | 162 | 167 | 143 | 146 | 145 | 149 | 144 | 152 | 146 |
| 12. | 113 | 183 | 454 | 211 | 219 | 164 | 157 | 140 | 145 | 143 | 159 | 138 | 151 | 159 |
| 13. | 111 | 189 | 441 | 208 | 212 | 164 | 151 | 142 | 151 | 139 | 162 | 140 | 150 | 163 |
| 14. | 110 | 184 | 428 | 206 | 208 | 168 | 151 | 146 | 156 | 138 | 152 | 140 | 156 | 161 |
| 15. | 110 | 186 | 411 | 210 | 206 | 171 | 154 | 147 | 172 | 136 | 151 | 140 | 151 | 165 |
| 16. | 114 | 199 | 386 | 216 | 204 | 165 | 154 | 146 | 232 | 138 | 144 | 142 | 143 | 189 |
| 17. | 113 | 256 | 359 | 223 | 201 | 160 | 150 | 151 | 254 | 138 | 136 | 152 | 139 | 242 |
| 18. | 108 | 289 | 337 | 225 | 198 | 157 | 149 | 150 | 268 | 142 | 135 | 149 | 138 | 300 |
| 19. | 107 | 307 | 319 | 233 | 196 | 155 | 148 | 147 | 257 | 143 | 135 | 141 | 137 | 335 |
| 20. | 107 | 299 | 345 | 244 | 194 | 153 | 147 | 143 | 248 | 141 | 135 | 136 | 135 | 339 |
| 21. | 107 | 272 | 396 | 255 | 191 | 153 | 146 | 142 | 236 | 136 | 135 | 136 | 136 | 316 |
| 22. | 105 | 265 | 448 | 273 | 190 | 153 | 146 | 163 | 216 | 138 | 135 | 135 | 132 | 292 |
| 23. | 108 | 266 | 500 | 247 | 187 | 153 | 145 | 175 | 209 | 137 | 135 | 134 | 129 | 299 |
| 24. | 107 | 274 | 510 | 231 | 184 | 157 | 142 | 174 | 202 | 135 | 136 | 134 | 129 | 369 |
| 25. | 106 | 286 | 500 | 230 | 181 | 157 | 139 | 170 | 191 | 135 | 135 | 134 | 133 | 442 |
| 26. | 105 | 299 | 473 | 232 | 178 | 156 | 138 | 160 | 179 | 141 | 139 | 133 | 133 | 456 |
| 27. | 105 | 294 | 435 | 230 | 175 | 154 | 139 | 151 | 171 | 154 | 141 | 136 | 131 | 454 |
| 28. | 105 | 279 | 399 | 233 | 172 | 153 | 140 | 146 | 172 | 150 | 135 | 135 | 133 | 452 |
| 29. | 104 | 267 | 359 | 232 | 171 | 151 | 140 | 146 | 178 | 143 | 137 | 135 | 133 | 447 |
| 30. | 104 | 277 | 335 | | 170 | 148 | 141 | 149 | 177 | 140 | 139 | 138 | 133 | 438 |
| 31. | | 305 | 317 | | 168 | | 142 | | 177 | 138 | | 137 | | 431 |

## Hauptwerte

| Tag | 29.+ | 1.+ | 31. | 14. | 31. | 30. | 26. | 12. | 6. | 24.+ | 5.+ | 26. | 23.+ | 1. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NW | 104 | 103 | 317 | 206 | 168 | 148 | 138 | 140 | 142 | 135 | 134 | 133 | 129 | 133 |
| MW | 113 | 216 | 418 | 235 | 203 | 160 | 149 | 154 | 182 | 149 | 140 | 141 | 142 | 257 |
| HW | 131 | 318 | 531 | 308 | 231 | 173 | 172 | 177 | 270 | 199 | 164 | 161 | 166 | 457 |
| Tag | 6.+ | 31. | 9. | 1. | 1. | 7.+ | 11. | 6.+ | 18. | 1.+ | 13. | 8. | 7.+ | 26. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2006 | 2012 | 2012 | 2012 | 2012 | 2010 | 2003 | 2003 | 2011 | 2011 | 2011 |
| NW | 104 | 103 | 134 | 146 | 168 | 148 | 138 | 140 | 134 | 124 | 100 | 109 | 104 | 103 |
| MNW | 146 | 171 | 212 | 214 | 231 | 188 | 164 | 150 | 142 | 140 | 134 | 136 | 133 | 163 |
| MW | 204 | 233 | 312 | 280 | 291 | 236 | 195 | 175 | 162 | 162 | 153 | 160 | 181 | 231 |
| MHW | 291 | 338 | 456 | 406 | 390 | 315 | 272 | 230 | 206 | 208 | 223 | 220 | 257 | 329 |
| HW | 502 | 544 | 659 | 573 | 580 | 552 | 454 | 375 | 270 | 398 | 572 | 600 | 482 | 533 |
| Jahr | 2002 | 2002 | 2003 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 103 | am 01.12.2011 | 103 | 133 | 129 | am 23.11.2012 |
| MW cm | 189 | | 225 | 152 | 194 | |
| HW cm | 531 | am 09.01.2012 | 531 | 270 | 531 | am 09.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 100 | am 27.09.2003 | 103 | 100 | 100 | am 27.09.2003 |
| MNW cm | 114 | | 137 | 126 | 124 | |
| MW cm | 213 | | 259 | 168 | 211 | |
| MHW cm | 550 | | 532 | 314 | 546 | |
| HW cm | 659 | am 05.01.2003 | 659 | 600 | 659 | am 05.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 76 | 01.12.1921 | 785 | 10.02.1946 |
| 2 | 81 | 16.09.1991 | 754 | 03.01.1926 |
| 3 | 85 | 21.10.1959 | 733 | 16.03.1947 |
| 4 | 88 | 03.11.1976 | 701 | 01.12.1939 |
| 5 | 88 | 07.10.1964 | 677 | 01.02.1995 |
| 6 | 91 | 07.11.1949 | 659 | 05.01.2003 |
| 7 | 92 | 04.10.1934 | 657 | 14.03.1981 |
| 8 | 94 | 10.01.1954 | 654 | 21.03.1942 |
| 9 | 98 | 02.01.1977 | 650 | 08.11.1940 |
| 10 | 100 | 07.10.1973 | 649 | 12.01.2011 |

## Dauertabelle

Unterschrittene Wasserstände cm

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 528 | 528 | | | |
| 364 | 516 | 516 | 658 | 620 | 423 |
| 363 | 512 | 512 | 657 | 565 | 414 |
| 362 | 510 | 510 | 651 | 531 | 401 |
| 361 | 510 | 510 | 638 | 514 | 387 |
| 360 | 500 | 500 | 629 | 495 | 385 |
| 359 | 493 | 493 | 623 | 477 | 376 |
| 358 | 478 | 478 | 622 | 466 | 373 |
| 357 | 473 | 473 | 620 | 455 | 372 |
| 356 | 466 | 466 | 615 | 449 | 372 |
| 350 | 414 | 447 | 483 | 400 | 359 |
| 340 | 345 | 396 | 430 | 365 | 333 |
| 330 | 299 | 337 | 407 | 341 | 302 |
| 320 | 268 | 292 | 384 | 320 | 283 |
| 300 | 232 | 232 | 340 | 285 | 232 |
| 270 | 208 | 208 | 313 | 245 | 198 |
| 240 | 177 | 172 | 292 | 218 | 172 |
| 210 | 165 | 164 | 271 | 195 | 161 |
| 183 | 156 | 156 | 253 | 181 | 153 |
| 150 | 151 | 152 | 230 | 166 | 146 |
| 130 | 147 | 148 | 219 | 159 | 141 |
| 120 | 145 | 147 | 216 | 156 | 137 |
| 110 | 143 | 144 | 211 | 153 | 135 |
| 100 | 142 | 143 | 208 | 151 | 131 |
| 90 | 141 | 142 | 203 | 149 | 129 |
| 80 | 139 | 141 | 199 | 147 | 127 |
| 70 | 138 | 140 | 196 | 145 | 123 |
| 60 | 136 | 139 | 193 | 143 | 120 |
| 50 | 136 | 138 | 187 | 141 | 117 |
| 40 | 135 | 137 | 183 | 138 | 115 |
| 30 | 120 | 136 | 178 | 136 | 114 |
| 25 | 118 | 136 | 175 | 133 | 112 |
| 20 | 113 | 135 | 170 | 129 | 111 |
| 15 | 110 | 135 | 165 | 124 | 109 |
| 10 | 107 | 134 | 163 | 118 | 107 |
| 9 | 106 | 134 | 162 | 117 | 106 |
| 8 | 106 | 134 | 162 | 116 | 106 |
| 7 | 106 | 134 | 162 | 115 | 106 |
| 6 | 106 | 134 | 162 | 114 | 106 |
| 5 | 106 | 134 | 161 | 113 | 106 |
| 4 | 105 | 133 | 161 | 111 | 104 |
| 3 | 105 | 132 | 161 | 110 | 103 |
| 2 | 104 | 131 | 160 | 108 | 102 |
| 1 | 104 | 131 | 160 | 105 | 101 |
| 0 | 103 | 129 | 159 | 100 | 100 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
Die Wasserstände sind durch Talsperrenbetrieb beeinflußt
Wasserstände bis 1960 für Weser-Km 182.97

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 19162 km²
PNP : NN + 37.04 m
Lage: 198.4 km unterhalb v. Werra u. Fulda, rechts

W
cm

Pegel : Porta Nr. 47100100
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 125 | 109 | 314 | 296 | 231 | 173 | 150 | 154 | 155 | 187 | 139 | 139 | 139 | 138 |
| 2. | 124 | 113 | 343 | 281 | 227 | 170 | 149 | 153 | 151 | 188 | 137 | 136 | 140 | 140 |
| 3. | 123 | 117 | 354 | 265 | 227 | 171 | 148 | 161 | 150 | 169 | 137 | 137 | 142 | 145 |
| 4. | 122 | 127 | 370 | 249 | 229 | 173 | 149 | 165 | 152 | 160 | 136 | 161 | 143 | 147 |
| 5. | 122 | 129 | 419 | 243 | 229 | 168 | 155 | 167 | 149 | 157 | 135 | 172 | 147 | 149 |
| 6. | 130 | 128 | 462 | 236 | 229 | 167 | 158 | 170 | 144 | 157 | 135 | 173 | 156 | 146 |
| 7. | 130 | 144 | 474 | 228 | 226 | 174 | 158 | 174 | 148 | 151 | 138 | 172 | 166 | 146 |
| 8. | 121 | 182 | 501 | 223 | 231 | 172 | 164 | 168 | 153 | 163 | 141 | 164 | 166 | 143 |
| 9. | 120 | 196 | 509 | 216 | 231 | 168 | 167 | 160 | 162 | 169 | 142 | 156 | 163 | 142 |
| 10. | 120 | 185 | 496 | 217 | 229 | 168 | 168 | 153 | 154 | 157 | 142 | 148 | 157 | 157 |
| 11. | 118 | 182 | 465 | 214 | 225 | 167 | 192 | 147 | 153 | 147 | 148 | 149 | 155 | 159 |
| 12. | 116 | 182 | 443 | 211 | 220 | 168 | 166 | 146 | 156 | 145 | 160 | 142 | 154 | 164 |
| 13. | 115 | 194 | 436 | 209 | 214 | 167 | 157 | 149 | 161 | 142 | 161 | 146 | 152 | 167 |
| 14. | 114 | 194 | 420 | 208 | 210 | 170 | 156 | 149 | 163 | 140 | 153 | 145 | 157 | 165 |
| 15. | 114 | 195 | 403 | 216 | 207 | 173 | 159 | 149 | 174 | 139 | 151 | 144 | 154 | 184 |
| 16. | 116 | 213 | 380 | 218 | 205 | 168 | 160 | 151 | 218 | 142 | 146 | 144 | 146 | 200 |
| 17. | 117 | 279 | 354 | 224 | 202 | 163 | 154 | 156 | 252 | 142 | 138 | 152 | 143 | 242 |
| 18. | 113 | 286 | 334 | 225 | 200 | 160 | 153 | 152 | 262 | 144 | 137 | 150 | 141 | 287 |
| 19. | 113 | 298 | 325 | 237 | 198 | 158 | 151 | 149 | 254 | 144 | 136 | 144 | 142 | 320 |
| 20. | 113 | 294 | 354 | 243 | 195 | 158 | 150 | 146 | 245 | 142 | 136 | 140 | 140 | 324 |
| 21. | 113 | 278 | 388 | 247 | 193 | 157 | 149 | 145 | 231 | 139 | 137 | 140 | 140 | 306 |
| 22. | 111 | 268 | 441 | 264 | 192 | 159 | 149 | 159 | 212 | 140 | 136 | 138 | 137 | 288 |
| 23. | 113 | 271 | 490 | 245 | 190 | 158 | 148 | 172 | 204 | 139 | 136 | 138 | 134 | 313 |
| 24. | 112 | 279 | 496 | 232 | 187 | 162 | 146 | 172 | 198 | 138 | 143 | 137 | 137 | 374 |
| 25. | 111 | 289 | 485 | 237 | 184 | 162 | 142 | 175 | 189 | 138 | 142 | 137 | 138 | 423 |
| 26. | 111 | 295 | 462 | 235 | 181 | 161 | 142 | 166 | 178 | 142 | 143 | 137 | 138 | 438 |
| 27. | 110 | 289 | 429 | 231 | 178 | 158 | 143 | 155 | 171 | 153 | 146 | 139 | 138 | 440 |
| 28. | 110 | 276 | 397 | 234 | 176 | 159 | 143 | 150 | 179 | 152 | 140 | 137 | 139 | 438 |
| 29. | 110 | 263 | 361 | 233 | 174 | 156 | 143 | 161 | 178 | 145 | 139 | 138 | 139 | 427 |
| 30. | 110 | 278 | 335 | | 174 | 152 | 144 | 160 | 177 | 142 | 140 | 145 | 139 | 419 |
| 31. | | 299 | 314 | | 173 | | 145 | | 175 | 140 | | 143 | | 412 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27.+ | 1. | 1.+ | 14. | 31. | 30. | 25.+ | 21. | 6. | 24.+ | 5.+ | 2. | 23. | 1. |
| NW | 110 | 109 | 314 | 208 | 173 | 152 | 142 | 145 | 144 | 138 | 135 | 136 | 134 | 138 |
| MW | 117 | 220 | 411 | 235 | 205 | 165 | 153 | 158 | 182 | 150 | 142 | 147 | 146 | 256 |
| HW | 132 | 308 | 511 | 304 | 233 | 176 | 205 | 179 | 265 | 193 | 163 | 187 | 170 | 446 |
| Tag | 6.+ | 31. | 9. | 1. | 8. | 7. | 11. | 7. | 18. | 1.+ | 13. | 4. | 7. | 28. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2006 + | 2012 | 2012 | 2012 | 2011 | 2010 | 2003 | 2003 | 2011 | 2011 | 2011 |
| NW | 110 | 109 | 138 | 153 | 173 | 152 | 142 | 142 | 135 | 126 | 108 | 111 | 110 | 109 |
| MNW | 151 | 177 | 217 | 216 | 234 | 192 | 166 | 153 | 144 | 142 | 136 | 140 | 138 | 168 |
| MW | 208 | 237 | 313 | 282 | 290 | 237 | 196 | 176 | 162 | 165 | 155 | 163 | 186 | 234 |
| MHW | 293 | 335 | 454 | 405 | 382 | 312 | 268 | 234 | 208 | 221 | 224 | 227 | 261 | 327 |
| HW | 484 | 528 | 644 | 549 | 564 | 526 | 427 | 361 | 265 | 394 | 541 | 570 | 472 | 528 |
| Jahr | 2002 | 2007 | 2003 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 109 | am 01.12.2011 | 109 | 135 | 134 | am 23.11.2012 |
| MW cm | 191 | | 226 | 155 | 196 | |
| HW cm | 511 | am 09.01.2012 | 511 | 265 | 511 | am 09.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 108 | am 27.09.2003 | 109 | 108 | 108 | am 27.09.2003 |
| MNW cm | 120 | | 142 | 130 | 128 | |
| MW cm | 215 | | 261 | 170 | 213 | |
| MHW cm | 531 | | 522 | 317 | 530 | |
| HW cm | 644 | am 04.01.2003 | 644 | 570 | 644 | am 04.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 92 | 15.09.1991 | 790 | 10.02.1946 |
| 2 | 105 | 02.11.1976 | 688 | 16.03.1947 |
| 3 | 108 | 27.09.2003 | 678 | 02.12.1939 |
| 4 | 108 | 08.09.1964 | 657 | 02.02.1995 |
| 5 | 108 | 21.09.1959 | 644 | 04.01.2003 |
| 6 | 109 | 01.12.2011 | 643 | 02.01.1987 |
| 7 | 110 | 27.10.1990 | 642 | 14.03.1981 |
| 8 | 114 | 02.11.1997 | 634 | 08.11.1940 |
| 9 | 114 | 07.11.1949 | 633 | 15.01.2011 |
| 10 | 115 | 15.11.2004 | 632 | 22.03.1942 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 509 | 509 | | | |
| 364 | 501 | 501 | 640 | 602 | 402 |
| 363 | 501 | 501 | 633 | 543 | 401 |
| 362 | 496 | 496 | 628 | 520 | 392 |
| 361 | 490 | 490 | 624 | 498 | 387 |
| 360 | 485 | 485 | 614 | 485 | 384 |
| 359 | 474 | 474 | 610 | 472 | 381 |
| 358 | 465 | 465 | 607 | 462 | 381 |
| 357 | 465 | 465 | 602 | 446 | 373 |
| 356 | 462 | 462 | 596 | 440 | 373 |
| 350 | 419 | 436 | 477 | 398 | 360 |
| 340 | 343 | 388 | 438 | 362 | 336 |
| 330 | 294 | 334 | 404 | 340 | 299 |
| 320 | 271 | 287 | 381 | 320 | 287 |
| 300 | 232 | 232 | 348 | 285 | 232 |
| 270 | 209 | 208 | 314 | 246 | 200 |
| 240 | 179 | 175 | 292 | 220 | 175 |
| 210 | 169 | 168 | 271 | 199 | 163 |
| 183 | 161 | 161 | 251 | 185 | 154 |
| 150 | 154 | 155 | 231 | 170 | 149 |
| 130 | 150 | 152 | 222 | 163 | 144 |
| 120 | 149 | 150 | 218 | 160 | 143 |
| 110 | 147 | 149 | 214 | 157 | 139 |
| 100 | 145 | 147 | 211 | 154 | 136 |
| 90 | 144 | 146 | 207 | 152 | 134 |
| 80 | 143 | 145 | 204 | 149 | 131 |
| 70 | 141 | 143 | 201 | 147 | 130 |
| 60 | 139 | 143 | 197 | 145 | 128 |
| 50 | 138 | 141 | 192 | 143 | 126 |
| 40 | 137 | 140 | 187 | 141 | 123 |
| 30 | 125 | 139 | 182 | 139 | 118 |
| 25 | 121 | 139 | 180 | 137 | 117 |
| 20 | 117 | 138 | 175 | 133 | 114 |
| 15 | 114 | 138 | 170 | 129 | 114 |
| 10 | 114 | 138 | 167 | 124 | 113 |
| 9 | 113 | 137 | 166 | 123 | 112 |
| 8 | 112 | 137 | 165 | 123 | 112 |
| 7 | 112 | 137 | 165 | 122 | 112 |
| 6 | 112 | 137 | 164 | 121 | 112 |
| 5 | 111 | 137 | 164 | 119 | 111 |
| 4 | 111 | 137 | 164 | 117 | 111 |
| 3 | 111 | 136 | 164 | 115 | 111 |
| 2 | 111 | 136 | 163 | 114 | 110 |
| 1 | 110 | 135 | 162 | 111 | 110 |
| 0 | 109 | 134 | 161 | 108 | 108 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1936
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 19910 km²
PNP : NN + 20.00 m
Lage: 256.1 km unterhalb von Werra und Fulda, links

W
cm

Pegel : Liebenau Nr. 47500200
Gewässer : Weser
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 128 | 121 | 292 | 288 | 214 | 154 | 139 | 141 | 141 | 157 | 131 | 131 | 132 | 129 |
| 2. | 125 | 122 | 318 | 270 | 207 | 151 | 139 | 141 | 138 | 164 | 130 | 128 | 133 | 132 |
| 3. | 126 | 122 | 348 | 250 | 206 | 152 | 139 | 144 | 136 | 150 | 130 | 129 | 133 | 136 |
| 4. | 127 | 129 | 357 | 230 | 209 | 156 | 139 | 147 | 138 | 143 | 129 | 143 | 132 | 135 |
| 5. | 126 | 131 | 393 | 224 | 211 | 153 | 139 | 149 | 138 | 141 | 130 | 159 | 136 | 137 |
| 6. | 129 | 130 | 476 | 214 | 210 | 150 | 144 | 151 | 134 | 141 | 130 | 157 | 141 | 137 |
| 7. | 130 | 135 | 488 | 208 | 207 | 152 | 142 | 155 | 135 | 138 | 130 | 157 | 145 | 135 |
| 8. | 127 | 162 | 515 | 204 | 212 | 151 | 140 | 149 | 139 | 143 | 132 | 150 | 146 | 132 |
| 9. | 126 | 175 | 533 | 195 | 214 | 149 | 147 | 145 | 143 | 149 | 132 | 142 | 145 | 131 |
| 10. | 127 | 170 | 535 | 192 | 209 | 149 | 149 | 140 | 142 | 143 | 133 | 137 | 141 | 144 |
| 11. | 126 | 164 | 499 | 190 | 206 | 151 | 169 | 138 | 140 | 136 | 135 | 138 | 138 | 147 |
| 12. | 124 | 162 | 464 | 186 | 200 | 151 | 153 | 135 | 139 | 134 | 143 | 135 | 139 | 147 |
| 13. | 122 | 169 | 451 | 184 | 195 | 150 | 143 | 136 | 146 | 134 | 144 | 135 | 137 | 149 |
| 14. | 123 | 174 | 436 | 183 | 191 | 150 | 142 | 138 | 147 | 132 | 139 | 136 | 141 | 146 |
| 15. | 123 | 174 | 416 | 192 | 186 | 154 | 144 | 133 | 152 | 131 | 136 | 135 | 141 | 162 |
| 16. | 125 | 182 | 393 | 199 | 182 | 151 | 146 | 139 | 180 | 134 | 136 | 135 | 135 | 173 |
| 17. | 124 | 262 | 360 | 200 | 180 | 147 | 142 | 139 | 215 | 133 | 129 | 138 | 132 | 204 |
| 18. | 123 | 266 | 336 | 205 | 178 | 145 | 139 | 139 | 232 | 134 | 129 | 138 | 131 | 247 |
| 19. | 124 | 276 | 315 | 212 | 176 | 144 | 138 | 136 | 230 | 135 | 129 | 134 | 135 | 290 |
| 20. | 122 | 277 | 353 | 223 | 172 | 145 | 138 | 134 | 223 | 132 | 130 | 131 | 133 | 303 |
| 21. | 122 | 262 | 387 | 224 | 172 | 143 | 136 | 133 | 208 | 130 | 130 | 133 | 131 | 289 |
| 22. | 122 | 246 | 447 | 241 | 169 | 143 | 135 | 137 | 186 | 133 | 129 | 131 | 130 | 267 |
| 23. | 124 | 249 | 507 | 232 | 168 | 144 | 139 | 149 | 176 | 131 | 129 | 132 | 130 | 282 |
| 24. | 122 | 251 | 533 | 214 | 165 | 146 | 134 | 150 | 173 | 132 | 135 | 130 | 128 | 362 |
| 25. | 122 | 268 | 521 | 221 | 162 | 147 | 133 | 153 | 164 | 131 | 133 | 130 | 131 | 406 |
| 26. | 120 | 271 | 502 | 219 | 159 | 144 | 133 | 150 | 157 | 132 | 133 | 131 | 131 | 438 |
| 27. | 121 | 269 | 460 | 216 | 157 | 143 | 135 | 140 | 151 | 139 | 136 | 130 | 131 | 446 |
| 28. | 122 | 256 | 421 | 215 | 156 | 145 | 134 | 137 | 156 | 140 | 133 | 130 | 131 | 451 |
| 29. | 123 | 242 | 372 | 216 | 154 | 141 | 133 | 141 | 154 | 134 | 131 | 130 | 132 | 437 |
| 30. | 122 | 248 | 339 | | 155 | 140 | 133 | 143 | 156 | 134 | 131 | 135 | 132 | 427 |
| 31. | | 278 | 311 | | 153 | | 136 | | 152 | 131 | | 134 | | 419 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 1. | 1. | 14. | 31. | 30. | 25.+ | 15.+ | 6. | 21. | 4.+ | 2. | 24. | 1. |
| NW | 120 | 121 | 292 | 183 | 153 | 140 | 133 | 133 | 134 | 130 | 129 | 128 | 128 | 129 |
| MW | 124 | 205 | 422 | 215 | 185 | 148 | 140 | 142 | 162 | 138 | 133 | 137 | 135 | 243 |
| HW | 140 | 286 | 539 | 304 | 223 | 166 | 194 | 171 | 238 | 173 | 155 | 180 | 155 | 455 |
| Tag | 7. | 31. | 10. | 1. | 1.+ | 4. | 11. | 25. | 19. | 2. | 13. | 5. | 8. | 28. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2011 | 2009 | 2006 + | 2012 | 2011 | 2011 | 2005 + | 2006 + | 2009 | 2003 | 2006 | 2003 | 2011 |
| NW | 119 | 121 | 128 | 142 | 153 | 137 | 129 | 128 | 126 | 122 | 116 | 119 | 119 | 121 |
| MNW | 146 | 164 | 203 | 198 | 216 | 172 | 146 | 137 | 131 | 132 | 127 | 131 | 132 | 157 |
| MW | 203 | 225 | 315 | 274 | 281 | 220 | 176 | 157 | 146 | 153 | 143 | 152 | 177 | 221 |
| MHW | 302 | 334 | 477 | 424 | 396 | 312 | 254 | 217 | 196 | 222 | 210 | 220 | 262 | 324 |
| HW | 556 | 570 | 694 | 581 | 613 | 553 | 439 | 370 | 238 | 381 | 501 | 570 | 494 | 570 |
| Jahr | 2002 | 2007 | 2003 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 120 | am 26.11.2011 | 120 | 128 | 128 | am 02.10.2012 |
| MW cm | 179 | | 217 | 142 | 184 | |
| HW cm | 539 | am 10.01.2012 | 539 | 238 | 539 | am 10.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 116 | am 25.09.2003 | 119 | 116 | 116 | am 25.09.2003 |
| MNW cm | 120 | | 134 | 123 | 123 | |
| MW cm | 203 | | 253 | 154 | 201 | |
| MHW cm | 563 | | 558 | 306 | 563 | |
| HW cm | 694 | am 06.01.2003 | 694 | 570 | 694 | am 06.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 103 | 19.10.1959 | 696 | 18.07.1956 |
| 2 | 106 | 30.08.1964 | 695 | 15.03.1981 |
| 3 | 110 | 08.09.1991 | 694 | 06.01.2003 |
| 4 | 113 | 24.10.1990 | 690 | 03.02.1995 |
| 5 | 113 | 10.01.1954 | 687 | 03.01.1987 |
| 6 | 114 | 01.11.1976 | 686 | 26.02.1970 |
| 7 | 116 | 25.09.2003 | 681 | 04.11.1998 |
| 8 | 116 | 17.10.1992 | 677 | 17.01.1968 |
| 9 | 116 | 13.08.1990 | 674 | 16.01.2011 |
| 10 | 116 | 22.11.1983 | 673 | 04.01.1994 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 535 | 535 | | | |
| 364 | 535 | 535 | 684 | 659 | 422 |
| 363 | 533 | 533 | 683 | 607 | 421 |
| 362 | 521 | 521 | 680 | 556 | 416 |
| 361 | 515 | 515 | 677 | 535 | 397 |
| 360 | 507 | 507 | 674 | 521 | 393 |
| 359 | 502 | 502 | 665 | 502 | 393 |
| 358 | 499 | 499 | 661 | 490 | 390 |
| 357 | 488 | 488 | 659 | 476 | 384 |
| 356 | 476 | 476 | 647 | 465 | 380 |
| 350 | 421 | 446 | 524 | 416 | 359 |
| 340 | 339 | 393 | 460 | 365 | 334 |
| 330 | 271 | 318 | 423 | 338 | 290 |
| 320 | 249 | 267 | 385 | 313 | 267 |
| 300 | 215 | 215 | 338 | 269 | 215 |
| 270 | 183 | 183 | 296 | 225 | 178 |
| 240 | 159 | 156 | 272 | 198 | 156 |
| 210 | 151 | 150 | 247 | 176 | 147 |
| 183 | 145 | 145 | 226 | 163 | 140 |
| 150 | 140 | 141 | 202 | 152 | 137 |
| 130 | 139 | 139 | 194 | 147 | 136 |
| 120 | 137 | 139 | 192 | 145 | 136 |
| 110 | 136 | 137 | 189 | 142 | 135 |
| 100 | 135 | 136 | 186 | 141 | 134 |
| 90 | 135 | 136 | 182 | 139 | 133 |
| 80 | 134 | 135 | 177 | 137 | 133 |
| 70 | 133 | 134 | 175 | 136 | 132 |
| 60 | 132 | 134 | 170 | 135 | 130 |
| 50 | 131 | 133 | 166 | 133 | 128 |
| 40 | 130 | 132 | 162 | 132 | 127 |
| 30 | 128 | 132 | 156 | 131 | 125 |
| 25 | 127 | 131 | 155 | 130 | 125 |
| 20 | 125 | 131 | 152 | 129 | 123 |
| 15 | 124 | 131 | 148 | 127 | 122 |
| 10 | 123 | 130 | 145 | 126 | 120 |
| 9 | 123 | 130 | 144 | 125 | 120 |
| 8 | 123 | 130 | 144 | 125 | 120 |
| 7 | 123 | 130 | 143 | 124 | 120 |
| 6 | 123 | 130 | 142 | 124 | 119 |
| 5 | 123 | 130 | 142 | 123 | 119 |
| 4 | 123 | 130 | 142 | 123 | 119 |
| 3 | 122 | 130 | 142 | 122 | 119 |
| 2 | 122 | 129 | 142 | 121 | 118 |
| 1 | 121 | 129 | 141 | 120 | 117 |
| 0 | 120 | 128 | 140 | 116 | 116 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1954
die Wasserstände sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
eisfrei
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 22112 km²
PNP : NN + 7.99 m
Lage: 308.9 km unterhalb von Werra und Fulda, rechts

W
cm

Pegel : Dörverden Nr. 47900209
Gewässer : Weser
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 225 | 223 | 392 | 401 | 320 | 260 | 241 | 242 | 242 | 251 | 229 | 228 | 230 | 228 |
| 2. | 226 | 221 | 412 | 379 | 316 | 258 | 239 | 237 | 237 | 259 | 227 | 226 | 233 | 232 |
| 3. | 227 | 225 | 449 | 362 | 313 | 258 | 240 | 245 | 235 | 251 | 227 | 226 | 230 | 235 |
| 4. | 225 | 228 | 455 | 340 | 313 | 258 | 240 | 244 | 235 | 242 | 227 | 240 | 230 | 233 |
| 5. | 225 | 232 | 483 | 333 | 315 | 259 | 240 | 247 | 236 | 240 | 225 | 256 | 235 | 239 |
| 6. | 228 | 231 | 564 | 324 | 315 | 256 | 243 | 249 | 231 | 239 | 228 | 251 | 241 | 233 |
| 7. | 230 | 236 | 586 | 326 | 312 | 257 | 243 | 251 | 234 | 237 | 226 | 260 | 241 | 234 |
| 8. | 226 | 260 | 607 | 344 | 316 | 257 | 246 | 248 | 238 | 237 | 228 | 247 | 246 | 231 |
| 9. | 224 | 275 | 630 | 334 | 322 | 255 | 247 | 245 | 244 | 248 | 228 | 243 | 243 | 232 |
| 10. | 225 | 275 | 639 | 314 | 316 | 252 | 248 | 240 | 241 | 241 | 228 | 237 | 240 | 241 |
| 11. | 225 | 265 | 622 | 309 | 311 | 252 | 266 | 236 | 234 | 235 | 229 | 236 | 239 | 248 |
| 12. | 224 | 263 | 582 | 297 | 308 | 253 | 259 | 236 | 237 | 232 | 239 | 230 | 237 | 248 |
| 13. | 222 | 268 | 557 | 286 | 302 | 253 | 243 | 235 | 241 | 232 | 242 | 235 | 236 | 250 |
| 14. | 224 | 275 | 544 | 287 | 293 | 252 | 243 | 234 | 245 | 229 | 237 | 233 | 239 | 246 |
| 15. | 222 | 275 | 522 | 296 | 292 | 255 | 243 | 234 | 249 | 228 | 233 | 236 | 241 | 256 |
| 16. | 221 | 279 | 503 | 305 | 288 | 254 | 248 | 236 | 267 | 230 | 233 | 229 | 233 | 276 |
| 17. | 225 | 351 | 470 | 304 | 286 | 249 | 244 | 239 | 300 | 232 | 228 | 235 | 231 | 293 |
| 18. | 222 | 370 | 447 | 308 | 284 | 245 | 239 | 238 | 326 | 231 | 226 | 237 | 231 | 335 |
| 19. | 223 | 375 | 424 | 315 | 281 | 247 | 239 | 236 | 324 | 229 | 226 | 235 | 233 | 377 |
| 20. | 224 | 379 | 452 | 328 | 277 | 246 | 238 | 232 | 320 | 228 | 228 | 230 | 232 | 397 |
| 21. | 221 | 369 | 492 | 327 | 275 | 243 | 238 | 231 | 305 | 227 | 226 | 232 | 229 | 391 |
| 22. | 222 | 351 | 544 | 341 | 274 | 245 | 235 | 234 | 286 | 230 | 227 | 230 | 228 | 371 |
| 23. | 221 | 355 | 606 | 342 | 272 | 244 | 236 | 247 | 274 | 229 | 226 | 227 | 227 | 370 |
| 24. | 223 | 354 | 645 | 324 | 269 | 247 | 234 | 247 | 269 | 228 | 232 | 228 | 227 | 450 |
| 25. | 223 | 374 | 642 | 328 | 267 | 247 | 234 | 251 | 263 | 227 | 232 | 229 | 230 | 489 |
| 26. | 221 | 373 | 626 | 328 | 264 | 246 | 234 | 250 | 254 | 230 | 229 | 229 | 232 | 525 |
| 27. | 223 | 373 | 589 | 324 | 262 | 244 | 232 | 240 | 249 | 233 | 236 | 229 | 228 | 537 |
| 28. | 220 | 365 | 547 | 323 | 261 | 244 | 233 | 235 | 253 | 236 | 230 | 227 | 232 | 542 |
| 29. | 223 | 347 | 496 | 324 | 261 | 244 | 233 | 238 | 252 | 232 | 229 | 229 | 230 | 533 |
| 30. | 220 | 346 | 455 | | 262 | 241 | 233 | 242 | 254 | 230 | 228 | 233 | 232 | 524 |
| 31. | | 376 | 426 | | 260 | | 232 | | 248 | 228 | | 234 | | 513 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 28.+ | 2. | 1. | 13. | 31. | 30. | 27.+ | 21. | 6. | 21.+ | 5. | 2.+ | 23.+ | 1. |
| NW | 220 | 221 | 392 | 286 | 260 | 241 | 232 | 231 | 231 | 227 | 225 | 226 | 227 | 228 |
| MW | 224 | 306 | 529 | 326 | 291 | 251 | 241 | 241 | 259 | 235 | 230 | 235 | 234 | 339 |
| HW | 240 | 385 | 648 | 415 | 332 | 273 | 292 | 266 | 337 | 275 | 256 | 280 | 267 | 544 |
| Tag | 3.+ | 20. | 24.+ | 1. | 1.+ | 1. | 11. | 25. | 20. | 3. | 4.+ | 5. | 5. | 28. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2011 | 2009 | 2009 | 2012 | 2012 | 2011 | 2011 | 2003 + | 2003 + | 2003 | 2003 | 2003 | 2011 |
| NW | 215 | 221 | 229 | 242 | 260 | 241 | 230 | 228 | 225 | 221 | 212 | 218 | 215 | 221 |
| MNW | 248 | 268 | 308 | 306 | 324 | 276 | 248 | 237 | 230 | 230 | 229 | 233 | 234 | 260 |
| MW | 306 | 328 | 426 | 387 | 391 | 326 | 277 | 257 | 245 | 251 | 244 | 254 | 279 | 324 |
| MHW | 403 | 438 | 588 | 539 | 506 | 417 | 352 | 317 | 291 | 313 | 307 | 322 | 363 | 427 |
| HW | 662 | 690 | 819 | 681 | 719 | 666 | 525 | 462 | 337 | 491 | 589 | 676 | 615 | 690 |
| Jahr | 2002 | 2007 | 2003 | 2010 | 2010 | 2006 | 2004 | 2006 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 220 | am 28.11.2011 | 220 | 225 | 225 | am 05.09.2012 |
| MW cm | 281 | | 322 | 240 | 284 | |
| HW cm | 648 | am 24.01.2012 | 648 | 337 | 648 | am 24.01.2012 |

| | 2003/2012 (*) 10 Jahre Jahr | Datum | Winter | Sommer | 2003/2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 212 | am 28.09.2003 | 215 | 212 | 212 | am 28.09.2003 |
| MNW cm | 220 | | 236 | 224 | 224 | |
| MW cm | 307 | | 361 | 255 | 305 | |
| MHW cm | 679 | | 675 | 408 | 680 | |
| HW cm | 819 | am 07.01.2003 | 819 | 676 | 819 | am 07.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 197 | 10.10.1959 | 855 | 15.03.1981 |
| 2 | 209 | 11.09.1991 | 854 | 03.02.1995 |
| 3 | 209 | 05.11.1976 | 851 | 04.01.1987 |
| 4 | 211 | 02.09.1964 | 827 | 05.01.1994 |
| 5 | 212 | 28.09.2003 | 820 | 05.11.1998 |
| 6 | 212 | 10.08.1998 | 819 | 07.01.2003 |
| 7 | 215 | 09.08.1990 | 818 | 19.01.1968 |
| 8 | 216 | 10.08.1996 | 815 | 27.02.1970 |
| 9 | 216 | 08.10.1973 | 810 | 18.01.2011 |
| 10 | 218 | 21.10.1992 | 801 | 31.03.1988 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 645 | 645 | | | |
| 364 | 642 | 642 | 818 | 786 | 537 |
| 363 | 639 | 639 | 814 | 714 | 533 |
| 362 | 630 | 630 | 812 | 673 | 524 |
| 361 | 626 | 626 | 801 | 657 | 524 |
| 360 | 622 | 622 | 793 | 637 | 523 |
| 359 | 607 | 607 | 793 | 622 | 514 |
| 358 | 606 | 606 | 786 | 608 | 494 |
| 357 | 589 | 589 | 770 | 603 | 493 |
| 356 | 586 | 586 | 768 | 582 | 491 |
| 350 | 544 | 544 | 664 | 526 | 469 |
| 340 | 449 | 492 | 567 | 477 | 444 |
| 330 | 375 | 426 | 528 | 450 | 403 |
| 320 | 354 | 370 | 504 | 423 | 370 |
| 300 | 324 | 323 | 457 | 379 | 323 |
| 270 | 287 | 287 | 412 | 333 | 284 |
| 240 | 261 | 258 | 384 | 303 | 258 |
| 210 | 250 | 249 | 357 | 277 | 248 |
| 183 | 245 | 245 | 336 | 265 | 241 |
| 150 | 240 | 240 | 307 | 252 | 237 |
| 130 | 237 | 238 | 297 | 247 | 233 |
| 120 | 236 | 237 | 296 | 245 | 232 |
| 110 | 235 | 236 | 292 | 242 | 231 |
| 100 | 234 | 235 | 288 | 240 | 229 |
| 90 | 233 | 234 | 284 | 238 | 228 |
| 80 | 231 | 233 | 281 | 236 | 227 |
| 70 | 230 | 233 | 277 | 235 | 226 |
| 60 | 229 | 231 | 273 | 234 | 226 |
| 50 | 229 | 231 | 270 | 232 | 224 |
| 40 | 228 | 230 | 265 | 231 | 223 |
| 30 | 227 | 229 | 260 | 229 | 222 |
| 25 | 226 | 229 | 259 | 228 | 222 |
| 20 | 225 | 229 | 256 | 227 | 221 |
| 15 | 224 | 228 | 251 | 226 | 220 |
| 10 | 223 | 228 | 249 | 224 | 218 |
| 9 | 223 | 228 | 249 | 224 | 218 |
| 8 | 223 | 227 | 249 | 224 | 218 |
| 7 | 222 | 227 | 248 | 223 | 218 |
| 6 | 222 | 227 | 248 | 223 | 217 |
| 5 | 222 | 227 | 247 | 222 | 217 |
| 4 | 222 | 227 | 246 | 222 | 216 |
| 3 | 222 | 227 | 246 | 222 | 216 |
| 2 | 221 | 227 | 245 | 221 | 216 |
| 1 | 221 | 226 | 244 | 218 | 215 |
| 0 | 220 | 225 | 242 | 212 | 212 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 30.06.1958 (Stauerrichtung)
die Wasserstände sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
eisfrei
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 37720 km²
PNP : NN + 4.79 m
Lage: 331.3 km unterhalb v. Werra u. Fulda, links

W
cm

Pegel : Intschede Nr. 49100101
Gewässer : Weser
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 44 | 41 | 278 | 329 | 221 | 115 | 78 | 57 | 71 | 85 | 43 | 44 | 53 | 56 |
| 2. | 43 | 39 | 296 | 292 | 216 | 112 | 74 | 66 | 64 | 92 | 45 | 40 | 54 | 60 |
| 3. | 41 | 41 | 329 | 266 | 212 | 110 | 74 | 74 | 60 | 81 | 46 | 38 | 52 | 61 |
| 4. | 38 | 50 | 341 | 240 | 212 | 110 | 73 | 74 | 61 | 69 | 40 | 57 | 55 | 61 |
| 5. | 37 | 54 | 374 | 229 | 209 | 116 | 79 | 77 | 59 | 66 | 40 | 85 | 59 | 68 |
| 6. | 40 | 53 | 450 | 211 | 207 | 117 | 83 | 86 | 52 | 63 | 41 | 93 | 69 | 65 |
| 7. | 42 | 66 | 487 | 185 | 200 | 114 | 78 | 98 | 56 | 62 | 38 | 112 | 71 | 63 |
| 8. | 43 | 91 | 511 | 181 | 201 | 112 | 86 | 89 | 69 | 60 | 42 | 99 | 77 | 63 |
| 9. | 44 | 126 | 540 | 183 | 209 | 108 | 88 | 80 | 78 | 76 | 41 | 82 | 77 | 58 |
| 10. | 45 | 132 | 554 | 177 | 205 | 105 | 84 | 71 | 73 | 67 | 40 | 73 | 73 | 73 |
| 11. | 45 | 119 | 551 | 173 | 198 | 106 | 105 | 63 | 62 | 55 | 43 | 64 | 70 | 85 |
| 12. | 45 | 114 | 522 | 165 | 191 | 107 | 109 | 57 | 63 | 52 | 53 | 58 | 70 | 91 |
| 13. | 42 | 115 | 494 | 156 | 182 | 105 | 90 | 56 | 69 | 50 | 58 | 64 | 66 | 93 |
| 14. | 44 | 123 | 479 | 156 | 175 | 106 | 79 | 57 | 77 | 45 | 60 | 65 | 70 | 88 |
| 15. | 42 | 123 | 453 | 165 | 171 | 110 | 77 | 53 | 83 | 44 | 50 | 67 | 70 | 97 |
| 16. | 39 | 133 | 428 | 179 | 165 | 109 | 82 | 54 | 106 | 47 | 50 | 58 | 60 | 125 |
| 17. | 41 | 203 | 392 | 182 | 163 | 95 | 82 | 60 | 146 | 50 | 42 | 65 | 56 | 156 |
| 18. | 37 | 250 | 357 | 187 | 157 | 91 | 74 | 58 | 171 | 49 | 39 | 69 | 58 | 201 |
| 19. | 37 | 266 | 331 | 194 | 153 | 90 | 72 | 57 | 177 | 44 | 39 | 64 | 59 | 242 |
| 20. | 38 | 267 | 348 | 213 | 147 | 91 | 67 | 52 | 185 | 44 | 39 | 57 | 56 | 261 |
| 21. | 36 | 251 | 396 | 212 | 145 | 85 | 65 | 55 | 177 | 42 | 39 | 56 | 55 | 261 |
| 22. | 37 | 232 | 447 | 218 | 141 | 89 | 63 | 60 | 154 | 41 | 38 | 52 | 51 | 237 |
| 23. | 37 | 233 | 505 | 224 | 138 | 86 | 57 | 79 | 129 | 43 | 37 | 46 | 51 | 230 |
| 24. | 39 | 239 | 551 | 212 | 134 | 92 | 57 | 78 | 120 | 39 | 42 | 48 | 51 | 306 |
| 25. | 44 | 259 | 566 | 218 | 128 | 93 | 53 | 79 | 108 | 40 | 49 | 48 | 53 | 368 |
| 26. | 42 | 263 | 567 | 231 | 124 | 93 | 50 | 84 | 95 | 44 | 44 | 48 | 58 | 415 |
| 27. | 46 | 267 | 548 | 231 | 120 | 88 | 46 | 72 | 85 | 48 | 54 | 50 | 56 | 432 |
| 28. | 41 | 255 | 511 | 230 | 118 | 85 | 48 | 64 | 86 | 55 | 48 | 48 | 60 | 434 |
| 29. | 40 | 235 | 466 | 226 | 114 | 83 | 48 | 64 | 88 | 49 | 43 | 50 | 59 | 428 |
| 30. | 38 | 232 | 415 | | 115 | 76 | 48 | 72 | 92 | 46 | 45 | 52 | 59 | 415 |
| 31. | | 260 | 374 | | 114 | | 48 | | 81 | 42 | | 60 | | 401 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 21. | 2. | 1. | 13.+ | 29.+ | 30. | 27. | 20. | 6. | 24. | 23. | 3. | 22.+ | 1. |
| NW | 36 | 39 | 278 | 156 | 114 | 76 | 46 | 52 | 52 | 39 | 37 | 38 | 51 | 56 |
| MW | 41 | 166 | 447 | 209 | 167 | 100 | 72 | 68 | 97 | 55 | 44 | 62 | 61 | 193 |
| HW | 65 | 273 | 569 | 352 | 229 | 130 | 138 | 109 | 197 | 109 | 81 | 119 | 92 | 437 |
| Tag | 11. | 19.+ | 25.+ | 1. | 1.+ | 1. | 12. | 8. | 20. | 3. | 14. | 7. | 7.+ | 27. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2011 | 2009 | 2006 + | 2012 | 2012 | 2012 | 2011 | 2010 | 2003 | 2003 | 2011 | 2003 | 2011 |
| NW | 35 | 39 | 69 | 94 | 114 | 76 | 46 | 48 | 38 | 26 | 21 | 29 | 35 | 39 |
| MNW | 91 | 128 | 185 | 189 | 210 | 141 | 92 | 67 | 55 | 50 | 51 | 61 | 67 | 114 |
| MW | 171 | 209 | 324 | 291 | 293 | 207 | 139 | 100 | 80 | 81 | 76 | 97 | 134 | 198 |
| MHW | 278 | 333 | 486 | 457 | 412 | 315 | 230 | 171 | 140 | 156 | 154 | 176 | 230 | 320 |
| HW | 566 | 599 | 715 | 583 | 638 | 548 | 437 | 322 | 199 | 363 | 436 | 545 | 544 | 599 |
| Jahr | 2002 | 2007 | 2003 | 2010 | 2010 | 2006 | 2004 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 36 | am 21.11.2011 | 36 | 37 | 37 | am 23.09.2012 |
| MW | cm | 127 | | 189 | 66 | 131 | |
| HW | cm | 569 | am 25.01.2012 | 569 | 197 | 569 | am 25.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 21 | am 28.09.2003 | 35 | 21 | 21 | am 28.09.2003 |
| MNW | cm | 36 | | 74 | 41 | 41 | |
| MW | cm | 172 | | 250 | 96 | 168 | |
| MHW | cm | 580 | | 579 | 275 | 586 | |
| HW | cm | 715 | am 06.01.2003 | 715 | 545 | 715 | am 06.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 6 | 11.09.1991 | 762 | 29.02.1940 |
| 2 | 18 | 13.08.1990 | 757 | 17.03.1947 |
| 3 | 20 | 10.08.1996 | 747 | 13.02.1941 |
| 4 | 21 | 28.09.2003 | 746 | 11.02.1946 |
| 5 | 21 | 26.08.1976 | 742 | 25.01.1924 |
| 6 | 25 | 09.08.1992 | 730 | 05.01.1926 |
| 7 | 29 | 03.10.2011 | 722 | 04.12.1939 |
| 8 | 29 | 25.10.1990 | 720 | 16.03.1981 |
| 9 | 30 | 26.08.1989 | 716 | 05.01.1987 |
| 10 | 31 | 02.09.2009 | 716 | 23.03.1942 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 567 | 567 | | | |
| 364 | 566 | 566 | 714 | 683 | 451 |
| 363 | 554 | 554 | 711 | 636 | 446 |
| 362 | 554 | 554 | 711 | 614 | 442 |
| 361 | 551 | 551 | 706 | 587 | 432 |
| 360 | 548 | 548 | 700 | 569 | 431 |
| 359 | 540 | 540 | 686 | 550 | 415 |
| 358 | 522 | 522 | 683 | 536 | 410 |
| 357 | 522 | 522 | 680 | 521 | 405 |
| 356 | 511 | 511 | 676 | 510 | 405 |
| 350 | 453 | 453 | 611 | 460 | 382 |
| 340 | 348 | 401 | 492 | 406 | 319 |
| 330 | 267 | 331 | 456 | 367 | 294 |
| 320 | 235 | 240 | 436 | 338 | 240 |
| 300 | 211 | 209 | 376 | 279 | 209 |
| 270 | 157 | 157 | 323 | 223 | 157 |
| 240 | 114 | 110 | 287 | 182 | 110 |
| 210 | 91 | 89 | 256 | 149 | 89 |
| 183 | 80 | 80 | 219 | 122 | 75 |
| 150 | 67 | 70 | 190 | 99 | 65 |
| 130 | 61 | 65 | 177 | 88 | 58 |
| 120 | 58 | 62 | 172 | 82 | 55 |
| 110 | 57 | 61 | 168 | 77 | 53 |
| 100 | 54 | 59 | 164 | 73 | 51 |
| 90 | 52 | 58 | 159 | 69 | 49 |
| 80 | 49 | 56 | 152 | 65 | 47 |
| 70 | 47 | 54 | 148 | 61 | 45 |
| 60 | 45 | 51 | 137 | 58 | 44 |
| 50 | 44 | 49 | 131 | 54 | 40 |
| 40 | 43 | 48 | 124 | 51 | 38 |
| 30 | 42 | 45 | 118 | 48 | 36 |
| 25 | 41 | 44 | 115 | 47 | 33 |
| 20 | 40 | 43 | 110 | 45 | 32 |
| 15 | 40 | 42 | 104 | 43 | 30 |
| 10 | 39 | 41 | 95 | 40 | 30 |
| 9 | 39 | 40 | 94 | 40 | 29 |
| 8 | 39 | 40 | 94 | 39 | 28 |
| 7 | 38 | 40 | 94 | 38 | 28 |
| 6 | 38 | 40 | 94 | 38 | 27 |
| 5 | 38 | 40 | 93 | 37 | 27 |
| 4 | 38 | 39 | 88 | 36 | 27 |
| 3 | 38 | 39 | 88 | 33 | 26 |
| 2 | 38 | 39 | 88 | 31 | 25 |
| 1 | 37 | 38 | 88 | 30 | 23 |
| 0 | 36 | 37 | 85 | 21 | 21 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

eisfrei
Die Wasserstände sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
Extremwerte ab 1921
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 4302 km²
PNP : NN + 168.02 m
Lage: 77.3 km oberhalb der Mündung, rechts

W
cm

Pegel : Heldra
Gewässer : Werra
Gebiet : Werra
Nr. 41700105

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 149 | 136 | 245 | 234 | 209 | 181 | 170K | 164K | 167 | 167 | 149 | 138 | 148 | 182 |
| 2. | 144 | 133 | 256 | 224 | 214 | 177 | 170K | 168K | 174 | 162 | 147 | 134 | 150 | 172 |
| 3. | 145 | 139 | 281 | 214R | 217 | 176 | 173K | 158K | 165 | 162 | 143 | 138 | 154 | 165 |
| 4. | 145 | 139 | 276 | 213R | 219 | 181 | 174K | 162K | 159 | 160 | 142 | 139 | 166 | 168 |
| 5. | 145 | 159 | 283 | 209R | 219 | 184 | 175K | 181K | 163 | 161 | 142 | 146K | 174 | 168 |
| 6. | 144 | 194 | 328 | 203R | 218 | 177 | 186K | 189K | 174 | 172 | 141 | 150K | 171 | 167 |
| 7. | 143 | 185 | 323 | 195R | 215 | 174 | 194K | 175K | 168 | 167 | 141 | 150K | 169 | 164 |
| 8. | 143 | 180 | 331 | 195R | 213 | 175 | 193K | 171K | 166 | 159 | 140 | 161K | 171 | 160 |
| 9. | 142 | 182 | 326 | 196R | 215 | 174 | 186K | 163K | 162 | 158 | 139 | 153K | 176 | 157 |
| 10. | 141 | 197 | 317 | 194R | 210 | 173 | 181K | 159K | 158 | 156 | 137 | 146K | 171 | 158 |
| 11. | 139 | 192 | 308 | 191R | 204 | 173 | 178K | 156K | 166 | 154 | 138 | 144K | 176 | 163 |
| 12. | 139 | 183 | 299 | 188R | 203 | 176 | 185K | 159K | 164 | 152 | 148 | 142K | 175 | 159 |
| 13. | 139 | 180 | 297 | 186R | 202 | 176 | 184K | 158K | 168 | 156 | 162 | 144 | 168 | 157 |
| 14. | 137 | 183 | 292 | 187R | 201 | 174 | 174K | 160K | 185 | 152K | 150 | 147 | 164 | 156 |
| 15. | 137 | 204 | 286 | 190R | 200 | 172 | 177K | 165K | 212 | 151 | 143 | 149 | 160 | 174 |
| 16. | 138 | 212 | 279 | 191R | 199 | 171 | 177K | 164K | 204 | 152 | 140 | 148 | 159 | 242 |
| 17. | 138 | 255 | 269 | 188 | 198 | 170 | 178K | 164K | 198 | 158 | 140 | 146 | 157 | 276 |
| 18. | 137 | 251 | 258 | 202 | 197 | 169 | 177K | 157K | 212 | 156 | 145 | 144 | 156 | 271 |
| 19. | 137 | 238 | 257 | 217 | 198 | 171 | 175K | 152K | 214 | 149 | 144 | 140 | 154 | 273 |
| 20. | 138 | 228 | 315 | 241 | 198 | 170 | 176K | 171K | 205 | 147 | 146 | 136 | 153 | 269 |
| 21. | 137 | 219 | 305 | 212 | 195 | 169 | 172K | 185 | 202 | 146 | 138 | 135 | 151 | 267 |
| 22. | 137 | 215 | 337 | 195 | 192 | 172 | 171K | 204 | 199 | 146 | 137 | 137 | 150 | 262 |
| 23. | 137 | 221 | 334 | 192 | 190 | 174 | 169K | 193 | 193 | 149 | 139 | 137 | 149 | 277 |
| 24. | 137 | 238 | 328 | 194 | 187 | 174 | 167K | 178 | 184 | 150 | 138 | 137 | 147 | 368 |
| 25. | 131 | 251 | 320 | 205 | 186 | 175 | 165K | 172 | 176 | 162 | 134 | 137 | 146 | 366 |
| 26. | 135 | 248 | 305 | 210 | 183 | 174 | 161K | 172 | 170 | 159 | 142 | 137 | 145 | 376 |
| 27. | 131 | 246 | 289 | 206 | 182 | 171 | 158K | 167 | 169 | 153 | 149 | 138 | 145 | 384 |
| 28. | 136 | 245 | 276 | 201 | 181 | 172 | 157K | 163 | 167 | 153 | 159 | 141 | 151 | 376 |
| 29. | 133 | 244 | 265 | 200 | 179 | 173 | 155K | 160 | 177 | 149 | 151 | 139 | 158 | 370 |
| 30. | 133 | 247 | 254 | | 179 | 171 | 153K | 160 | 188 | 149 | 144 | 141 | 178 | 353 |
| 31. | | 250 | 244 | | 182 | | 152K | | 174 | 150 | | 146 | | 328 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25.+ | 2. | 31. | 13. | 29.+ | 18.+ | 31. | 19. | 10. | 21.+ | 25. | 2. | 26.+ | 14. |
| NW | 131 | 133 | 244 | 186 | 179 | 169 | 152 | 152 | 158 | 146 | 134 | 134 | 145 | 156 |
| MW | 139 | 206 | 293 | 203 | 200 | 174 | 173 | 168 | 180 | 155 | 144 | 143 | 160 | 243 |
| HW | 154 | 270 | 354 | 249 | 221 | 187 | 199 | 211 | 219 | 177 | 170 | 174 | 189 | 385 |
| Tag | 1. | 17. | 22. | 20. | 5. | 4.+ | 8. | 22. | 18. | 6. | 13. | 8. | 30. | 27. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 + | 2011 | 2006 | 2006 | 2004 | 2007 | 2011 | 2011 | 2003 | 2003 | 2003 | 2003 | 2003 + | 2011 |
| NW | 131 | 133 | 149 | 149 | 165 | 165 | 137 | 136 | 131 | 125 | 125 | 130 | 131 | 133 |
| MNW | 151 | 168 | 188 | 184 | 198 | 186 | 170 | 154 | 145 | 140 | 138 | 143 | 145 | 165 |
| MW | 183 | 207 | 237 | 220 | 234 | 212 | 190 | 173 | 160 | 152 | 151 | 158 | 174 | 206 |
| MHW | 240 | 275 | 319 | 294 | 290 | 262 | 262 | 217 | 198 | 182 | 212 | 200 | 225 | 271 |
| HW | 337 | 428 | 469 | 376 | 381 | 424 | 395 | 292 | 254 | 254 | 412 | 323 | 329 | 385 |
| Jahr | 2002 | 2002 | 2011 | 2005 | 2006 | 2006 | 2004 | 2006 | 2009 | 2010 | 2007 | 2007 | 2007 | 2012 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 131 | am 25.11.2011 | 131 | 134 | 134 | am 25.09.2012 |
| MW cm | 182 | | 203 | 161 | 186 | |
| HW cm | 354 | am 22.01.2012 | 354 | 219 | 385 | am 27.12.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 125 | am 14.08.2003 | 131 | 125 | 125 | am 14.08.2003 |
| MNW cm | 134 | | 148 | 135 | 134 | |
| MW cm | 190 | | 216 | 164 | 189 | |
| MHW cm | 392 | | 369 | 279 | 394 | |
| HW cm | 469 | am 16.01.2011 | 469 | 412 | 469 | am 16.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 115 | 03.09.1991 | 469 | 16.01.2011 |
| 2 | 116 | 07.10.1973 | 461 | 16.04.1994 |
| 3 | 117 | 14.08.1976 | 459 | 14.03.1981 |
| 4 | 121 | 15.12.1991 | 457 | 12.08.1981 |
| 5 | 122 | 22.11.1976 | 452 | 16.07.1956 |
| 6 | 122 | 03.10.1964 | 450 | 04.01.2003 |
| 7 | 125 | 14.08.2003 | 445 | 09.01.1982 |
| 8 | 126 | 14.11.1983 | 440 | 04.01.1987 |
| 9 | 126 | 01.10.1977 | 439 | 27.12.1967 |
| 10 | 128 | 19.09.1997 | 433 | 28.03.1988 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 337 | 384 | | | |
| 364 | 334 | 384 | 462 | 422 | 311 |
| 363 | 331 | 376 | 458 | 396 | 307 |
| 362 | 331 | 370 | 449 | 372 | 306 |
| 361 | 328 | 368 | 445 | 355 | 302 |
| 360 | 326 | 366 | 434 | 342 | 281 |
| 359 | 323 | 353 | 429 | 334 | 275 |
| 358 | 320 | 337 | 428 | 326 | 267 |
| 357 | 317 | 334 | 424 | 318 | 267 |
| 356 | 315 | 331 | 417 | 311 | 267 |
| 350 | 292 | 320 | 344 | 289 | 258 |
| 340 | 258 | 286 | 286 | 271 | 248 |
| 330 | 246 | 271 | 275 | 258 | 237 |
| 320 | 224 | 244 | 266 | 247 | 226 |
| 300 | 212 | 212 | 245 | 227 | 209 |
| 270 | 196 | 195 | 230 | 209 | 193 |
| 240 | 185 | 183 | 217 | 196 | 182 |
| 210 | 177 | 176 | 208 | 185 | 171 |
| 183 | 173 | 172 | 197 | 177 | 158 |
| 150 | 165 | 167 | 185 | 170 | 146 |
| 130 | 160 | 163 | 181 | 164 | 142 |
| 120 | 159 | 161 | 180 | 161 | 142 |
| 110 | 154 | 159 | 177 | 159 | 140 |
| 100 | 152 | 158 | 175 | 156 | 139 |
| 90 | 150 | 155 | 173 | 153 | 138 |
| 80 | 147 | 153 | 171 | 151 | 137 |
| 70 | 145 | 151 | 170 | 149 | 136 |
| 60 | 144 | 150 | 168 | 147 | 135 |
| 50 | 142 | 147 | 166 | 144 | 133 |
| 40 | 140 | 145 | 164 | 142 | 132 |
| 30 | 139 | 143 | 162 | 140 | 129 |
| 25 | 138 | 141 | 161 | 139 | 128 |
| 20 | 138 | 140 | 160 | 138 | 128 |
| 15 | 138 | 139 | 160 | 137 | 127 |
| 10 | 137 | 138 | 159 | 135 | 127 |
| 9 | 136 | 138 | 159 | 134 | 127 |
| 8 | 136 | 138 | 159 | 134 | 127 |
| 7 | 135 | 138 | 159 | 133 | 126 |
| 6 | 135 | 138 | 158 | 132 | 126 |
| 5 | 134 | 138 | 158 | 132 | 126 |
| 4 | 134 | 137 | 157 | 131 | 126 |
| 3 | 134 | 136 | 156 | 129 | 126 |
| 2 | 133 | 135 | 154 | 128 | 126 |
| 1 | 133 | 135 | 154 | 127 | 126 |
| 0 | 131 | 134 | 153 | 125 | 125 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1951
14 Tage Randeis
Verkrautung vom 1.05.-19.06, 14.8, 5.10 - 12.10.

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 5166 km²
PNP : NN + 143.52 m
Lage: 40.7 km oberhalb der Mündung, rechts

W
cm

Pegel : Allendorf — Nr. 41900104
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 76 | 61 | 190 | 181 | 144 | 112 | 82 | K 80 | K 90 | K 98 | K 71 | K 66 | K 74 | 110 |
| 2. | 70 | 61 | 200 | 169 | 151 | 108 | K 81 | K 85 | K 99 | K 93 | K 70 | K 60 | 76 | 101 |
| 3. | 70 | 60 | 230 | R 156 | 154 | 106 | K 80 | K 79 | K 95 | K 88 | K 67 | K 62 | 82 | 92 |
| 4. | 71 | 64 | 228 | R 155 | 157 | 111 | K 82 | K 80 | K 87 | K 89 | K 65 | K 65 | 91 | 91 |
| 5. | 70 | 78 | 241 | R 149 | 158 | 116 | K 85 | K 93 | K 90 | K 85 | K 64 | K 69 | 103 | 91 |
| 6. | 70 | 115 | 299 | R 142 | 156 | 109 | K 96 | K 108 | K 99 | K 98 | K 64 | K 77 | 100 | 91 |
| 7. | 68 | 118 | 294 | R 131 | 154 | 105 | K 103 | K 94 | K 99 | K 97 | K 64 | K 73 | 97 | 89 |
| 8. | 68 | 110 | 302 | R 136 | 152 | 105 | K 105 | K 93 | K 93 | K 85 | K 62 | K 81 | 95 | 85 |
| 9. | 68 | 112 | 299 | R 138 | 153 | 104 | K 99 | K 83 | K 90 | K 83 | K 62 | K 81 | 103 | 80 |
| 10. | 68 | 123 | 286 | R 135 | 150 | 104 | K 94 | K 80 | K 86 | K 80 | K 61 | K 73 | 99 | 82 |
| 11. | 68 | 124 | 274 | R 132 | 143 | 103 | K 90 | K 78 | K 91 | K 78 | K 62 | K 70 | 102 | 89 |
| 12. | 67 | 113 | 261 | R 124 | 141 | 104 | K 92 | K 78 | K 94 | K 76 | K 67 | K 69 | 104 | 85 |
| 13. | 66 | 108 | 258 | R 124 | 140 | 108 | K 95 | K 79 | K 95 | K 77 | K 86 | K 68 | 96 | 82 |
| 14. | 65 | 111 | 254 | R 124 | 137 | 103 | K 86 | K 78 | 129 | K 75 | K 76 | K 72 | 91 | 81 |
| 15. | 63 | 131 | 244 | R 126 | 136 | 100 | K 84 | K 84 | 148 | K 73 | K 68 | K 77 | 87 | 98 |
| 16. | 64 | 149 | 236 | R 129 | 135 | 97 | K 84 | 86 | 146 | K 73 | K 65 | K 74 | 85 | 167 |
| 17. | 65 | 192 | 224 | R 127 | 133 | 96 | K 85 | 84 | 142 | K 77 | K 64 | K 72 | 83 | 224 |
| 18. | 63 | 198 | 209 | 138 | 132 | 94 | K 83 | 81 | 151 | K 78 | K 70 | K 69 | 81 | 224 |
| 19. | 63 | 182 | 209 | 150 | 131 | 96 | K 81 | 75 | 157 | K 72 | K 68 | K 67 | 79 | 225 |
| 20. | 64 | 169 | 271 | 182 | 131 | 95 | K 81 | 96 | 146 | K 69 | K 68 | K 63 | 78 | 217 |
| 21. | 62 | 159 | 275 | 157 | 129 | 93 | K 77 | 105 | 141 | K 68 | K 64 | K 62 | 77 | 214 |
| 22. | 63 | 155 | 309 | 134 | 127 | 97 | K 76 | 127 | 136 | K 66 | K 60 | K 63 | 75 | 210 |
| 23. | 63 | 159 | 318 | 129 | 125 | 96 | K 75 | 122 | 130 | K 67 | K 63 | K 63 | 75 | 236 |
| 24. | 62 | 178 | 305 | 130 | 121 | 96 | K 72 | 106 | 119 | K 72 | K 63 | K 63 | 74 | 343 |
| 25. | 60 | 194 | 294 | 140 | 118 | 96 | K 71 | 98 | 110 | K 84 | K 60 | K 63 | 73 | 349 |
| 26. | 58 | 193 | 276 | 149 | 115 | 94 | K 69 | 97 | 103 | K 84 | K 62 | K 63 | 72 | 351 |
| 27. | 60 | 189 | 255 | 145 | 114 | 92 | K 67 | 93 | 102 | K 78 | K 74 | K 64 | 72 | 359 |
| 28. | 61 | 187 | 236 | 140 | 112 | 89 | K 68 | 88 | 100 | K 75 | K 79 | K 66 | 76 | 353 |
| 29. | 59 | 184 | 221 | 137 | 110 | 87 | K 68 | K 86 | 108 | K 71 | K 81 | K 66 | 81 | 345 |
| 30. | 58 | 192 | 207 | | 111 | 84 | K 68 | K 84 | 118 | K 71 | K 70 | K 66 | 98 | 328 |
| 31. | | 196 | 193 | | 111 | | K 68 | | 109 | K 72 | | K 70 | | 300 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26.+ | 3. | 1. | 12.+ | 29. | 30. | 27. | 19. | 10. | 22. | 22.+ | 2. | 26.+ | 9. |
| NW | 58 | 60 | 190 | 124 | 110 | 84 | 67 | 75 | 86 | 66 | 60 | 60 | 72 | 80 |
| MW | 65 | 141 | 255 | 142 | 135 | 100 | 82 | 90 | 113 | 79 | 67 | 68 | 86 | 187 |
| HW | 79 | 216 | 338 | 189 | 160 | 118 | 109 | 138 | 160 | 106 | 90 | 92 | 108 | 363 |
| Tag | 1. | 17. | 22.+ | 20. | 5. | 5. | 8. | 22. | 19. | 6. | 13. | 8. | 5. | 27. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 + | 2011 | 2006 | 2006 | 2004 | 2012 | 2011 + | 2003 + | 2003 | 2003 | 2003 | 2003 | 2003 + | 2011 |
| NW | 57 | 60 | 77 | 76 | 96 | 84 | 67 | 64 | 56 | 48 | 49 | 55 | 57 | 60 |
| MNW | 78 | 100 | 121 | 118 | 135 | 114 | 92 | 78 | 71 | 65 | 63 | 68 | 71 | 95 |
| MW | 117 | 144 | 182 | 163 | 179 | 148 | 117 | 96 | 87 | 79 | 78 | 85 | 104 | 143 |
| MHW | 184 | 226 | 280 | 260 | 250 | 209 | 199 | 143 | 132 | 110 | 146 | 132 | 162 | 222 |
| HW | 324 | 402 | 447 | 383 | 365 | 401 | 369 | 234 | 189 | 192 | 411 | 315 | 299 | 363 |
| Jahr | 2002 | 2002 | 2011 | 2010 | 2006 | 2006 | 2004 | 2006 | 2009 | 2010 | 2007 | 2007 | 2007 | 2012 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 58 | am 26.11.2011 | 58 | 60 | 60 | am 22.09.2012 |
| MW | cm | 112 | | 140 | 83 | 117 | |
| HW | cm | 338 | am 22.01.2012 | 338 | 160 | 363 | am 27.12.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 48 | am 25.08.2003 | 57 | 48 | 48 | am 25.08.2003 |
| MNW | cm | 59 | | 74 | 60 | 60 | |
| MW | cm | 123 | | 156 | 90 | 122 | |
| MHW | cm | 376 | | 346 | 226 | 375 | |
| HW | cm | 447 | am 17.01.2011 | 447 | 411 | 447 | am 17.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 44 | 14.09.1991 | 447 | 17.01.2011 |
| 2 | 44 | 29.08.1976 | 434 | 26.03.1987 |
| 3 | 48 | 25.08.2003 | 434 | 04.06.1981 |
| 4 | 49 | 13.12.1991 | 431 | 16.04.1994 |
| 5 | 51 | 31.12.1976 | 428 | 15.03.1981 |
| 6 | 52 | 19.09.1997 | 425 | 05.01.2003 |
| 7 | 52 | 08.10.1973 | 419 | 04.01.1987 |
| 8 | 53 | 20.09.2008 | 411 | 29.09.2007 |
| 9 | 53 | 20.08.1998 | 411 | 30.01.1995 |
| 10 | 54 | 01.09.2001 | 411 | 29.03.1988 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 318 | 359 | | | |
| 364 | 309 | 353 | 445 | 408 | 274 |
| 363 | 305 | 351 | 436 | 387 | 268 |
| 362 | 302 | 349 | 435 | 356 | 267 |
| 361 | 302 | 345 | 419 | 343 | 263 |
| 360 | 299 | 343 | 419 | 325 | 240 |
| 359 | 299 | 328 | 419 | 309 | 235 |
| 358 | 294 | 318 | 416 | 300 | 223 |
| 357 | 286 | 309 | 416 | 288 | 220 |
| 356 | 276 | 305 | 408 | 277 | 219 |
| 350 | 255 | 294 | 325 | 247 | 209 |
| 340 | 221 | 244 | 244 | 224 | 196 |
| 330 | 192 | 224 | 228 | 208 | 180 |
| 320 | 169 | 190 | 217 | 194 | 167 |
| 300 | 150 | 150 | 195 | 168 | 145 |
| 270 | 132 | 131 | 172 | 145 | 123 |
| 240 | 113 | 110 | 156 | 127 | 110 |
| 210 | 102 | 100 | 145 | 113 | 95 |
| 183 | 95 | 95 | 128 | 104 | 86 |
| 150 | 85 | 87 | 116 | 94 | 72 |
| 130 | 81 | 84 | 110 | 89 | 69 |
| 120 | 79 | 82 | 108 | 86 | 67 |
| 110 | 77 | 81 | 105 | 84 | 65 |
| 100 | 74 | 79 | 104 | 81 | 64 |
| 90 | 72 | 78 | 102 | 79 | 63 |
| 80 | 71 | 76 | 100 | 77 | 62 |
| 70 | 69 | 74 | 97 | 74 | 61 |
| 60 | 68 | 72 | 95 | 72 | 60 |
| 50 | 67 | 70 | 93 | 70 | 58 |
| 40 | 65 | 69 | 92 | 68 | 56 |
| 30 | 64 | 67 | 91 | 66 | 53 |
| 25 | 64 | 66 | 88 | 65 | 52 |
| 20 | 63 | 65 | 87 | 63 | 52 |
| 15 | 63 | 64 | 86 | 62 | 51 |
| 10 | 62 | 63 | 85 | 60 | 51 |
| 9 | 61 | 63 | 85 | 60 | 51 |
| 8 | 61 | 63 | 85 | 59 | 51 |
| 7 | 61 | 63 | 85 | 59 | 51 |
| 6 | 61 | 63 | 85 | 58 | 51 |
| 5 | 61 | 63 | 85 | 57 | 50 |
| 4 | 61 | 62 | 84 | 55 | 50 |
| 3 | 60 | 61 | 84 | 53 | 50 |
| 2 | 59 | 61 | 83 | 52 | 50 |
| 1 | 59 | 61 | 82 | 51 | 49 |
| 0 | 58 | 60 | 81 | 48 | 48 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1970
Verkrautung vom 02.05.-14.06., 29.06.-13.07., 01.08.-1.11.
15 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 5487 km²
PNP : NN + 117.40 m
Lage: 2.3 km oberhalb der Mündung, rechts

W
cm

Pegel : Letzter Heller Nr. 41900206
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 165 | 153 | 265 | 257 | 233 | 206 | 174 | 170 | 185 | 205 | 162 | 158 | 165 | 200 |
| 2. | 163 | 153 | 269 | 250 | 238 | 202 | 173 | 177 | 191 | 199 | 162 | 153 | 167 | 194 |
| 3. | 159 | 150 | 284 | 255 | 239 | 199 | 172 | 175 | 192 | 194 | 160 | 151 | 171 | 184 |
| 4. | 160 | 156 | 287 | 249 | 241 | 203 | 176 | 170 | 182 | 194 | 157 | 155 | 183 | 182 |
| 5. | 159 | 162 | 294 | 243 | 242 | 209 | 177 | 183 | 184 | 190 | 156 | 160 | 194 | 182 |
| 6. | 159 | 196 | 328 | 239 | 242 | 204 | 188 | 197 | 190 | 200 | 156 | 167 | 194 | 184 |
| 7. | 159 | 215 | 332 | 232 | 241 | 198 | 195 | 191 | 196 | 205 | 155 | 167 | 192 | 181 |
| 8. | 157 | 207 | 336 | 233 | 240 | 196 | 200 | 185 | 188 | 192 | 154 | 167 | 190 | 177 |
| 9. | 157 | 208 | 333 | 231 | 240 | 196 | 195 | 177 | 186 | 188 | 153 | 176 | 196 | 174 |
| 10. | 157 | 217 | 322 | 233 | 240 | 194 | 190 | 172 | 181 | 178 | 152 | 166 | 194 | 173 |
| 11. | 157 | 223 | 313 | 229 | 235 | 193 | 191 | 168 | 189 | 170 | 153 | 161 | 194 | 180 |
| 12. | 155 | 216 | 304 | 222 | 233 | 193 | 190 | 168 | 201 | 166 | 157 | 161 | 198 | 179 |
| 13. | 155 | 212 | 301 | 223 | 232 | 200 | 188 | 169 | 201 | 166 | 172 | 160 | 190 | 174 |
| 14. | 169 | 213 | 298 | 222 | 231 | 194 | 181 | 167 | 226 | 172 | 172 | 162 | 185 | 172 |
| 15. | 153 | 222 | 292 | 225 | 228 | 190 | 176 | 172 | 237 | 167 | 162 | 168 | 180 | 190 |
| 16. | 153 | 236 | 287 | 226 | 225 | 188 | 177 | 176 | 240 | 163 | 157 | 167 | 178 | 237 |
| 17. | 156 | 256 | 278 | 223 | 223 | 185 | 177 | 175 | 238 | 166 | 155 | 165 | 175 | 279 |
| 18. | 157 | 270 | 273 | 231 | 223 | 183 | 175 | 175 | 240 | 170 | 159 | 162 | 174 | 285 |
| 19. | 156 | 260 | 272 | 234 | 222 | 185 | 174 | 166 | 245 | 165 | 161 | 160 | 172 | 283 |
| 20. | 157 | 251 | 301 | 254 | 223 | 185 | 173 | 181 | 239 | 160 | 159 | 156 | 170 | 279 |
| 21. | 154 | 244 | 316 | 245 | 221 | 181 | 171 | 198 | 235 | 159 | 159 | 154 | 170 | 276 |
| 22. | 153 | 243 | 332 | 230 | 219 | 186 | 168 | 214 | 232 | 157 | 152 | 154 | 169 | 275 |
| 23. | 153 | 245 | 347 | 226 | 216 | 185 | 166 | 217 | 229 | 156 | 151 | 154 | 168 | 288 |
| 24. | 151 | 254 | 336 | 226 | 214 | 188 | 164 | 205 | 221 | 164 | 155 | 154 | 167 | 348 |
| 25. | 151 | 265 | 326 | 230 | 212 | 186 | 164 | 194 | 216 | 174 | 153 | 153 | 166 | 362 |
| 26. | 146 | 266 | 313 | 237 | 210 | 185 | 161 | 191 | 210 | 179 | 150 | 155 | 162 | 359 |
| 27. | 152 | 263 | 300 | 235 | 208 | 183 | 159 | 188 | 207 | 172 | 160 | 155 | 161 | 364 |
| 28. | 148 | 262 | 289 | 233 | 206 | 180 | 160 | 183 | 207 | 167 | 167 | 157 | 162 | 361 |
| 29. | 153 | 261 | 279 | 231 | 204 | 178 | 162 | 181 | 210 | 165 | 174 | 158 | 168 | 355 |
| 30. | 153 | 266 | 269 | | 204 | 177 | 159 | 177 | 219 | 162 | 164 | 158 | 180 | 345 |
| 31. | | 269 | 263 | | 203 | | 160 | | 216 | 162 | | 160 | | 328 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 3. | 31. | 12.+ | 31. | 30. | 27.+ | 19. | 10. | 23. | 26. | 3. | 27. | 14. |
| NW | 146 | 150 | 263 | 222 | 203 | 177 | 159 | 166 | 181 | 156 | 150 | 151 | 161 | 172 |
| MW | 156 | 226 | 301 | 235 | 225 | 191 | 175 | 182 | 211 | 175 | 159 | 160 | 178 | 250 |
| HW | 207 | 276 | 357 | 296 | 243 | 212 | 203 | 224 | 246 | 211 | 182 | 183 | 201 | 368 |
| Tag | 14. | 18. | 23. | 17. | 4.+ | 5. | 8. | 22. | 19. | 1. | 13. | 9. | 12. | 24.+ |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2006 | 2006 | 2004 | 2012 | 2011 + | 2011 | 2003 | 2003 | 2003 | 2012 | 2011 | 2011 |
| NW | 146 | 150 | 179 | 176 | 202 | 177 | 159 | 155 | 157 | 146 | 147 | 151 | 146 | 150 |
| MNW | 179 | 199 | 216 | 217 | 228 | 211 | 195 | 179 | 172 | 164 | 162 | 169 | 171 | 193 |
| MW | 210 | 233 | 261 | 246 | 256 | 234 | 214 | 198 | 189 | 180 | 177 | 186 | 199 | 232 |
| MHW | 265 | 293 | 343 | 312 | 307 | 279 | 271 | 232 | 234 | 207 | 235 | 232 | 249 | 287 |
| HW | 361 | 432 | 518 | 407 | 398 | 428 | 385 | 293 | 298 | 260 | 440 | 410 | 334 | 368 |
| Jahr | 2002 | 2002 | 2011 | 2010 | 2006 | 2006 | 2004 | 2006 | 2006 | 2007 | 2007 | 2007 | 2007 | 2012 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 146 | am 26.11.2011 | 146 | 150 | 150 | am 26.09.2012 |
| MW | cm | 200 | | 223 | 177 | 204 | |
| HW | cm | 357 | am 23.01.2012 | 357 | 246 | 368 | am 24.12.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 146 | am 15.08.2003 | 146 | 146 | 146 | am 15.08.2003 |
| MNW | cm | 157 | | 175 | 159 | 158 | |
| MW | cm | 215 | | 240 | 190 | 214 | |
| MHW | cm | 413 | | 390 | 295 | 411 | |
| HW | cm | 518 | am 17.01.2011 | 518 | 440 | 518 | am 17.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 134 | 06.09.1991 | 518 | 17.01.2011 |
| 2 | 146 | 26.11.2011 | 512 | 05.01.2003 |
| 3 | 146 | 15.08.2003 | 511 | 31.01.1995 |
| 4 | 146 | 13.09.1989 | 485 | 15.04.1994 |
| 5 | 149 | 19.09.1997 | 446 | 23.12.1993 |
| 6 | 149 | 06.08.1990 | 445 | 02.11.1998 |
| 7 | 150 | 26.09.2012 | 440 | 30.09.2007 |
| 8 | 152 | 26.09.2006 | 439 | 01.03.2002 |
| 9 | 154 | 01.09.2001 | 436 | 08.01.1994 |
| 10 | 155 | 10.09.2005 | 428 | 04.04.2006 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 347 | 364 | | | |
| 364 | 347 | 362 | 510 | 453 | 314 |
| 363 | 336 | 361 | 498 | 413 | 308 |
| 362 | 333 | 359 | 495 | 373 | 307 |
| 361 | 333 | 355 | 486 | 361 | 304 |
| 360 | 332 | 348 | 469 | 350 | 295 |
| 359 | 328 | 347 | 463 | 341 | 294 |
| 358 | 326 | 345 | 454 | 331 | 283 |
| 357 | 322 | 345 | 453 | 323 | 279 |
| 356 | 316 | 336 | 442 | 317 | 279 |
| 350 | 300 | 326 | 347 | 298 | 276 |
| 340 | 273 | 294 | 294 | 283 | 266 |
| 330 | 265 | 283 | 286 | 274 | 258 |
| 320 | 251 | 263 | 279 | 264 | 249 |
| 300 | 239 | 239 | 265 | 251 | 238 |
| 270 | 226 | 226 | 254 | 237 | 224 |
| 240 | 212 | 206 | 244 | 227 | 206 |
| 210 | 197 | 195 | 237 | 217 | 187 |
| 183 | 189 | 189 | 228 | 209 | 181 |
| 150 | 178 | 181 | 220 | 197 | 174 |
| 130 | 173 | 177 | 216 | 191 | 170 |
| 120 | 169 | 175 | 213 | 188 | 168 |
| 110 | 168 | 173 | 212 | 185 | 166 |
| 100 | 166 | 171 | 211 | 183 | 165 |
| 90 | 163 | 169 | 209 | 180 | 164 |
| 80 | 162 | 168 | 207 | 177 | 162 |
| 70 | 161 | 166 | 205 | 175 | 162 |
| 60 | 160 | 163 | 202 | 172 | 160 |
| 50 | 158 | 162 | 199 | 169 | 157 |
| 40 | 157 | 161 | 197 | 167 | 154 |
| 30 | 155 | 158 | 195 | 164 | 152 |
| 25 | 155 | 157 | 193 | 163 | 152 |
| 20 | 154 | 156 | 192 | 161 | 150 |
| 15 | 154 | 155 | 190 | 159 | 150 |
| 10 | 153 | 154 | 190 | 157 | 149 |
| 9 | 153 | 154 | 189 | 156 | 149 |
| 8 | 152 | 154 | 189 | 156 | 149 |
| 7 | 152 | 154 | 189 | 155 | 149 |
| 6 | 152 | 154 | 189 | 154 | 148 |
| 5 | 152 | 153 | 189 | 154 | 148 |
| 4 | 151 | 153 | 188 | 152 | 148 |
| 3 | 151 | 152 | 188 | 152 | 148 |
| 2 | 150 | 152 | 187 | 150 | 147 |
| 1 | 148 | 151 | 186 | 149 | 147 |
| 0 | 146 | 150 | 185 | 146 | 146 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1989
Wasserstände bis 1988 bei Km 5,09 oberhalb der Mündung
Ablesungen sind nicht mit denen früherer Jahre Vergleichbar
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 2523 km²
PNP : NN + 179.52 m
Lage: 95.7 km oberhalb der Mündung, rechts

W
cm

Pegel : Rotenburg Nr. 42700100
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 122 | 116 | 225 | R 192 | 176 | 137 | 130 | 140 | 162 | 172 | 126 | 117 | 155 | 141 |
| 2. | 122 | 118 | 262 | R 173 | 177 | 135 | 130 | 141 | 152 | 162 | 122 | 116 | 153 | 137 |
| 3. | 121 | 119 | 310 | R 172 | 174 | 134 | 158 | 132 | 146 | 154 | 120 | 117 | 171 | 137 |
| 4. | 121 | 123 | 303 | R 174 | 170 | 148 | 142 | 137 | 142 | 148 | 119 | 120 | 212 | 136 |
| 5. | 119 | 170 | 295 | R 170 | 168 | 157 | 141 | 159 | 148 | 145 | 118 | 155 | 216 | 141 |
| 6. | 120 | 230 | 357 | R 164 | 166 | 142 | 166 | 162 | 195 | 158 | 118 | 156 | 199 | 147 |
| 7. | 119 | 177 | 402 | R 159 | 162 | 139 | 173 | 149 | 174 | 158 | 119 | 146 | 189 | 144 |
| 8. | 118 | 185 | 352 | R 158 | 164 | 139 | 168 | 156 | 155 | 145 | 117 | 184 | 176 | 139 |
| 9. | 119 | 188 | 322 | R 160 | 172 | 137 | 151 | 144 | 147 | 141 | 117 | 152 | 168 | 134 |
| 10. | 119 | 218 | 307 | R 157 | 166 | 140 | 144 | 135 | 143 | 138 | 116 | 138 | 162 | 137 |
| 11. | 119 | 190 | 291 | R 155 | 162 | 150 | 142 | 130 | 148 | 135 | 117 | 131 | 185 | 145 |
| 12. | 118 | 165 | 265 | R 152 | 161 | 152 | 157 | 134 | 165 | 130 | 130 | 128 | 189 | 139 |
| 13. | 118 | 165 | 263 | R 151 | 161 | 151 | 161 | 136 | 168 | 130 | 159 | 131 | 168 | 136 |
| 14. | 118 | 185 | 266 | R 153 | 159 | 144 | 144 | 185 | 236 | 128 | 139 | 133 | 158 | 134 |
| 15. | 118 | 225 | 242 | R 158 | 156 | 142 | 140 | 166 | 312 | 128 | 125 | 148 | 152 | 182 |
| 16. | 118 | 244 | 224 | R 161 | 153 | 138 | 143 | 148 | 278 | 131 | 121 | 164 | 148 | 327 |
| 17. | 118 | 301 | 210 | R 160 | 151 | 137 | 145 | 151 | 238 | 139 | 120 | 149 | 146 | 377 |
| 18. | 117 | 320 | 199 | 172 | 150 | 137 | 139 | 146 | 262 | 133 | 119 | 139 | 143 | 368 |
| 19. | 118 | 240 | 213 | 200 | 152 | 137 | 138 | 139 | 230 | 126 | 118 | 133 | 142 | 327 |
| 20. | 117 | 206 | 308 | 252 | 154 | 137 | 141 | 175 | 201 | 124 | 119 | 131 | 140 | 274 |
| 21. | 117 | 195 | 341 | 179 | 147 | 138 | 144 | 193 | 195 | 121 | 120 | 128 | 138 | 243 |
| 22. | 116 | 196 | 344 | 164 | 145 | 139 | 138 | 181 | 191 | 121 | 119 | 126 | 135 | 235 |
| 23. | 116 | 230 | 383 | 159 | 143 | 146 | 135 | 160 | 175 | 122 | 119 | 125 | 134 | 275 |
| 24. | 116 | 255 | 354 | 160 | 143 | 149 | 131 | 145 | 165 | 131 | 118 | 126 | 133 | 358 |
| 25. | 116 | 270 | 309 | 169 | 141 | 147 | 127 | 143 | 159 | 155 | 117 | 124 | 132 | 399 |
| 26. | 117 | 232 | 280 | 179 | 139 | 149 | 124 | 154 | 153 | 146 | 120 | 123 | 131 | 353 |
| 27. | 116 | 217 | 256 | 172 | 142 | 141 | 123 | 144 | 149 | 134 | 128 | 129 | 133 | 329 |
| 28. | 117 | 207 | 241 | 165 | 132 | 138 | 122 | 139 | 150 | 138 | 133 | 137 | 139 | 361 |
| 29. | 117 | 197 | 228 | 165 | 139 | 134 | 122 | 138 | 191 | 131 | 126 | 132 | 140 | 384 |
| 30. | 117 | 202 | 216 | | 134 | 130 | 123 | 135 | 258 | 125 | 120 | 132 | 141 | 353 |
| 31. | | 238 | 206 | | 139 | | 123 | | 204 | 127 | | 142 | | 300 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 22.+ | 1. | 18. | 13. | 28. | 30. | 28.+ | 11. | 4. | 21.+ | 10. | 2. | 26. | 9.+ |
| NW | 116 | 116 | 199 | 151 | 132 | 130 | 122 | 130 | 142 | 121 | 116 | 116 | 131 | 134 |
| MW | 118 | 204 | 283 | 169 | 155 | 141 | 141 | 150 | 187 | 138 | 123 | 136 | 158 | 238 |
| HW | 123 | 336 | 406 | 286 | 183 | 162 | 177 | 208 | 319 | 179 | 166 | 199 | 237 | 404 |
| Tag | 2.+ | 18. | 7. | 20. | 9. | 5. | 7. | 14. | 15. | 1. | 13. | 8. | 4.+ | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2003 | 2009 | 2006 | 2012 | 2011 | 2011 | 2011 | 2003 | 2003 | 2003 | 2003 | 2003 | 2003 |
| NW | 113 | 114 | 124 | 125 | 132 | 129 | 118 | 117 | 115 | 106 | 107 | 111 | 113 | 114 |
| MNW | 128 | 141 | 159 | 155 | 164 | 147 | 133 | 127 | 124 | 120 | 119 | 121 | 124 | 139 |
| MW | 167 | 188 | 223 | 201 | 209 | 176 | 160 | 145 | 142 | 139 | 132 | 136 | 158 | 192 |
| MHW | 262 | 314 | 379 | 339 | 306 | 245 | 260 | 211 | 203 | 195 | 199 | 204 | 248 | 310 |
| HW | 371 | 442 | 495 | 425 | 396 | 426 | 397 | 335 | 319 | 374 | 407 | 406 | 356 | 404 |
| Jahr | 2002 | 2002 | 2003 | 2005 | 2010 | 2006 | 2004 | 2007 | 2012 | 2007 | 2007 | 2007 | 2004 | 2012 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 116 | am 22.11.2011 | 116 | 116 | 116 | am 10.09.2012 |
| MW cm | 162 | | 179 | 146 | 168 | |
| HW cm | 406 | am 07.01.2012 | 406 | 319 | 406 | am 07.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 106 | am 17.08.2003 | 113 | 106 | 106 | am 17.08.2003 |
| MNW cm | 115 | | 124 | 116 | 116 | |
| MW cm | 168 | | 194 | 142 | 168 | |
| MHW cm | 428 | | 422 | 297 | 424 | |
| HW cm | 495 | am 04.01.2003 | 495 | 407 | 495 | am 04.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 80 | 12.09.1949 | 603 | 23.01.1995 |
| 2 | 100 | 05.09.1991 | 558 | 08.02.1984 |
| 3 | 100 | 16.07.1934 | 553 | 13.01.1993 |
| 4 | 101 | 26.08.1976 | 540 | 09.02.1946 |
| 5 | 103 | 21.09.1943 | 540 | 05.11.1940 |
| 6 | 104 | 14.08.1998 | 538 | 01.04.1986 |
| 7 | 105 | 26.09.1997 | 533 | 22.12.1993 |
| 8 | 105 | 16.10.1991 | 532 | 24.02.1970 |
| 9 | 105 | 25.08.1947 | 531 | 25.12.1967 |
| 10 | 106 | 17.08.2003 | 522 | 28.11.1939 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 402 | 402 | | | |
| 364 | 383 | 399 | 479 | 413 | 337 |
| 363 | 357 | 384 | 451 | 388 | 326 |
| 362 | 354 | 383 | 445 | 379 | 321 |
| 361 | 352 | 377 | 444 | 366 | 320 |
| 360 | 344 | 368 | 430 | 358 | 314 |
| 359 | 341 | 361 | 418 | 350 | 305 |
| 358 | 322 | 358 | 413 | 339 | 294 |
| 357 | 320 | 357 | 384 | 331 | 292 |
| 356 | 312 | 354 | 381 | 326 | 291 |
| 350 | 301 | 329 | 346 | 297 | 272 |
| 340 | 262 | 300 | 325 | 269 | 230 |
| 330 | 238 | 263 | 295 | 247 | 213 |
| 320 | 218 | 235 | 284 | 228 | 204 |
| 300 | 192 | 192 | 256 | 206 | 183 |
| 270 | 169 | 169 | 218 | 185 | 160 |
| 240 | 160 | 160 | 203 | 169 | 146 |
| 210 | 153 | 153 | 189 | 157 | 139 |
| 183 | 147 | 148 | 179 | 149 | 135 |
| 150 | 140 | 143 | 165 | 142 | 127 |
| 130 | 139 | 140 | 160 | 138 | 123 |
| 120 | 136 | 140 | 156 | 136 | 121 |
| 110 | 134 | 139 | 154 | 134 | 119 |
| 100 | 132 | 138 | 152 | 133 | 118 |
| 90 | 131 | 136 | 150 | 131 | 117 |
| 80 | 127 | 134 | 148 | 129 | 117 |
| 70 | 125 | 133 | 145 | 127 | 116 |
| 60 | 123 | 131 | 144 | 126 | 115 |
| 50 | 121 | 129 | 141 | 124 | 115 |
| 40 | 120 | 126 | 139 | 122 | 113 |
| 30 | 119 | 123 | 139 | 120 | 112 |
| 25 | 119 | 122 | 138 | 119 | 111 |
| 20 | 118 | 121 | 137 | 118 | 111 |
| 15 | 118 | 120 | 136 | 118 | 110 |
| 10 | 118 | 119 | 134 | 116 | 108 |
| 9 | 118 | 119 | 133 | 116 | 108 |
| 8 | 117 | 118 | 133 | 116 | 108 |
| 7 | 117 | 118 | 132 | 115 | 108 |
| 6 | 117 | 118 | 131 | 115 | 108 |
| 5 | 117 | 118 | 131 | 114 | 108 |
| 4 | 117 | 118 | 130 | 113 | 108 |
| 3 | 117 | 118 | 130 | 112 | 108 |
| 2 | 117 | 117 | 130 | 111 | 108 |
| 1 | 117 | 117 | 129 | 108 | 107 |
| 0 | 116 | 116 | 128 | 106 | 106 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1931
ab 1.09.1998 hat sich das Wasserstands / Abflussverhältnis durch Baumaßnahmen im Pegelbereich verändert
Abflüsse sind nicht denen früherer Jahre vergleichbar !
17 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 2975 km²
PNP : NN + 151.01 m
Lage: 55.5 km oberhalb der Mündung, rechts

W
cm

Pegel : Grebenau Nr. 42700202
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 130 | 125 | 197 | R 179 | 160 | 137 | 136 | 138 | 146 | 165 | 131 | 128 | 147 | 141 |
| 2. | 131 | 126 | 206 | R 168 | 164 | 138 | 136 | 141 | 149 | 156 | 130 | 127 | 148 | 139 |
| 3. | 131 | 126 | 240 | R 168 | 162 | 137 | 148 | 137 | 145 | 150 | 129 | 127 | 155 | 138 |
| 4. | 131 | 128 | 254 | R 170 | 160 | 143 | 147 | 137 | 141 | 145 | 129 | 128 | 173 | 138 |
| 5. | 130 | 142 | 242 | R 169 | 159 | 151 | 141 | 149 | 141 | 143 | 129 | 136 | 188 | 140 |
| 6. | 130 | 187 | 272 | R 167 | 158 | 144 | 157 | 156 | 158 | 148 | 128 | 154 | 177 | 143 |
| 7. | 128 | 171 | 309 | R 165 | 156 | 141 | 159 | 145 | 167 | 153 | 128 | 143 | 170 | 143 |
| 8. | 128 | 159 | 312 | R 173 | 157 | 140 | 161 | 149 | 150 | 144 | 128 | 157 | 162 | 140 |
| 9. | 127 | 176 | 274 | R 187 | 161 | 140 | 150 | 144 | 144 | 141 | 128 | 152 | 158 | 138 |
| 10. | 128 | 175 | 257 | R 190 | 157 | 141 | 146 | 138 | 143 | 138 | 127 | 141 | 154 | 139 |
| 11. | 128 | 181 | 244 | R 195 | 155 | 144 | 143 | 135 | 142 | 137 | 128 | 136 | 159 | 143 |
| 12. | 128 | 159 | 225 | R 199 | 154 | 148 | 146 | 136 | 152 | 135 | 129 | 134 | 173 | 141 |
| 13. | 127 | 152 | 216 | R 190 | 153 | 149 | 157 | 137 | 155 | 135 | 146 | 135 | 159 | 138 |
| 14. | 127 | 161 | 220 | R 170 | 153 | 145 | 145 | 152 | 199 | 133 | 142 | 136 | 152 | 138 |
| 15. | 126 | 184 | 208 | R 157 | 151 | 143 | 141 | 164 | 236 | 132 | 134 | 141 | 148 | 156 |
| 16. | 125 | 203 | 197 | R 155 | 150 | 141 | 142 | 147 | 241 | 134 | 129 | 151 | 145 | 228 |
| 17. | 125 | 224 | 188 | R 156 | 149 | 139 | 144 | 145 | 212 | 137 | 129 | 148 | 144 | 289 |
| 18. | 126 | 261 | 180 | 162 | 148 | 139 | 141 | 144 | 214 | 138 | 128 | 141 | 142 | 303 |
| 19. | 125 | 219 | 187 | 171 | 148 | 139 | 139 | 139 | 209 | 133 | 128 | 137 | 142 | 277 |
| 20. | 126 | 186 | 232 | 206 | 149 | 139 | 141 | 155 | 188 | 130 | 128 | 134 | 140 | 238 |
| 21. | 126 | 178 | 278 | 175 | 147 | 140 | 141 | 172 | 184 | 130 | 128 | 132 | 139 | 209 |
| 22. | 125 | 177 | 283 | 157 | 144 | 142 | 140 | 169 | 179 | 130 | 128 | 131 | 138 | 201 |
| 23. | 126 | 189 | 300 | 153 | 143 | 143 | 136 | 157 | 170 | 130 | 128 | 130 | 136 | 222 |
| 24. | 125 | 209 | 306 | 153 | 143 | 146 | 135 | 146 | 162 | 133 | 128 | 130 | 137 | 278 |
| 25. | 125 | 217 | 268 | 156 | 142 | 146 | 132 | 143 | 156 | 148 | 128 | 131 | 136 | 308 |
| 26. | 125 | 206 | 238 | 164 | 141 | 147 | 130 | 146 | 152 | 147 | 128 | 131 | 135 | 314 |
| 27. | 125 | 191 | 220 | 161 | 143 | 144 | 130 | 144 | 149 | 139 | 131 | 131 | 136 | 270 |
| 28. | 125 | 184 | 209 | 157 | 137 | 142 | 129 | 140 | 149 | 137 | 134 | 137 | 138 | 283 |
| 29. | 125 | 178 | 201 | 156 | 140 | 140 | 129 | 138 | 164 | 135 | 133 | 137 | 139 | 302 |
| 30. | 125 | 181 | 193 | | 136 | 138 | 129 | 138 | 205 | 131 | 129 | 136 | 140 | 304 |
| 31. | | 197 | 186 | | 141 | | 130 | | 199 | 131 | | 138 | | 256 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 16.+ | 1. | 18. | 23.+ | 30. | 1.+ | 28.+ | 11. | 4.+ | 20.+ | 10. | 2.+ | 26. | 3.+ |
| NW | 125 | 125 | 180 | 153 | 136 | 137 | 129 | 135 | 141 | 130 | 127 | 127 | 135 | 138 |
| MW | 127 | 179 | 237 | 170 | 150 | 142 | 141 | 146 | 171 | 139 | 130 | 137 | 150 | 206 |
| HW | 132 | 270 | 326 | 222 | 167 | 153 | 163 | 178 | 253 | 176 | 154 | 171 | 194 | 324 |
| Tag | 7.+ | 18. | 8. | 20. | 9. | 5.+ | 8. | 14.+ | 16. | 1. | 13. | 8. | 5. | 26. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2004 | 2006 | 2012 | 2011 + | 2012 | 2011 | 2003 | 2003 | 2003 | 2011 | 2011 | 2011 |
| NW | 125 | 125 | 138 | 138 | 136 | 137 | 129 | 131 | 128 | 124 | 125 | 126 | 125 | 125 |
| MNW | 139 | 147 | 157 | 155 | 160 | 150 | 140 | 137 | 134 | 132 | 132 | 134 | 136 | 145 |
| MW | 164 | 176 | 204 | 185 | 189 | 168 | 157 | 148 | 145 | 143 | 140 | 144 | 157 | 178 |
| MHW | 225 | 253 | 324 | 278 | 257 | 215 | 220 | 189 | 184 | 180 | 187 | 176 | 214 | 254 |
| HW | 304 | 322 | 461 | 361 | 344 | 361 | 314 | 284 | 253 | 294 | 343 | 246 | 289 | 324 |
| Jahr | 2002 | 2002 | 2003 + | 2010 | 2010 | 2006 | 2004 | 2007 | 2009 + | 2007 | 2007 | 2007 | 2007 | 2012 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 125 | am 16.11.2011 | 125 | 127 | 127 | am 10.09.2012 |
| MW cm | 156 | | 168 | 144 | 160 | |
| HW cm | 326 | am 08.01.2012 | 326 | 253 | 326 | am 08.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 124 | am 17.08.2003 | 125 | 124 | 124 | am 17.08.2003 |
| MNW cm | 130 | | 137 | 130 | 130 | |
| MW cm | 163 | | 181 | 146 | 163 | |
| MHW cm | 364 | | 360 | 247 | 361 | |
| HW cm | 461 | am 04.01.2003 | 461 | 343 | 461 | am 04.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 118 | 05.09.1991 | 523 | 24.01.1995 |
| 2 | 122 | 19.09.1997 | 480 | 08.02.1984 |
| 3 | 122 | 12.10.1991 | 461 | 09.01.2011 |
| 4 | 123 | 15.08.1998 | 461 | 04.01.2003 |
| 5 | 123 | 29.08.1993 | 456 | 24.02.1970 |
| 6 | 124 | 17.08.2003 | 450 | 13.01.1993 |
| 7 | 124 | 03.08.1990 | 435 | 02.04.1986 |
| 8 | 125 | 16.11.2011 | 432 | 25.12.1967 |
| 9 | 126 | 09.08.2004 | 429 | 06.12.1960 |
| 10 | 126 | 11.09.1999 | 419 | 28.02.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 312 | 314 | | | |
| 364 | 309 | 312 | 444 | 345 | 270 |
| 363 | 306 | 309 | 424 | 325 | 266 |
| 362 | 300 | 308 | 395 | 309 | 264 |
| 361 | 283 | 306 | 378 | 299 | 264 |
| 360 | 278 | 304 | 368 | 290 | 256 |
| 359 | 274 | 303 | 338 | 283 | 255 |
| 358 | 272 | 302 | 336 | 280 | 246 |
| 357 | 268 | 300 | 334 | 274 | 243 |
| 356 | 261 | 289 | 324 | 271 | 240 |
| 350 | 240 | 274 | 282 | 247 | 228 |
| 340 | 216 | 240 | 264 | 226 | 204 |
| 330 | 205 | 216 | 248 | 213 | 193 |
| 320 | 193 | 205 | 234 | 203 | 184 |
| 300 | 179 | 179 | 210 | 189 | 172 |
| 270 | 162 | 161 | 196 | 174 | 154 |
| 240 | 155 | 156 | 187 | 164 | 147 |
| 210 | 149 | 149 | 176 | 156 | 142 |
| 183 | 145 | 146 | 169 | 151 | 139 |
| 150 | 142 | 143 | 161 | 147 | 136 |
| 130 | 140 | 142 | 157 | 144 | 134 |
| 120 | 138 | 141 | 154 | 143 | 133 |
| 110 | 138 | 140 | 153 | 142 | 132 |
| 100 | 137 | 139 | 152 | 141 | 132 |
| 90 | 135 | 138 | 151 | 140 | 131 |
| 80 | 132 | 138 | 150 | 139 | 131 |
| 70 | 131 | 137 | 149 | 138 | 130 |
| 60 | 131 | 136 | 147 | 137 | 130 |
| 50 | 130 | 133 | 147 | 135 | 130 |
| 40 | 129 | 132 | 146 | 134 | 129 |
| 30 | 129 | 131 | 145 | 133 | 128 |
| 25 | 128 | 130 | 144 | 132 | 127 |
| 20 | 128 | 130 | 143 | 131 | 127 |
| 15 | 127 | 129 | 143 | 131 | 126 |
| 10 | 126 | 129 | 142 | 129 | 126 |
| 9 | 126 | 129 | 142 | 129 | 126 |
| 8 | 126 | 129 | 142 | 129 | 126 |
| 7 | 126 | 129 | 142 | 128 | 126 |
| 6 | 126 | 129 | 141 | 128 | 126 |
| 5 | 126 | 129 | 141 | 127 | 126 |
| 4 | 126 | 129 | 140 | 127 | 125 |
| 3 | 126 | 128 | 140 | 127 | 125 |
| 2 | 126 | 128 | 139 | 126 | 125 |
| 1 | 126 | 128 | 139 | 126 | 125 |
| 0 | 125 | 127 | 138 | 124 | 124 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1951
17 Tage Randeis
PNP seit 05.05.2004 von NN 151,02 m auf NN 151,01 m verschoben

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 6366 km²
PNP : NN + 140.90 m
Lage: 44.0 km oberhalb der Mündung, links

W
cm

Pegel : Guntershausen Nr. 42900100
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 127 | 127 | 252 | 171 | 131 | 110 | 114 | 134 | 126 | 137 | 141 | 150 | 148 | 128 |
| 2. | 127 | 127 | 259 | 166 | 134 | 110 | 117 | 125 | 127 | 132 | 140 | 155 | 146 | 127 |
| 3. | 141 | 128 | 280 | 165R | 133 | 110 | 122 | 119 | 120 | 134 | 142 | 155 | 152 | 126 |
| 4. | 152 | 130 | 292 | 160R | 136 | 114 | 123 | 125 | 121 | 129 | 145 | 157 | 164 | 129 |
| 5. | 136 | 141 | 296 | 161R | 135 | 120 | 120 | 128 | 124 | 124 | 155 | 162 | 169 | 129 |
| 6. | 127 | 171 | 321 | 162R | 134 | 116 | 130 | 127 | 128 | 151 | 155 | 164 | 161 | 129 |
| 7. | 127 | 164 | 329 | 163R | 132 | 112 | 128 | 118 | 134 | 150 | 156 | 154 | 154 | 129 |
| 8. | 127 | 155 | 331 | 165R | 132 | 111 | 125 | 118 | 123 | 133 | 158 | 155 | 148 | 127 |
| 9. | 126 | 167 | 309 | 155R | 133 | 111 | 118 | 115 | 121 | 128 | 172 | 144 | 143 | 131 |
| 10. | 127 | 166 | 301 | 151R | 129 | 116 | 116 | 119 | 124 | 129 | 175 | 153 | 141 | 148 |
| 11. | 127 | 170 | 297 | 150R | 127 | 113 | 113 | 123 | 126 | 128 | 171 | 153 | 144 | 154 |
| 12. | 127 | 154 | 286 | 147R | 126 | 116 | 117 | 128 | 129 | 128 | 155 | 153 | 154 | 153 |
| 13. | 126 | 149 | 277 | 139R | 125 | 117 | 122 | 127 | 131 | 130 | 156 | 154 | 145 | 152 |
| 14. | 127 | 157 | 266 | 137R | 125 | 114 | 116 | 129 | 176 | 131 | 141 | 154 | 140 | 156 |
| 15. | 126 | 178 | 242 | 143R | 123 | 113 | 115 | 133 | 203 | 132 | 143 | 156 | 138 | 187 |
| 16. | 127 | 195 | 226 | 144R | 122 | 111 | 117 | 126 | 201 | 136 | 149 | 157 | 140 | 223 |
| 17. | 127 | 224 | 201 | 144R | 121 | 110 | 118 | 126 | 178 | 138 | 149 | 146 | 140 | 252 |
| 18. | 127 | 232 | 189 | 157 | 120 | 109 | 116 | 125 | 181 | 135 | 148 | 153 | 139 | 258 |
| 19. | 126 | 203 | 211 | 166 | 121 | 110 | 118 | 124 | 173 | 133 | 148 | 152 | 141 | 240 |
| 20. | 127 | 180 | 253 | 189 | 121 | 110 | 120 | 137 | 156 | 139 | 149 | 153 | 136 | 213 |
| 21. | 127 | 176 | 278 | 171 | 119 | 111 | 121 | 146 | 155 | 139 | 151 | 153 | 136 | 191 |
| 22. | 127 | 175 | 290 | 146 | 116 | 117 | 119 | 138 | 151 | 140 | 152 | 153 | 137 | 185 |
| 23. | 126 | 186 | 299 | 136 | 116 | 116 | 117 | 128 | 142 | 140 | 152 | 154 | 136 | 209 |
| 24. | 126 | 197 | 303 | 133 | 116 | 115 | 122 | 120 | 134 | 144 | 154 | 156 | 136 | 257 |
| 25. | 126 | 202 | 280 | 131 | 115 | 115 | 125 | 117 | 131 | 152 | 153 | 156 | 137 | 276 |
| 26. | 126 | 194 | 259 | 134 | 114 | 115 | 126 | 117 | 132 | 137 | 151 | 157 | 137 | 279 |
| 27. | 126 | 182 | 222 | 134 | 115 | 114 | 128 | 117 | 134 | 138 | 153 | 158 | 137 | 256 |
| 28. | 126 | 189 | 202 | 131 | 112 | 113 | 130 | 118 | 141 | 141 | 150 | 157 | 138 | 267 |
| 29. | 126 | 197 | 193 | 129 | 112 | 112 | 129 | 121 | 147 | 141 | 145 | 148 | 136 | 277 |
| 30. | 125 | 221 | 186 | | 110 | 111 | 129 | 124 | 166 | 140 | 148 | 147 | 134 | 275 |
| 31. | | 249 | 179 | | 112 | | 130 | | 165 | 140 | | 148 | | 241 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1.+ | 31. | 29. | 30. | 18. | 11. | 9. | 3. | 5. | 2. | 9. | 30. | 3. |
| NW | 125 | 127 | 179 | 129 | 110 | 109 | 113 | 115 | 120 | 124 | 140 | 144 | 134 | 126 |
| MW | 128 | 177 | 262 | 151 | 123 | 113 | 121 | 125 | 145 | 136 | 152 | 154 | 144 | 194 |
| HW | 153 | 260 | 335 | 201 | 137 | 121 | 133 | 151 | 210 | 160 | 177 | 168 | 172 | 282 |
| Tag | 3.+ | 31. | 7.+ | 20. | 3.+ | 5. | 6.+ | 20. | 16. | 6. | 11. | 6. | 5. | 26. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2003 | 2004 | 2009 | 2011 + | 2011 | 2009 | 2009 | 2007 | 2011 | 2003 | 2003 | 2003 | 2003 |
| NW | 100 | 104 | 114 | 111 | 110 | 106 | 106 | 108 | 116 | 121 | 102 | 106 | 100 | 104 |
| MNW | 128 | 131 | 141 | 136 | 140 | 120 | 114 | 115 | 122 | 131 | 131 | 130 | 126 | 130 |
| MW | 156 | 163 | 197 | 171 | 174 | 144 | 134 | 131 | 136 | 149 | 146 | 146 | 147 | 166 |
| MHW | 205 | 232 | 305 | 251 | 239 | 198 | 192 | 174 | 170 | 182 | 190 | 186 | 189 | 228 |
| HW | 324 | 334 | 442 | 347 | 345 | 360 | 289 | 246 | 210 | 312 | 334 | 291 | 263 | 334 |
| Jahr | 2002 | 2007 | 2011 | 2010 | 2010 | 2006 | 2004 | 2007 | 2012 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 109 | am 18.04.2012 | 109 | 113 | 109 | am 18.04.2012 |
| MW cm | 149 | | 160 | 139 | 152 | |
| HW cm | 335 | am 07.01.2012 | 335 | 210 | 335 | am 07.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 100 | am 21.11.2003 | 100 | 102 | 100 | am 21.11.2003 |
| MNW cm | 110 | | 115 | 112 | 110 | |
| MW cm | 154 | | 168 | 140 | 154 | |
| MHW cm | 349 | | 344 | 229 | 343 | |
| HW cm | 442 | am 09.01.2011 | 442 | 334 | 442 | am 09.01.2011 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 83 | 15.09.1991 | 829*) | 17.05.1943 |
| 2 | 91 | 22.11.1976 | 584 | 09.02.1946 |
| 3 | 94 | 01.12.1991 | 554 | 01.01.1926 |
| 4 | 95 | 25.10.1990 | 507 | 24.01.1995 |
| 5 | 95 | 25.11.1983 | 506 | 29.11.1939 |
| 6 | 97 | 21.07.1996 | 498 | 06.11.1940 |
| 7 | 98 | 01.09.1988 | 468 | 15.01.1948 |
| 8 | 98 | 06.10.1973 | 451 | 08.02.1984 |
| 9 | 100 | 18.11.1999 | 450 | 31.05.1984 |
| 10 | 101 | 09.06.1993 | 442 | 09.01.2011 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 331 | 331 | | | |
| 364 | 329 | 329 | 417 | 344 | 253 |
| 363 | 321 | 321 | 406 | 331 | 252 |
| 362 | 309 | 309 | 373 | 322 | 247 |
| 361 | 303 | 303 | 370 | 308 | 241 |
| 360 | 301 | 301 | 362 | 301 | 241 |
| 359 | 299 | 299 | 362 | 296 | 238 |
| 358 | 297 | 297 | 346 | 289 | 230 |
| 357 | 296 | 296 | 344 | 281 | 221 |
| 356 | 292 | 292 | 339 | 277 | 217 |
| 350 | 277 | 278 | 299 | 246 | 206 |
| 340 | 224 | 257 | 276 | 222 | 200 |
| 330 | 201 | 222 | 251 | 207 | 183 |
| 320 | 182 | 191 | 237 | 198 | 172 |
| 300 | 167 | 166 | 221 | 181 | 157 |
| 270 | 156 | 156 | 203 | 164 | 135 |
| 240 | 151 | 151 | 190 | 155 | 133 |
| 210 | 142 | 144 | 178 | 149 | 130 |
| 183 | 135 | 139 | 168 | 143 | 127 |
| 150 | 130 | 134 | 158 | 137 | 121 |
| 130 | 128 | 130 | 154 | 133 | 118 |
| 120 | 128 | 130 | 149 | 132 | 118 |
| 110 | 127 | 129 | 146 | 130 | 117 |
| 100 | 127 | 127 | 143 | 129 | 116 |
| 90 | 126 | 126 | 141 | 128 | 114 |
| 80 | 123 | 123 | 140 | 126 | 113 |
| 70 | 122 | 122 | 136 | 125 | 111 |
| 60 | 120 | 120 | 132 | 123 | 110 |
| 50 | 118 | 118 | 130 | 121 | 109 |
| 40 | 117 | 117 | 127 | 119 | 108 |
| 30 | 116 | 116 | 124 | 117 | 107 |
| 25 | 115 | 115 | 124 | 116 | 106 |
| 20 | 114 | 114 | 123 | 115 | 105 |
| 15 | 113 | 113 | 122 | 113 | 105 |
| 10 | 112 | 112 | 121 | 111 | 104 |
| 9 | 112 | 112 | 121 | 111 | 104 |
| 8 | 111 | 111 | 121 | 110 | 104 |
| 7 | 111 | 111 | 120 | 109 | 104 |
| 6 | 111 | 111 | 120 | 109 | 104 |
| 5 | 111 | 111 | 119 | 108 | 103 |
| 4 | 111 | 111 | 119 | 107 | 103 |
| 3 | 111 | 111 | 119 | 107 | 103 |
| 2 | 111 | 111 | 118 | 105 | 102 |
| 1 | 110 | 110 | 118 | 104 | 101 |
| 0 | 109 | 109 | 117 | 100 | 100 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
*) durch Bruch der Edertalsperre
15 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 1014 $km^2$

PNP : NN + 27.18 m

Lage: 22.7 km oberhalb der Mündung links

W

cm

Pegel : Heide OP Nr. 4767109

Gewässer : Große Aue

Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 265 | 262 | 290 | 282 | 286 | 271 | 269 | 266 | 264 | 261 | 261 | 262 | 265 | 267 |
| 2. | 265 | 263 | 293 | 275 | 284 | 270 | 269 | 265 | 263 | 260 | 259 | 261 | 265 | 267 |
| 3. | 265 | 265 | 296 | 273 | 282 | 270 | 272 | 265 | 262 | 259 | 259 | 261 | 265 | 267 |
| 4. | 265 | 267 | 297 | 272 | 281 | 271 | 272 | 265 | 261 | 259 | 259 | 264 | 265 | 269 |
| 5. | 264 | 268 | 311 | 271 | 281 | 271 | 269 | 267 | 261 | 259 | 258 | 271 | 266 | 270 |
| 6. | 264 | 271 | 319 | 269 | 279 | 271 | 269 | 267 | 261 | 260 | 258 | 276 | 266 | 269 |
| 7. | 264 | 273 | 310 | 268 | 278 | 270 | 269 | 267 | 260 | 261 | 258 | 280 | 267 | 268 |
| 8. | 264 | 280 | 317 | 268 | 285 | 270 | 268 | 267 | 260 | 262 | 258 | 274 | 267 | 267 |
| 9. | 264 | 285 | 319 | 268 | 283 | 270 | 268 | 266 | 261 | 262 | 258 | 271 | 266 | 268 |
| 10. | 264 | 283 | 310 | 267 | 281 | 272 | 269 | 265 | 261 | 261 | 257 | 269 | 267 | 277 |
| 11. | 264 | 277 | 303 | 267 | 279 | 272 | 272 | 264 | 260 | 261 | 258 | 267 | 267 | 279 |
| 12. | 264 | 275 | 297 | 266 | 278 | 272 | 269 | 263 | 260 | 261 | 259 | 266 | 266 | 279 |
| 13. | 264 | 275 | 296 | 266 | 278 | 272 | 268 | 264 | 262 | 260 | 259 | 266 | 266 | 276 |
| 14. | 264 | 280 | 294 | 268 | 277 | 271 | 267 | 263 | 263 | 259 | 259 | 266 | 268 | 274 |
| 15. | 264 | 282 | 290 | 272 | 277 | 271 | 267 | 263 | 264 | 259 | 259 | 266 | 266 | 283 |
| 16. | 264 | 285 | 287 | 272 | 276 | 270 | 268 | 263 | 265 | 260 | 259 | 267 | 266 | 285 |
| 17. | 264 | 301 | 285 | 273 | 275 | 269 | 266 | 264 | 267 | 260 | 259 | 266 | 266 | 283 |
| 18. | 264 | 293 | 284 | 275 | 275 | 269 | 266 | 264 | 267 | 259 | 259 | 265 | 265 | 282 |
| 19. | 264 | 287 | 290 | 281 | 274 | 269 | 265 | 263 | 271 | 259 | 259 | 265 | 266 | 281 |
| 20. | 264 | 285 | 312 | 280 | 273 | 270 | 265 | 262 | 271 | 258 | 258 | 264 | 268 | 279 |
| 21. | 264 | 286 | 318 | 279 | 271 | 270 | 265 | 262 | 270 | 258 | 258 | 264 | 267 | 278 |
| 22. | 264 | 287 | 326 | 279 | 271 | 271 | 264 | 261 | 268 | 258 | 258 | 264 | 265 | 279 |
| 23. | 264 | 289 | 338 | 281 | 272 | 272 | 263 | 260 | 266 | 257 | 258 | 264 | 267 | 297 |
| 24. | 264 | 288 | 319 | 286 | 270 | 271 | 262 | 260 | 265 | 257 | 261 | 264 | 267 | 308 |
| 25. | 264 | 289 | 307 | 292 | 270 | 272 | 262 | 263 | 264 | 257 | 264 | 264 | 268 | 297 |
| 26. | 264 | 285 | 299 | 290 | 270 | 272 | 261 | 263 | 262 | 258 | 264 | 264 | 268 | 296 |
| 27. | 264 | 283 | 296 | 287 | 270 | 270 | 261 | 263 | 262 | 258 | 264 | 264 | 269 | 296 |
| 28. | 264 | 281 | 293 | 287 | 270 | 270 | 261 | 263 | 262 | 258 | 263 | 264 | 268 | 293 |
| 29. | 264 | 280 | 290 | 286 | 270 | 270 | 261 | 263 | 262 | 258 | 263 | 264 | 268 | 288 |
| 30. | 267 | 288 | 286 | | 271 | 270 | 260 | 264 | 261 | 257 | 263 | 264 | 267 | 287 |
| 31. | | 294 | 281 | | 271 | | 262 | | 260 | 257 | | 265 | | 285 |

## Hauptwerte

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 5.+ | 1. | 31. | 12.+ | 24.+ | 17.+ | 30. | 23.+ | 7.+ | 23.+ | 10. | 2.+ | 1.+ | 1.+ |
| NW | 264 | 262 | 281 | 266 | 270 | 269 | 260 | 260 | 260 | 257 | 257 | 261 | 265 | 267 |
| MW | 264 | 281 | 302 | 276 | 276 | 271 | 266 | 264 | 263 | 259 | 260 | 266 | 267 | 280 |
| HW | 271 | 303 | 343 | 293 | 287 | 273 | 276 | 267 | 274 | 262 | 264 | 281 | 274 | 313 |
| Tag | 30. | 17. | 23. | 25. | 8. | 10. | 3. | 1. | 19. | 8. | 24. | 6. | 14. | 23. |
| Jahr | 2003+ | 2011 | 2009 | 2012 | 2011 | 2009+ | 2012 | 2011 | 2010 | 2004 | 2003 | 2003 | 2003+ | 2011 |
| NW | 263 | 262 | 268 | 266 | 269 | 265 | 260 | 258 | 255 | 250 | 245 | 259 | 263 | 262 |
| MNW | 271 | 272 | 278 | 276 | 277 | 270 | 264 | 261 | 259 | 259 | 260 | 264 | 268 | 271 |
| MW | 281 | 284 | 295 | 290 | 287 | 275 | 270 | 266 | 263 | 264 | 265 | 269 | 277 | 282 |
| MHW | 305 | 315 | 342 | 319 | 308 | 286 | 284 | 275 | 272 | 277 | 276 | 281 | 294 | 308 |
| HW | 382 | 386 | 405 | 338 | 337 | 312 | 310 | 294 | 280 | 310 | 298 | 303 | 330 | 341 |
| Jahr | 2002 | 2002 | 2008 | 2008 | 2007 | 2006 | 2004 | 2006 | 2007 | 2010 | 2007 | 2007 | 2007 | 2007 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 257 | am 23.08.2012 | 262 | 257 | 257 | am 23.08.2012 |
| MW | cm | 271 | | 278 | 263 | 271 | |
| HW | cm | 343 | am 23.01.2012 | 343 | 281 | 343 | am 23.01.2012 |
| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NW | cm | 245 | am 23.09.2003 | 262 | 245 | 245 | am 23.09.2003 |
| MNW | cm | 256 | | 266 | 256 | 256 | |
| MW | cm | 276 | | 286 | 266 | 275 | |
| MHW | cm | 346 | | 346 | 292 | 348 | |
| HW | cm | 405 | am 22.01.2008 | 405 | 310 | 405 | am 22.01.2008 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 207 | 06.05.1989 | 444 | 13.03.1981 |
| 2 | 208 | 08.07.2002 | 443 | 29.10.1998 |
| 3 | 210 | 12.02.1989 | 436 | 05.03.1979 |
| 4 | 245 | 23.09.2003 | 427 | 16.01.1968 |
| 5 | 250 | 25.08.2004 | 419 | 28.01.1994 |
| 6 | 251 | 24.05.1990 | 412 | 19.03.1994 |
| 7 | 255 | 15.07.2010 | 409 | 31.12.1986 |
| 8 | 256 | 19.08.2009 | 405 | 22.01.2008 |
| 9 | 256 | 18.08.1973 | 405 | 31.12.1993 |
| 10 | 257 | 23.08.2012 | 400 | 04.01.2003 |

## Dauertabelle

Unterschrittene Wasserstände cm

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 338 | 338 | | | |
| 364 | 326 | 326 | 393 | 341 | 310 |
| 363 | 326 | 326 | 387 | 330 | 305 |
| 362 | 326 | 326 | 353 | 327 | 302 |
| 361 | 326 | 326 | 351 | 325 | 301 |
| 360 | 318 | 318 | 341 | 321 | 300 |
| 359 | 317 | 317 | 339 | 319 | 299 |
| 358 | 312 | 312 | 330 | 318 | 299 |
| 357 | 311 | 311 | 330 | 316 | 299 |
| 356 | 311 | 311 | 330 | 315 | 299 |
| 350 | 299 | 299 | 320 | 306 | 295 |
| 340 | 292 | 294 | 312 | 299 | 293 |
| 330 | 288 | 288 | 307 | 295 | 288 |
| 320 | 286 | 286 | 301 | 292 | 286 |
| 300 | 282 | 280 | 295 | 288 | 280 |
| 270 | 273 | 273 | 290 | 282 | 273 |
| 240 | 272 | 271 | 286 | 279 | 271 |
| 210 | 270 | 270 | 282 | 275 | 269 |
| 183 | 267 | 268 | 278 | 272 | 266 |
| 150 | 265 | 267 | 274 | 270 | 265 |
| 130 | 265 | 266 | 272 | 268 | 264 |
| 120 | 265 | 265 | 271 | 267 | 264 |
| 110 | 265 | 265 | 271 | 267 | 263 |
| 100 | 264 | 264 | 270 | 266 | 263 |
| 90 | 264 | 264 | 270 | 265 | 262 |
| 80 | 263 | 263 | 269 | 265 | 261 |
| 70 | 262 | 262 | 268 | 264 | 261 |
| 60 | 262 | 262 | 268 | 264 | 260 |
| 50 | 261 | 261 | 267 | 263 | 259 |
| 40 | 260 | 260 | 267 | 262 | 259 |
| 30 | 260 | 260 | 267 | 261 | 258 |
| 25 | 260 | 260 | 266 | 261 | 258 |
| 20 | 259 | 259 | 266 | 260 | 258 |
| 15 | 259 | 259 | 265 | 259 | 257 |
| 10 | 259 | 259 | 265 | 259 | 257 |
| 9 | 259 | 259 | 265 | 259 | 257 |
| 8 | 259 | 259 | 265 | 259 | 257 |
| 7 | 259 | 259 | 264 | 259 | 257 |
| 6 | 259 | 259 | 264 | 258 | 257 |
| 5 | 258 | 258 | 264 | 258 | 256 |
| 4 | 258 | 258 | 264 | 258 | 256 |
| 3 | 258 | 258 | 264 | 257 | 256 |
| 2 | 258 | 258 | 263 | 257 | 256 |
| 1 | 258 | 258 | 263 | 257 | 256 |
| 0 | 257 | 257 | 262 | 245 | 245 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Große Aue

NLWKN

$A_{Eo}$ : 1638 $km^2$

PNP : NN + 46.32 m

Lage: 154.9 km oberhalb der Mündung rechts

W

cm

Pegel : Brenneckenbrück Nr. 4819102

Gewässer : Aller

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 110 | 109 | 172 | 171 | 196 | 133 | 118 | 138 | 149 | 164 | 109 | 109 | 120 | 121 |
| 2. | 109 | 112 | 176 | 162 | 189 | 130 | 115 | 137 | 147 | 152 | 110 | 107 | 120 | 122 |
| 3. | 110 | 113 | 184 | 158 | 183 | 129 | 114 | 128 | 146 | 152 | 113 | 105 | 126 | 122 |
| 4. | 109 | 115 | 188 | 152 | 177 | 141 | 116 | 136 | 145 | 149 | 111 | 120 | 131 | 124 |
| 5. | 111 | 119 | 214 | 149 | 174 | 160 | 118 | 142 | 144 | 148 | 110 | 144 | 130 | 129 |
| 6. | 112 | 122 | 263 | 143 | 166 | 150 | 122 | 141 | 162 | 160 | 112 | 147 | 129 | 127 |
| 7. | 110 | 129 | 267 | 140 | 161 | 148 | 123 | 138 | 163 | 167 | 110 | 154 | 131 | 123 |
| 8. | 111 | 152 | 266 | 139 | 168 | 146 | 122 | 136 | 164 | 163 | 108 | 143 | 138 | 115 |
| 9. | 112 | 162 | 266 | 138 | 169 | 144 | 122 | 136 | 159 | 164 | 108 | 135 | 134 | 116 |
| 10. | 112 | 160 | 265 | 135 | 163 | 146 | 122 | 132 | 156 | 165 | 106 | 127 | 122 | 132 |
| 11. | 110 | 150 | 255 | 134 | 159 | 142 | 137 | 132 | 155 | 158 | 107 | 121 | 125 | 144 |
| 12. | 109 | 143 | 240 | 133 | 155 | 138 | 139 | 132 | 157 | 154 | 121 | 121 | 122 | 139 |
| 13. | 110 | 148 | 230 | 133 | 152 | 136 | 130 | 134 | 166 | 140 | 123 | 132 | 119 | 137 |
| 14. | 109 | 152 | 224 | 133 | 150 | 138 | 127 | 132 | 172 | 115 | 120 | 132 | 117 | 137 |
| 15. | 109 | 151 | 209 | 145 | 150 | 136 | 125 | 131 | 178 | 108 | 117 | 137 | 116 | 153 |
| 16. | 112 | 160 | 198 | 148 | 147 | 131 | 127 | 132 | 179 | 115 | 115 | 141 | 118 | 182 |
| 17. | 110 | 214 | 193 | 154 | 148 | 128 | 124 | 132 | 180 | 126 | 112 | 134 | 118 | 194 |
| 18. | 112 | 221 | 188 | 166 | 145 | 127 | 122 | 131 | 182 | 121 | 109 | 127 | 115 | 196 |
| 19. | 112 | 217 | 196 | 174 | 143 | 127 | 121 | 132 | 193 | 116 | 107 | 122 | 116 | 194 |
| 20. | 111 | 202 | 228 | 178 | 139 | 128 | 120 | 132 | 205 | 112 | 105 | 117 | 115 | 186 |
| 21. | 112 | 194 | 245 | 174 | 138 | 126 | 118 | 135 | 201 | 108 | 103 | 114 | 114 | 178 |
| 22. | 112 | 194 | 269 | 174 | 138 | 127 | 116 | 135 | 190 | 103 | 94 | 113 | 113 | 169 |
| 23. | 111 | 200 | 289 | 185 | 136 | 126 | 115 | 133 | 184 | 111 | 103 | 112 | 113 | 182 |
| 24. | 109 | 202 | 295 | 199 | 135 | 130 | 112 | 131 | 187 | 116 | 110 | 112 | 117 | 238 |
| 25. | 109 | 204 | 295 | 219 | 133 | 134 | 102 | 137 | 179 | 114 | 110 | 115 | 121 | 241 |
| 26. | 111 | 194 | 290 | 212 | 133 | 129 | 109 | 141 | 172 | 114 | 110 | 115 | 126 | 225 |
| 27. | 110 | 185 | 275 | 202 | 131 | 126 | 112 | 142 | 169 | 115 | 111 | 115 | 128 | 215 |
| 28. | 109 | 179 | 249 | 199 | 130 | 125 | 112 | 158 | 170 | 113 | 114 | 116 | 129 | 208 |
| 29. | 108 | 173 | 225 | 201 | 129 | 123 | 111 | 150 | 169 | 111 | 113 | 113 | 126 | 192 |
| 30. | 106 | 177 | 208 | | 131 | 120 | 110 | 148 | 165 | 110 | 112 | 116 | 123 | 184 |
| 31. | | 178 | 187 | | 133 | | 117 | | 165 | 110 | | 122 | | 179 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 1. | 12.+ | 29. | 30. | 25. | 3. | 5. | 22. | 22. | 3. | 22.+ | 8. |
| NW | 106 | 109 | 172 | 133 | 129 | 120 | 102 | 128 | 144 | 103 | 94 | 105 | 113 | 115 |
| MW | 110 | 166 | 234 | 164 | 152 | 134 | 119 | 136 | 169 | 131 | 110 | 124 | 122 | 165 |
| HW | 114 | 226 | 295 | 224 | 200 | 163 | 142 | 163 | 206 | 172 | 125 | 156 | 139 | 245 |
| Tag | 18. | 17. | 24. | 25. | 1. | 5. | 11. | 28. | 20. | 10. | 12. | 7. | 8. | 24. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2006 | 2003 | 2009 | 2006 | 2012 | 2007 | 2003 | 2003 | 2003 | 2003 | 2012 | 2006 | 2006 | 2003 |
| NW | 99 | 107 | 125 | 123 | 129 | 112 | 101 | 84 | 83 | 82 | 94 | 98 | 99 | 107 |
| MNW | 123 | 132 | 153 | 151 | 159 | 130 | 114 | 115 | 128 | 121 | 114 | 115 | 116 | 130 |
| MW | 154 | 165 | 205 | 189 | 188 | 153 | 136 | 130 | 147 | 147 | 134 | 130 | 144 | 163 |
| MHW | 195 | 225 | 280 | 260 | 248 | 198 | 173 | 156 | 175 | 191 | 175 | 176 | 181 | 219 |
| HW | 283 | 303 | 348 | 310 | 314 | 264 | 217 | 175 | 206 | 257 | 292 | 279 | 273 | 271 |
| Jahr | 2002 | 2002 | 2003 | 2008 | 2010 | 2008 | 2010 | 2010 | 2012 | 2010 | 2010 | 2010 | 2007 | 2010 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 94 | am 22.09.2012 | 106 | 94 | 94 | am 22.09.2012 |
| MW | cm | 146 | | 160 | 132 | 147 | |
| HW | cm | 295 | am 24.01.2012 | 295 | 206 | 295 | am 24.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 82 | am 15.08.2003 | 99 | 82 | 82 | am 15.08.2003 |
| MNW | cm | 102 | | 117 | 103 | 103 | |
| MW | cm | 156 | | 176 | 138 | 155 | |
| MHW | cm | 300 | | 300 | 216 | 304 | |
| HW | cm | 348 | am 05.01.2003 | 348 | 292 | 348 | am 05.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 0 | 09.08.1992 | 279 | 05.03.1956 |
| 2 | 0 | 22.07.1947 | 277 | 15.01.1948 |
| 3 | 0 | 14.07.1952 | 362 | 14.03.1981 |
| 4 | 0 | 21.08.2009 | 351 | 31.01.1994 |
| 5 | 0 | 06.08.1990 | 356 | 21.03.1970 |
| 6 | 0 | 10.07.1993 | 270 | 21.03.1947 |
| 7 | 0 | 07.09.1975 | 269 | 10.02.1946 |
| 8 | 0 | 16.09.1999 | 343 | 23.02.1966 |
| 9 | 0 | 27.07.1959 | 340 | 20.03.1994 |
| 10 | 0 | 17.08.2003 | 350 | 18.01.1968 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 296 | 296 | | | |
| 364 | 296 | 296 | 345 | 326 | 253 |
| 363 | 290 | 290 | 343 | 316 | 250 |
| 362 | 289 | 289 | 339 | 308 | 243 |
| 361 | 275 | 275 | 336 | 297 | 233 |
| 360 | 269 | 269 | 328 | 288 | 231 |
| 359 | 267 | 267 | 325 | 283 | 230 |
| 358 | 267 | 267 | 325 | 274 | 226 |
| 357 | 267 | 267 | 325 | 269 | 221 |
| 356 | 265 | 265 | 316 | 267 | 220 |
| 350 | 230 | 240 | 268 | 246 | 212 |
| 340 | 209 | 212 | 251 | 225 | 201 |
| 330 | 200 | 198 | 238 | 212 | 192 |
| 320 | 190 | 189 | 232 | 203 | 184 |
| 300 | 178 | 179 | 216 | 189 | 174 |
| 270 | 163 | 163 | 202 | 175 | 156 |
| 240 | 151 | 149 | 189 | 166 | 144 |
| 210 | 142 | 140 | 178 | 156 | 128 |
| 183 | 136 | 136 | 170 | 148 | 117 |
| 150 | 131 | 131 | 164 | 138 | 112 |
| 130 | 126 | 128 | 160 | 134 | 110 |
| 120 | 123 | 126 | 157 | 132 | 109 |
| 110 | 121 | 123 | 155 | 130 | 108 |
| 100 | 117 | 123 | 153 | 128 | 106 |
| 90 | 116 | 121 | 149 | 125 | 105 |
| 80 | 115 | 118 | 146 | 123 | 102 |
| 70 | 113 | 117 | 143 | 121 | 100 |
| 60 | 113 | 116 | 140 | 118 | 98 |
| 50 | 112 | 115 | 137 | 116 | 97 |
| 40 | 111 | 113 | 136 | 113 | 95 |
| 30 | 111 | 112 | 134 | 111 | 93 |
| 25 | 110 | 111 | 133 | 110 | 92 |
| 20 | 110 | 111 | 131 | 108 | 89 |
| 15 | 109 | 110 | 131 | 106 | 87 |
| 10 | 108 | 108 | 129 | 103 | 85 |
| 9 | 108 | 108 | 129 | 102 | 85 |
| 8 | 107 | 108 | 129 | 101 | 85 |
| 7 | 107 | 106 | 129 | 100 | 84 |
| 6 | 106 | 106 | 128 | 99 | 84 |
| 5 | 106 | 106 | 128 | 98 | 84 |
| 4 | 105 | 105 | 128 | 96 | 83 |
| 3 | 105 | 105 | 128 | 94 | 83 |
| 2 | 105 | 105 | 127 | 90 | 82 |
| 1 | 102 | 102 | 127 | 86 | 82 |
| 0 | 94 | 94 | 126 | 82 | 82 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Aller
Ableitung aus der Aller in den MLK bei Grafhorst
i.M. werden 620 l/s abgeleitet

NLWKN

$A_{Eo}$ : 4374 km²
PNP : NN + 31.80 m
Lage: 111.6 km oberhalb der Mündung, links

W
cm

Pegel : Celle*) Nr. 48300105
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 142 | 139 | 226 | 242 | 247 | 173 | 152 | 142 | 133 | 143 | 125 | 126 | 144 | 156 |
| 2. | 140 | 141 | 227 | 224 | 240 | 174 | 151 | 152 | 137 | 138 | 129 | 126 | 143 | 156 |
| 3. | 142 | 142 | 240 | 227 | 235 | 172 | 147 | 146 | 142 | 135 | 128 | 122 | 144 | 157 |
| 4. | 144 | 146 | 251 | 217 | 228 | 179 | 154 | 144 | 135 | 132 | 127 | 131 | 149 | 160 |
| 5. | 140 | 146 | 269 | 214 | 223 | 195 | 149 | 153 | 131 | 131 | 126 | 157 | 156 | 162 |
| 6. | 144 | 156 | 325 | 198 | 215 | 188 | 148 | 170 | 150 | 132 | 123 | 172 | 157 | 164 |
| 7. | 139 | 160 | 358 | 195 | 210 | 185 | 158 | 163 | 176 | 137 | 121 | 175 | 152 | 160 |
| 8. | 140 | 179 | 361 | 199 | 213 | 181 | 156 | 150 | 168 | 140 | 119 | 165 | 157 | 155 |
| 9. | 142 | 191 | 359 | 195 | 220 | 179 | 150 | 147 | 163 | 136 | 120 | 158 | 162 | 154 |
| 10. | 139 | 192 | 356 | 193 | 214 | 183 | 154 | 143 | 163 | 134 | 119 | 150 | 155 | 165 |
| 11. | 141 | 186 | 344 | 192 | 209 | 185 | 159 | 137 | 152 | 133 | 118 | 147 | 154 | 181 |
| 12. | 141 | 176 | 324 | 189 | 204 | 179 | 167 | 135 | 147 | 130 | 125 | 148 | 155 | 179 |
| 13. | 141 | 177 | 307 | 189 | 203 | 176 | 155 | 139 | 157 | 128 | 134 | 154 | 151 | 173 |
| 14. | 139 | 180 | 299 | 189 | 201 | 184 | 154 | 135 | 164 | 127 | 128 | 158 | 152 | 171 |
| 15. | 140 | 182 | 286 | 196 | 199 | 180 | 152 | 135 | 172 | 124 | 126 | 157 | 148 | 183 |
| 16. | 143 | 194 | 266 | 206 | 197 | 173 | 154 | 133 | 176 | 127 | 125 | 164 | 150 | 218 |
| 17. | 142 | 243 | 255 | 207 | 194 | 168 | 160 | 133 | 176 | 131 | 124 | 159 | 153 | 242 |
| 18. | 141 | 270 | 245 | 215 | 194 | 164 | 150 | 132 | 172 | 131 | 124 | 154 | 149 | 244 |
| 19. | 143 | 263 | 252 | 222 | 193 | 165 | 148 | 131 | 189 | 128 | 123 | 149 | 148 | 237 |
| 20. | 140 | 245 | 285 | 229 | 193 | 165 | 146 | 129 | 203 | 123 | 121 | 146 | 149 | 234 |
| 21. | 141 | 233 | 318 | 223 | 185 | 164 | 143 | 132 | 197 | 121 | 122 | 142 | 148 | 220 |
| 22. | 138 | 232 | 348 | 222 | 187 | 165 | 137 | 136 | 181 | 121 | 121 | 137 | 148 | 210 |
| 23. | 142 | 239 | 372 | 232 | 183 | 171 | 136 | 133 | 166 | 122 | 119 | 146 | 148 | 220 |
| 24. | 141 | 243 | 386 | 247 | 180 | 170 | 133 | 126 | 159 | 122 | 124 | 139 | 150 | 288 |
| 25. | 138 | 252 | 390 | 270 | 177 | 171 | 131 | 132 | 150 | 123 | 125 | 141 | 154 | 310 |
| 26. | 140 | 246 | 387 | 274 | 176 | 167 | 128 | 138 | 146 | 124 | 124 | 141 | 155 | 304 |
| 27. | 142 | 231 | 380 | 263 | 175 | 162 | 127 | 140 | 147 | 127 | 125 | 141 | 160 | 288 |
| 28. | 139 | 223 | 355 | 254 | 172 | 154 | 126 | 141 | 146 | 125 | 125 | 139 | 163 | 276 |
| 29. | 137 | 219 | 316 | 251 | 173 | 156 | 126 | 138 | 150 | 123 | 126 | 141 | 159 | 259 |
| 30. | 138 | 218 | 289 | | 171 | 155 | 125 | 136 | 148 | 122 | 127 | 143 | 160 | 246 |
| 31. | | 225 | 266 | | 176 | | 126 | | 146 | 123 | | 142 | | 236 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 1. | 12.+ | 30. | 28. | 30. | 24. | 5. | 21.+ | 11. | 3. | 2. | 9. |
| NW | 137 | 139 | 226 | 189 | 171 | 154 | 125 | 126 | 131 | 121 | 118 | 122 | 143 | 154 |
| MW | 141 | 202 | 311 | 220 | 200 | 173 | 145 | 140 | 159 | 129 | 124 | 147 | 152 | 210 |
| HW | 152 | 273 | 390 | 280 | 249 | 198 | 169 | 175 | 206 | 150 | 137 | 177 | 178 | 311 |
| Tag | 6. | 17.+ | 25.+ | 25. | 1. | 5. | 12. | 6. | 20. | 1. | 13. | 7. | 9. | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2006 | 2006 | 2009 | 2006 | 2012 | 2007 | 2012 | 2005 | 2006 | 2003 | 2003 + | 2006 | 2006 | 2006 |
| NW | 126 | 137 | 153 | 158 | 171 | 146 | 125 | 119 | 111 | 107 | 114 | 105 | 126 | 137 |
| MNW | 162 | 178 | 204 | 206 | 215 | 178 | 147 | 130 | 125 | 121 | 131 | 140 | 151 | 172 |
| MW | 203 | 218 | 271 | 257 | 254 | 210 | 177 | 149 | 140 | 139 | 149 | 165 | 186 | 211 |
| MHW | 253 | 287 | 365 | 343 | 324 | 270 | 231 | 190 | 169 | 183 | 197 | 221 | 232 | 276 |
| HW | 390 | 423 | 518 | 418 | 415 | 352 | 308 | 264 | 206 | 309 | 359 | 374 | 385 | 380 |
| Jahr | 2002 | 2002 | 2003 | 2008 | 2010 | 2008 | 2008 | 2007 | 2012 | 2007 | 2010 | 2007 | 2007 | 2010 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 118 | am 11.09.2012 | 137 | 118 | 118 | am 11.09.2012 |
| MW cm | 174 | | 208 | 141 | 176 | |
| HW cm | 390 | am 25.01.2012 | 390 | 206 | 390 | am 25.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 105 | am 04.10.2006 | 126 | 105 | 105 | am 04.10.2006 |
| MNW cm | 116 | | 153 | 117 | 117 | |
| MW cm | 194 | | 236 | 153 | 192 | |
| MHW cm | 398 | | 398 | 263 | 400 | |
| HW cm | 518 | am 06.01.2003 | 518 | 374 | 518 | am 06.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 50 | 09.09.1953 | 528 | 12.02.1946 |
| 2 | 53 | 07.09.1936 | 519 | 15.03.1981 |
| 3 | 55 | 19.07.1925 | 518 | 06.01.2003 |
| 4 | 68 | 23.06.1957 | 510 | 17.01.1948 |
| 5 | 74 | 22.06.1959 | 502 | 03.01.1987 |
| 6 | 76 | 02.07.1952 | 499 | 06.03.1956 |
| 7 | 80 | 16.09.1973 | 497 | 23.07.2002 |
| 8 | 80 | 10.12.1959 | 495 | 04.11.1926 |
| 9 | 80 | 21.08.1933 | 493 | 03.01.1926 |
| 10 | 82 | 08.09.1947 | 490 | 31.01.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 390 | 390 | | | |
| 364 | 387 | 387 | 516 | 441 | 329 |
| 363 | 386 | 386 | 509 | 433 | 327 |
| 362 | 380 | 380 | 507 | 421 | 320 |
| 361 | 372 | 372 | 491 | 404 | 307 |
| 360 | 361 | 361 | 489 | 386 | 304 |
| 359 | 359 | 359 | 465 | 377 | 299 |
| 358 | 358 | 358 | 462 | 371 | 297 |
| 357 | 356 | 356 | 448 | 367 | 291 |
| 356 | 355 | 355 | 445 | 363 | 285 |
| 350 | 316 | 316 | 422 | 342 | 267 |
| 340 | 269 | 276 | 354 | 316 | 242 |
| 330 | 251 | 252 | 332 | 295 | 233 |
| 320 | 239 | 242 | 320 | 275 | 218 |
| 300 | 218 | 218 | 299 | 250 | 210 |
| 270 | 193 | 192 | 269 | 223 | 192 |
| 240 | 177 | 176 | 248 | 205 | 172 |
| 210 | 165 | 165 | 229 | 187 | 158 |
| 183 | 155 | 157 | 215 | 173 | 148 |
| 150 | 147 | 151 | 206 | 159 | 141 |
| 130 | 143 | 149 | 199 | 152 | 137 |
| 120 | 142 | 147 | 198 | 149 | 134 |
| 110 | 141 | 144 | 193 | 146 | 131 |
| 100 | 140 | 141 | 190 | 144 | 129 |
| 90 | 138 | 138 | 187 | 142 | 127 |
| 80 | 136 | 136 | 184 | 140 | 124 |
| 70 | 133 | 133 | 168 | 137 | 122 |
| 60 | 132 | 132 | 167 | 134 | 121 |
| 50 | 128 | 128 | 163 | 132 | 120 |
| 40 | 127 | 127 | 161 | 128 | 118 |
| 30 | 126 | 126 | 156 | 125 | 116 |
| 25 | 125 | 125 | 154 | 123 | 115 |
| 20 | 124 | 124 | 152 | 122 | 114 |
| 15 | 123 | 123 | 148 | 120 | 113 |
| 10 | 122 | 122 | 146 | 118 | 111 |
| 9 | 122 | 122 | 144 | 118 | 111 |
| 8 | 122 | 122 | 144 | 117 | 110 |
| 7 | 122 | 122 | 142 | 117 | 110 |
| 6 | 122 | 122 | 142 | 116 | 110 |
| 5 | 121 | 121 | 141 | 116 | 110 |
| 4 | 120 | 120 | 140 | 115 | 110 |
| 3 | 120 | 120 | 139 | 115 | 109 |
| 2 | 120 | 120 | 138 | 113 | 108 |
| 1 | 119 | 119 | 137 | 111 | 108 |
| 0 | 118 | 118 | 135 | 105 | 105 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921, eisfrei
*)bei Niedrigwasser beeinflußt durch die 12 Km unterhalb des Pegels gelegene Staustufe Oldau
am 1.11.1988 wurde das PNP-Niveau von NN + 31,816 m auf NN + 31,80 m verschoben,
die Werte werden nicht auf den neuen Nullpunkt umgerechnet !
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 7209 km²
PNP : NN + 23.01 m
Lage: 75.9 km oberhalb der Mündung, rechts

W
cm

Pegel : Marklendorf Nr. 48700103
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 118 | 117 | 165 | 193 | 184 | 108 | 126 | 122 | 120 | 115 | 120 | 111 | 117 | 126 |
| 2. | 115 | 128 | 163 | 171 | 177 | 109 | 125 | 129 | 113 | 113 | 118 | 109 | 128 | 122 |
| 3. | 122 | 127 | 173 | 171 | 173 | 107 | 124 | 121 | 119 | 116 | 108 | 115 | 120 | 122 |
| 4. | 120 | 124 | 186 | 162 | 167 | 114 | 126 | 120 | 108 | 111 | 116 | 116 | 124 | 130 |
| 5. | 116 | 117 | 200 | 155 | 161 | 131 | 123 | 125 | 108 | 110 | 110 | 142 | 128 | 132 |
| 6. | 122 | 124 | 241 | 141 | 154 | 125 | 120 | 136 | 123 | 113 | 106 | 144 | 128 | 129 |
| 7. | 123 | 131 | 272 | 124 | 148 | 121 | 128 | 129 | 135 | 114 | 110 | 148 | 121 | 128 |
| 8. | 116 | 148 | 295 | 145 | 152 | 117 | 126 | 119 | 126 | 123 | 103 | 142 | 131 | 119 |
| 9. | 120 | 150 | 308 | 139 | 159 | 114 | 120 | 121 | 121 | 114 | 108 | 133 | 130 | 125 |
| 10. | 112 | 161 | 308 | 135 | 154 | 115 | 129 | 123 | 129 | 114 | 111 | 126 | 134 | 136 |
| 11. | 120 | 152 | 304 | 132 | 149 | 120 | 134 | 116 | 118 | 120 | 114 | 125 | 126 | 144 |
| 12. | 116 | 143 | 289 | 130 | 144 | 113 | 142 | 119 | 120 | 115 | 117 | 128 | 128 | 136 |
| 13. | 120 | 141 | 268 | 128 | 142 | 112 | 127 | 116 | 128 | 111 | 120 | 130 | 118 | 107 |
| 14. | 117 | 144 | 251 | 130 | 140 | 117 | 129 | 114 | 131 | 113 | 113 | 138 | 125 | 100 |
| 15. | 115 | 137 | 238 | 136 | 136 | 113 | 119 | 116 | 138 | 106 | 110 | 133 | 120 | 109 |
| 16. | 119 | 126 | 220 | 147 | 134 | 110 | 125 | 111 | 133 | 113 | 117 | 136 | 120 | 141 |
| 17. | 122 | 164 | 201 | 146 | 131 | 127 | 133 | 113 | 137 | 120 | 112 | 130 | 126 | 163 |
| 18. | 120 | 198 | 192 | 153 | 129 | 132 | 123 | 113 | 135 | 112 | 109 | 127 | 118 | 168 |
| 19. | 121 | 200 | 194 | 161 | 128 | 138 | 122 | 110 | 145 | 119 | 114 | 123 | 116 | 162 |
| 20. | 119 | 183 | 221 | 168 | 127 | 134 | 124 | 112 | 159 | 110 | 110 | 120 | 118 | 159 |
| 21. | 118 | 171 | 249 | 164 | 123 | 135 | 118 | 112 | 158 | 106 | 109 | 123 | 117 | 148 |
| 22. | 116 | 168 | 273 | 161 | 120 | 134 | 113 | 114 | 144 | 109 | 109 | 118 | 117 | 138 |
| 23. | 115 | 172 | 299 | 168 | 119 | 138 | 116 | 111 | 134 | 109 | 105 | 119 | 117 | 145 |
| 24. | 121 | 177 | 328 | 181 | 116 | 137 | 111 | 108 | 130 | 111 | 111 | 111 | 123 | 201 |
| 25. | 114 | 185 | 352 | 199 | 114 | 139 | 114 | 114 | 127 | 113 | 111 | 116 | 131 | 232 |
| 26. | 113 | 184 | 354 | 209 | 112 | 133 | 114 | 114 | 122 | 112 | 110 | 123 | 130 | 232 |
| 27. | 121 | 170 | 345 | 202 | 111 | 131 | 115 | 119 | 116 | 114 | 110 | 124 | 131 | 220 |
| 28. | 121 | 159 | 329 | 192 | 108 | 127 | 111 | 117 | 123 | 109 | 111 | 124 | 132 | 209 |
| 29. | 117 | 155 | 296 | 187 | 108 | 127 | 107 | 120 | 122 | 108 | 119 | 123 | 124 | 194 |
| 30. | 112 | 151 | 250 | | 108 | 127 | 109 | 116 | 123 | 108 | 110 | 122 | 129 | 180 |
| 31. | | 161 | 220 | | 111 | | 116 | | 118 | 108 | | 116 | | 169 |

## Hauptwerte

| Tag | 10.+ | 1.+ | 2. | 7. | 28.+ | 3. | 29. | 24. | 4.+ | 15.+ | 8. | 2. | 19. | 14. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NW | 112 | 117 | 163 | 124 | 108 | 107 | 107 | 108 | 108 | 106 | 103 | 109 | 116 | 100 |
| MW | 118 | 154 | 258 | 160 | 137 | 124 | 122 | 118 | 128 | 113 | 112 | 126 | 124 | 152 |
| HW | 138 | 207 | 356 | 210 | 189 | 145 | 154 | 139 | 164 | 128 | 131 | 158 | 142 | 237 |
| Tag | 19. | 19. | 26. | 26. | 1. | 25. | 12. | 2. | 20.+ | 11. | 29. | 7. | 10. | 26. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2006 | 2006 | 2009 | 2006 | 2012 | 2012 | 2012 | 2009 | 2006 | 2006 | 2009 | 2006 | 2006 | 2006 |
| NW | 108 | 75 | 92 | 103 | 108 | 107 | 107 | 106 | 86 | 96 | 99 | 98 | 108 | 75 |
| MNW | 134 | 135 | 149 | 152 | 168 | 145 | 125 | 112 | 106 | 106 | 112 | 118 | 124 | 127 |
| MW | 172 | 175 | 219 | 207 | 207 | 172 | 147 | 126 | 121 | 121 | 127 | 139 | 156 | 166 |
| MHW | 224 | 248 | 310 | 291 | 276 | 224 | 192 | 162 | 156 | 161 | 174 | 190 | 203 | 236 |
| HW | 351 | 362 | 429 | 383 | 370 | 304 | 260 | 210 | 189 | 232 | 285 | 303 | 343 | 327 |
| Jahr | 2002 | 2002 | 2003 | 2008 | 2010 | 2008 | 2004 | 2007 | 2004 | 2007 | 2010 | 2007 | 2007 | 2007 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 103 | am 08.09.2012 | 107 | 103 | 100 | am 14.12.2012 |
| MW | cm | 139 | | 159 | 120 | 139 | |
| HW | cm | 356 | am 26.01.2012 | 356 | 164 | 356 | am 26.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 75 | am 27.12.2006 | 75 | 86 | 75 | am 27.12.2006 |
| MNW | cm | 96 | | 118 | 101 | 96 | |
| MW | cm | 161 | | 192 | 130 | 159 | |
| MHW | cm | 345 | | 345 | 217 | 349 | |
| HW | cm | 429 | am 07.01.2003 | 429 | 303 | 429 | am 07.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 37 | 09.09.1959 | 434 | 09.01.1982 |
| 2 | 45 | 11.07.1973 | 432 | 13.02.1946 |
| 3 | 54 | 02.08.1943 | 429 | 07.01.2003 |
| 4 | 60 | 11.09.1953 | 424 | 04.01.1987 |
| 5 | 70 | 10.08.1992 | 424 | 15.03.1981 |
| 6 | 71 | 08.07.1954 | 424 | 13.02.1941 |
| 7 | 72 | 26.01.1996 | 423 | 07.03.1956 |
| 8 | 72 | 08.07.1952 | 419 | 17.01.1948 |
| 9 | 74 | 20.02.1954 | 417 | 23.03.1940 |
| 10 | 75 | 27.12.2006 | 414 | 22.03.1957 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 354 | 354 | | | |
| 364 | 352 | 352 | 426 | 391 | 277 |
| 363 | 345 | 345 | 425 | 387 | 273 |
| 362 | 329 | 329 | 425 | 379 | 262 |
| 361 | 328 | 328 | 418 | 365 | 253 |
| 360 | 328 | 328 | 413 | 348 | 247 |
| 359 | 308 | 308 | 409 | 338 | 246 |
| 358 | 304 | 304 | 401 | 331 | 244 |
| 357 | 299 | 299 | 396 | 327 | 242 |
| 356 | 296 | 296 | 396 | 320 | 239 |
| 350 | 251 | 251 | 376 | 297 | 214 |
| 340 | 201 | 220 | 333 | 263 | 197 |
| 330 | 186 | 193 | 300 | 242 | 186 |
| 320 | 172 | 173 | 269 | 224 | 173 |
| 300 | 161 | 158 | 243 | 198 | 158 |
| 270 | 141 | 139 | 208 | 176 | 139 |
| 240 | 132 | 132 | 188 | 162 | 132 |
| 210 | 128 | 129 | 177 | 149 | 129 |
| 183 | 124 | 125 | 170 | 140 | 123 |
| 150 | 121 | 121 | 159 | 131 | 119 |
| 130 | 119 | 120 | 155 | 127 | 116 |
| 120 | 118 | 119 | 151 | 126 | 114 |
| 110 | 117 | 117 | 150 | 124 | 114 |
| 100 | 116 | 117 | 147 | 122 | 112 |
| 90 | 115 | 115 | 144 | 121 | 111 |
| 80 | 115 | 115 | 140 | 119 | 110 |
| 70 | 114 | 114 | 139 | 117 | 109 |
| 60 | 113 | 113 | 137 | 116 | 108 |
| 50 | 112 | 112 | 135 | 114 | 107 |
| 40 | 112 | 111 | 132 | 113 | 105 |
| 30 | 111 | 110 | 130 | 111 | 103 |
| 25 | 110 | 110 | 128 | 110 | 101 |
| 20 | 110 | 109 | 125 | 109 | 99 |
| 15 | 109 | 109 | 123 | 107 | 90 |
| 10 | 109 | 109 | 122 | 105 | 86 |
| 9 | 109 | 108 | 122 | 104 | 85 |
| 8 | 109 | 108 | 122 | 104 | 85 |
| 7 | 108 | 108 | 121 | 104 | 83 |
| 6 | 108 | 107 | 119 | 103 | 83 |
| 5 | 107 | 107 | 111 | 101 | 82 |
| 4 | 107 | 107 | 111 | 100 | 82 |
| 3 | 107 | 106 | 110 | 98 | 80 |
| 2 | 106 | 105 | 109 | 94 | 79 |
| 1 | 105 | 103 | 107 | 86 | 79 |
| 0 | 103 | 100 | 105 | 75 | 75 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1941
die Wasserstände sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
eisfrei
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 14730 km²
PNP : NN + 14.31 m
Lage: 34.2 km oberhalb der Mündung, links

W
cm

Pegel : Rethem Nr. 48900204
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 83 | 73 | 251 | 308 | 248 | 153 | 115 | 85 | 98 | 94 | 62 | 58 | 73 | 87 |
| 2. | 83 | 73 | 249 | 276 | 246 | 151 | 113 | 107 | 89 | 87 | 81 | 55 | 72 | 87 |
| 3. | 82 | 78 | 256 | 257 | 244 | 150 | 110 | 109 | 94 | 82 | 74 | 53 | 77 | 86 |
| 4. | 85 | 84 | 276 | 244 | 240 | 150 | 114 | 99 | 89 | 80 | 64 | 60 | 78 | 86 |
| 5. | 83 | 90 | 296 | 230 | 233 | 163 | 130 | 105 | 79 | 78 | 62 | 91 | 83 | 91 |
| 6. | 79 | 94 | 335 | 221 | 226 | 165 | 121 | 120 | 77 | 78 | 58 | 127 | 88 | 94 |
| 7. | 80 | 102 | 370 | 207 | 217 | 158 | 120 | 137 | 98 | 79 | 55 | 136 | 89 | 94 |
| 8. | 81 | 122 | 385 | 201 | 215 | 154 | 127 | 118 | 108 | 84 | 54 | 133 | 89 | 89 |
| 9. | 79 | 152 | 390 | 200 | 223 | 150 | 120 | 106 | 106 | 86 | 51 | 113 | 96 | 84 |
| 10. | 80 | 155 | 393 | 196 | 223 | 149 | 114 | 99 | 98 | 77 | 50 | 99 | 100 | 93 |
| 11. | 78 | 152 | 392 | 190 | 214 | 151 | 123 | 94 | 96 | 74 | 50 | 89 | 95 | 115 |
| 12. | 78 | 142 | 388 | 186 | 207 | 151 | 142 | 87 | 89 | 72 | 54 | 86 | 94 | 124 |
| 13. | 76 | 132 | 383 | 183 | 203 | 148 | 130 | 86 | 93 | 69 | 71 | 89 | 94 | 124 |
| 14. | 77 | 135 | 376 | 181 | 200 | 152 | 117 | 90 | 105 | 64 | 74 | 95 | 87 | 111 |
| 15. | 77 | 143 | 366 | 186 | 197 | 155 | 115 | 84 | 110 | 63 | 64 | 95 | 86 | 113 |
| 16. | 77 | 158 | 347 | 195 | 194 | 144 | 113 | 84 | 126 | 61 | 59 | 95 | 82 | 142 |
| 17. | 77 | 186 | 322 | 198 | 191 | 132 | 118 | 82 | 133 | 68 | 58 | 101 | 81 | 182 |
| 18. | 77 | 246 | 299 | 200 | 186 | 133 | 117 | 82 | 132 | 75 | 56 | 95 | 83 | 201 |
| 19. | 77 | 258 | 287 | 209 | 184 | 130 | 109 | 80 | 156 | 66 | 53 | 88 | 81 | 201 |
| 20. | 77 | 238 | 305 | 218 | 182 | 132 | 104 | 76 | 181 | 61 | 53 | 84 | 81 | 198 |
| 21. | 76 | 218 | 341 | 217 | 179 | 130 | 103 | 76 | 179 | 59 | 52 | 79 | 80 | 192 |
| 22. | 76 | 211 | 369 | 211 | 173 | 129 | 99 | 85 | 160 | 55 | 51 | 79 | 79 | 179 |
| 23. | 75 | 218 | 387 | 210 | 171 | 132 | 93 | 92 | 139 | 55 | 49 | 74 | 78 | 179 |
| 24. | 75 | 230 | 398 | 220 | 168 | 136 | 90 | 80 | 125 | 55 | 52 | 76 | 77 | 236 |
| 25. | 76 | 244 | 404 | 238 | 165 | 136 | 86 | 77 | 117 | 55 | 60 | 72 | 80 | 303 |
| 26. | 75 | 254 | 406 | 258 | 162 | 134 | 82 | 91 | 107 | 58 | 61 | 72 | 86 | 321 |
| 27. | 74 | 253 | 402 | 267 | 159 | 128 | 79 | 94 | 101 | 66 | 63 | 72 | 88 | 319 |
| 28. | 75 | 235 | 398 | 260 | 156 | 124 | 78 | 91 | 99 | 69 | 61 | 71 | 92 | 313 |
| 29. | 75 | 225 | 390 | 252 | 152 | 120 | 76 | 87 | 102 | 64 | 59 | 69 | 92 | 305 |
| 30. | 74 | 225 | 375 | | 151 | 119 | 73 | 90 | 104 | 60 | 62 | 70 | 88 | 291 |
| 31. | | 237 | 346 | | 152 | | 73 | | 97 | 58 | | 76 | | 280 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27.+ | 1.+ | 2. | 14. | 30. | 30. | 30.+ | 20.+ | 6. | 22.+ | 23. | 3. | 2. | 9. |
| NW | 74 | 73 | 249 | 181 | 151 | 119 | 73 | 76 | 77 | 55 | 49 | 53 | 72 | 84 |
| MW | 78 | 173 | 351 | 221 | 196 | 142 | 107 | 93 | 112 | 69 | 59 | 86 | 85 | 172 |
| HW | 86 | 262 | 407 | 327 | 250 | 168 | 146 | 140 | 184 | 96 | 85 | 140 | 101 | 323 |
| Tag | 4. | 18.+ | 26. | 1. | 1. | 5.+ | 12. | 7. | 20.+ | 1. | 2. | 7.+ | 10. | 26. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2006 | 2011 | 2009 | 2006 | 2012 | 2012 | 2012 | 2011 | 2006 | 2009 | 2009 | 2009 | 2006 | 2011 |
| NW | 71 | 73 | 114 | 134 | 151 | 119 | 73 | 73 | 60 | 46 | 45 | 50 | 71 | 73 |
| MNW | 123 | 153 | 198 | 210 | 224 | 168 | 123 | 97 | 83 | 74 | 80 | 91 | 102 | 139 |
| MW | 185 | 214 | 278 | 281 | 280 | 216 | 164 | 124 | 107 | 100 | 105 | 126 | 157 | 201 |
| MHW | 247 | 297 | 368 | 374 | 346 | 290 | 234 | 176 | 153 | 159 | 166 | 194 | 217 | 289 |
| HW | 413 | 406 | 452 | 432 | 415 | 391 | 369 | 325 | 221 | 332 | 335 | 409 | 413 | 406 |
| Jahr | 2007 | 2007 | 2003 | 2008 | 2010 | 2008 | 2004 | 2007 | 2004 | 2007 | 2010 | 2007 | 2007 | 2007 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 49 | am 23.09.2012 | 73 | 49 | 49 | am 23.09.2012 |
| MW | cm | 141 | | 194 | 88 | 141 | |
| HW | cm | 407 | am 26.01.2012 | 407 | 184 | 407 | am 26.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 45 | am 01.09.2009 | 71 | 45 | 45 | am 01.09.2009 |
| MNW | cm | 62 | | 113 | 67 | 67 | |
| MW | cm | 181 | | 242 | 121 | 178 | |
| MHW | cm | 407 | | 406 | 260 | 408 | |
| HW | cm | 452 | am 09.01.2003 | 452 | 409 | 452 | am 09.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 45 | 01.09.2009 | 452 | 09.01.2003 |
| 2 | 47 | 07.08.1996 | 445 | 09.01.1987 |
| 3 | 47 | 06.09.1991 | 439 | 06.11.1998 |
| 4 | 49 | 23.09.2012 | 437*) | 12.02.1946 |
| 5 | 49 | 15.08.2003 | 436 | 31.01.1994 |
| 6 | 49 | 09.08.1990 | 434 | 29.01.2008 |
| 7 | 53 | 13.08.1992 | 434 | 26.03.1994 |
| 8 | 54 | 22.08.1989 | 434 | 15.03.1981 |
| 9 | 55 | 15.09.1959 | 434 | 10.02.1966 |
| 10 | 57 | 03.09.2001 | 431 | 29.03.1988 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 Obere Hüllwerte | 10 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 406 | 406 | | | |
| 364 | 404 | 404 | 451 | 433 | 366 |
| 363 | 402 | 402 | 449 | 428 | 364 |
| 362 | 402 | 402 | 448 | 424 | 361 |
| 361 | 398 | 398 | 446 | 418 | 361 |
| 360 | 393 | 393 | 445 | 414 | 360 |
| 359 | 392 | 392 | 444 | 410 | 360 |
| 358 | 392 | 392 | 444 | 407 | 359 |
| 357 | 390 | 390 | 441 | 405 | 353 |
| 356 | 388 | 388 | 437 | 401 | 351 |
| 350 | 370 | 370 | 424 | 388 | 312 |
| 340 | 299 | 313 | 401 | 366 | 281 |
| 330 | 256 | 280 | 388 | 342 | 256 |
| 320 | 246 | 248 | 376 | 318 | 240 |
| 300 | 218 | 210 | 345 | 273 | 210 |
| 270 | 181 | 181 | 305 | 228 | 181 |
| 240 | 151 | 144 | 267 | 199 | 144 |
| 210 | 127 | 121 | 248 | 173 | 121 |
| 183 | 109 | 107 | 228 | 153 | 107 |
| 150 | 94 | 95 | 205 | 131 | 95 |
| 130 | 87 | 90 | 198 | 120 | 90 |
| 120 | 85 | 88 | 193 | 114 | 88 |
| 110 | 82 | 87 | 189 | 109 | 87 |
| 100 | 80 | 83 | 185 | 104 | 83 |
| 90 | 78 | 81 | 178 | 100 | 81 |
| 80 | 77 | 79 | 171 | 95 | 77 |
| 70 | 76 | 77 | 168 | 91 | 70 |
| 60 | 74 | 74 | 163 | 87 | 67 |
| 50 | 71 | 71 | 159 | 83 | 62 |
| 40 | 66 | 66 | 151 | 79 | 58 |
| 30 | 61 | 61 | 145 | 74 | 52 |
| 25 | 60 | 60 | 145 | 72 | 50 |
| 20 | 59 | 59 | 140 | 68 | 50 |
| 15 | 56 | 56 | 139 | 64 | 49 |
| 10 | 54 | 54 | 134 | 60 | 47 |
| 9 | 54 | 54 | 132 | 60 | 47 |
| 8 | 54 | 54 | 129 | 59 | 47 |
| 7 | 53 | 53 | 127 | 58 | 47 |
| 6 | 53 | 53 | 125 | 56 | 47 |
| 5 | 52 | 52 | 125 | 54 | 47 |
| 4 | 52 | 52 | 123 | 52 | 46 |
| 3 | 51 | 51 | 122 | 51 | 46 |
| 2 | 51 | 51 | 120 | 50 | 46 |
| 1 | 50 | 50 | 118 | 47 | 46 |
| 0 | 49 | 49 | 115 | 45 | 45 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1941
Wasserstände bis 1953 für Aller-Km 34,82
*) Wert auf Km 34,2 errechnet
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 1734 $km^2$

PNP : NN + 55.99 m

Lage: 29.5 km oberhalb der Mündung rechts

W

cm

Pegel : Gr.Schwülper Nr. 4829102

Gewässer : Oker

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 212 | 209 | 255 | 271 | 265 | 231 | 220 | 233 | 223 | 225 | 225 | 210 | 213 | 216 |
| 2. | 216 | 209 | 257 | 269 | 266 | 231 | 217 | 232 | 246 | 223 | 227 | 204 | 209 | 216 |
| 3. | 216 | 211 | 282 | 262 | 262 | 228 | 223 | 221 | 236 | 219 | 219 | 206 | 212 | 219 |
| 4. | 213 | 214 | 284 | 260 | 256 | 233 | 227 | 226 | 221 | 219 | 228 | 215 | 221 | 221 |
| 5. | 214 | 224 | 292 | 258 | 253 | 235 | 209 | 255 | 224 | 222 | 214 | 242 | 239 | 220 |
| 6. | 212 | 225 | 361 | 260 | 249 | 232 | 230 | 270 | 287 | 221 | 214 | 242 | 219 | 227 |
| 7. | 212 | 232 | 387 | 252 | 245 | 227 | 234 | 232 | 289 | 233 | 204 | 231 | 213 | 218 |
| 8. | 217 | 239 | 381 | 241 | 248 | 227 | 218 | 229 | 270 | 230 | 214 | 223 | 219 | 215 |
| 9. | 210 | 242 | 368 | 244 | 252 | 227 | 222 | 227 | 279 | 221 | 212 | 217 | 212 | 215 |
| 10. | 213 | 241 | 357 | 246 | 247 | 235 | 217 | 222 | 264 | 221 | 212 | 213 | 205 | 223 |
| 11. | 214 | 231 | 340 | 244 | 241 | 230 | 227 | 217 | 247 | 218 | 213 | 216 | 222 | 236 |
| 12. | 215 | 223 | 316 | 242 | 241 | 227 | 220 | 220 | 255 | 216 | 240 | 213 | 212 | 223 |
| 13. | 211 | 226 | 308 | 239 | 242 | 240 | 218 | 219 | 263 | 216 | 227 | 227 | 212 | 219 |
| 14. | 214 | 226 | 305 | 240 | 243 | 241 | 218 | 219 | 266 | 211 | 213 | 221 | 209 | 219 |
| 15. | 218 | 243 | 294 | 243 | 241 | 234 | 216 | 217 | 275 | 217 | 215 | 227 | 209 | 241 |
| 16. | 216 | 247 | 278 | 252 | 238 | 230 | 229 | 217 | 278 | 220 | 214 | 225 | 214 | 282 |
| 17. | 214 | 279 | 267 | 248 | 233 | 221 | 221 | 216 | 264 | 223 | 214 | 221 | 213 | 290 |
| 18. | 214 | 297 | 266 | 257 | 237 | 222 | 217 | 218 | 264 | 222 | 214 | 216 | 207 | 279 |
| 19. | 214 | 267 | 269 | 256 | 244 | 225 | 217 | 220 | 280 | 214 | 209 | 213 | 210 | 285 |
| 20. | 212 | 252 | 303 | 257 | 237 | 224 | 215 | 216 | 280 | 209 | 212 | 212 | 213 | 274 |
| 21. | 208 | 246 | 339 | 251 | 233 | 224 | 211 | 231 | 269 | 213 | 210 | 213 | 213 | 254 |
| 22. | 210 | 251 | 352 | 247 | 231 | 227 | 212 | 234 | 248 | 218 | 210 | 220 | 211 | 250 |
| 23. | 214 | 250 | 389 | 251 | 231 | 239 | 209 | 215 | 240 | 213 | 212 | 212 | 212 | 275 |
| 24. | 210 | 261 | 423 | 266 | 231 | 229 | 211 | 218 | 229 | 213 | 213 | 210 | 213 | 341 |
| 25. | 210 | 272 | 447 | 284 | 230 | 225 | 211 | 224 | 227 | 215 | 210 | 211 | 215 | 363 |
| 26. | 212 | 262 | 432 | 296 | 230 | 227 | 210 | 234 | 229 | 220 | 214 | 208 | 216 | 334 |
| 27. | 210 | 248 | 379 | 280 | 228 | 215 | 206 | 224 | 222 | 219 | 210 | 208 | 220 | 304 |
| 28. | 210 | 247 | 333 | 272 | 229 | 213 | 209 | 220 | 232 | 216 | 215 | 207 | 214 | 293 |
| 29. | 209 | 245 | 311 | 268 | 226 | 219 | 207 | 220 | 234 | 214 | 217 | 211 | 218 | 284 |
| 30. | 209 | 243 | 293 | | 229 | 219 | 207 | 219 | 234 | 215 | 213 | 211 | 216 | 269 |
| 31. | | 260 | 282 | | 228 | | 208 | | 233 | 216 | | 215 | | 265 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 21. | 1.+ | 1. | 13. | 29. | 28. | 27. | 23. | 4. | 20. | 7. | 2. | 10. | 8.+ |
| NW | 208 | 209 | 255 | 239 | 226 | 213 | 206 | 215 | 221 | 209 | 204 | 204 | 205 | 215 |
| MW | 213 | 243 | 327 | 257 | 241 | 228 | 217 | 226 | 252 | 218 | 215 | 217 | 214 | 257 |
| HW | 220 | 307 | 449 | 301 | 266 | 257 | 240 | 282 | 307 | 241 | 254 | 249 | 250 | 368 |
| Tag | 8. | 18. | 25. | 26. | 1. | 23. | 6. | 6. | 6. | 7. | 12. | 5. | 5. | 25. |
| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
| Jahr | 2011 | 2006+ | 2006+ | 2006 | 2012 | 2012 | 2012 | 2011 | 2011 | 2003 | 2003+ | 2012 | 2012 | 2006+ |
| NW | 208 | 209 | 218 | 219 | 226 | 213 | 206 | 208 | 194 | 202 | 203 | 204 | 205 | 209 |
| MNW | 228 | 241 | 256 | 252 | 258 | 239 | 223 | 218 | 213 | 212 | 217 | 218 | 220 | 236 |
| MW | 271 | 277 | 316 | 298 | 296 | 265 | 244 | 233 | 228 | 230 | 236 | 243 | 255 | 269 |
| MHW | 327 | 355 | 424 | 391 | 376 | 325 | 305 | 277 | 268 | 287 | 309 | 310 | 307 | 344 |
| HW | 496 | 489 | 544 | 465 | 477 | 458 | 412 | 368 | 307 | 462 | 488 | 518 | 496 | 489 |
| Jahr | 2010 | 2010 | 2003 | 2008 | 2010 | 2008 | 2004 | 2007 | 2012 | 2007 | 2010 | 2007 | 2010 | 2010 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 204 | am 07.09.2012 | 208 | 204 | 204 | am 07.09.2012 |
| MW | cm | 238 | | 252 | 224 | 239 | |
| HW | cm | 449 | am 25.01.2012 | 449 | 307 | 449 | am 25.01.2012 |
| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NW | cm | 194 | am 29.07.2011 | 208 | 194 | 194 | am 29.07.2011 |
| MNW | cm | 206 | | 221 | 207 | 207 | |
| MW | cm | 261 | | 287 | 236 | 259 | |
| MHW | cm | 461 | | 454 | 355 | 466 | |
| HW | cm | 544 | am 04.01.2003 | 544 | 518 | 544 | am 04.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 10 | 09.09.1977 | 557 | 20.07.2002 |
| 2 | 14 | 31.08.1947 | 544 | 04.01.2003 |
| 3 | 18 | 21.09.1942 | 534 | 15.04.1994 |
| 4 | 18 | 02.09.1933 | 520 | 14.03.1981 |
| 5 | 19 | 07.11.1949 | 520 | 17.07.1956 |
| 6 | 19 | 20.02.1949 | 519 | 06.01.1932 |
| 7 | 20 | 17.09.1944 | 518 | 02.10.2007 |
| 8 | 21 | 20.09.1935 | 516 | 02.01.1987 |
| 9 | 21 | 28.08.1934 | 512 | 06.06.1981 |
| 10 | 22 | 06.08.1943 | 510 | 30.06.1958 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 447 | 447 | | | |
| 364 | 432 | 432 | 539 | 498 | 376 |
| 363 | 423 | 423 | 536 | 488 | 367 |
| 362 | 389 | 389 | 520 | 481 | 347 |
| 361 | 387 | 387 | 511 | 475 | 345 |
| 360 | 381 | 381 | 499 | 468 | 343 |
| 359 | 379 | 379 | 496 | 461 | 343 |
| 358 | 368 | 368 | 496 | 455 | 343 |
| 357 | 361 | 363 | 489 | 448 | 329 |
| 356 | 357 | 361 | 486 | 441 | 325 |
| 350 | 311 | 334 | 471 | 408 | 309 |
| 340 | 287 | 294 | 434 | 369 | 282 |
| 330 | 279 | 284 | 403 | 345 | 264 |
| 320 | 270 | 278 | 387 | 326 | 259 |
| 300 | 258 | 265 | 354 | 298 | 251 |
| 270 | 247 | 248 | 326 | 271 | 243 |
| 240 | 238 | 237 | 305 | 257 | 236 |
| 210 | 231 | 231 | 282 | 247 | 230 |
| 183 | 228 | 228 | 271 | 239 | 225 |
| 150 | 222 | 222 | 263 | 231 | 220 |
| 130 | 220 | 220 | 260 | 227 | 218 |
| 120 | 219 | 219 | 258 | 225 | 216 |
| 110 | 218 | 218 | 255 | 223 | 215 |
| 100 | 217 | 217 | 254 | 222 | 214 |
| 90 | 216 | 217 | 252 | 221 | 213 |
| 80 | 215 | 216 | 251 | 220 | 212 |
| 70 | 215 | 215 | 248 | 218 | 211 |
| 60 | 214 | 214 | 245 | 217 | 211 |
| 50 | 213 | 214 | 242 | 216 | 210 |
| 40 | 212 | 213 | 240 | 215 | 208 |
| 30 | 211 | 212 | 234 | 213 | 205 |
| 25 | 211 | 211 | 232 | 213 | 204 |
| 20 | 211 | 211 | 230 | 212 | 204 |
| 15 | 210 | 210 | 229 | 211 | 204 |
| 10 | 209 | 209 | 227 | 210 | 203 |
| 9 | 209 | 209 | 225 | 209 | 203 |
| 8 | 209 | 208 | 225 | 209 | 203 |
| 7 | 209 | 208 | 225 | 209 | 203 |
| 6 | 208 | 208 | 224 | 208 | 203 |
| 5 | 208 | 208 | 224 | 207 | 203 |
| 4 | 208 | 207 | 224 | 206 | 203 |
| 3 | 207 | 207 | 224 | 205 | 203 |
| 2 | 207 | 205 | 223 | 205 | 202 |
| 1 | 206 | 205 | 223 | 204 | 202 |
| 0 | 204 | 204 | 222 | 194 | 194 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Oker

Eckertalsperre seit 1942 Okertalsperre seit 1956

NLWKN

$A_{Eo}$ : 2916 $km^2$

PNP : NN + 94.98 m

Lage: 177.0 km oberhalb der Mündung links

W

cm

Pegel : Greene Nr. 4885118

Gewässer : Leine

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 157 | 153 | 293 | 267 | 280 | 194 | 173 | 204 | 190 | 170 | 171 | 152 | 156 | 163 |
| 2. | 157 | 155 | 333 | 247 | 286 | 191 | 173 | 174 | 173 | 168 | 162 | 153 | 158 | 163 |
| 3. | 157 | 158 | 381 | 236 | 276 | 190 | 236 | 172 | 168 | 167 | 159 | 151 | 159 | 165 |
| 4. | 157 | 169 | 358 | 232 | 266 | 194 | 200 | 186 | 164 | 165 | 159 | 164 | 166 | 166 |
| 5. | 156 | 169 | 389 | 226 | 258 | 192 | 192 | 245 | 162 | 163 | 159 | 184 | 166 | 173 |
| 6. | 156 | 171 | 429 | 218 | 248 | 190 | 212 | 196 | 182 | 178 | 157 | 179 | 162 | 168 |
| 7. | 156 | 176 | 429 | 215 | 240 | 190 | 194 | 183 | 171 | 173 | 156 | 178 | 174 | 166 |
| 8. | 156 | 193 | 431 | 215 | 244 | 189 | 187 | 178 | 174 | 164 | 155 | 163 | 199 | 162 |
| 9. | 156 | 199 | 433 | 213 | 240 | 187 | 182 | 172 | 170 | 163 | 154 | 160 | 178 | 161 |
| 10. | 155 | 202 | 440 | 209 | 231 | 191 | 183 | 169 | 165 | 161 | 154 | 158 | 174 | 176 |
| 11. | 155 | 185 | 434 | 205 | 230 | 190 | 180 | 168 | 168 | 161 | 157 | 157 | 183 | 178 |
| 12. | 154 | 180 | 419 | 203 | 231 | 186 | 183 | 170 | 172 | 160 | 186 | 157 | 173 | 167 |
| 13. | 154 | 191 | 409 | 204 | 231 | 206 | 177 | 169 | 176 | 159 | 161 | 165 | 170 | 166 |
| 14. | 155 | 210 | 390 | 204 | 228 | 191 | 175 | 166 | 223 | 158 | 158 | 161 | 167 | 165 |
| 15. | 154 | 209 | 365 | 217 | 224 | 186 | 176 | 165 | 245 | 157 | 156 | 174 | 166 | 216 |
| 16. | 154 | 232 | 339 | 214 | 220 | 183 | 183 | 167 | 217 | 166 | 155 | 170 | 165 | 260 |
| 17. | 155 | 309 | 312 | 218 | 221 | 182 | 178 | 168 | 267 | 166 | 154 | 163 | 164 | 267 |
| 18. | 155 | 261 | 293 | 225 | 220 | 181 | 174 | 163 | 291 | 160 | 156 | 161 | 163 | 273 |
| 19. | 154 | 238 | 301 | 223 | 223 | 181 | 173 | 161 | 264 | 159 | 155 | 158 | 163 | 277 |
| 20. | 154 | 228 | 353 | 219 | 212 | 180 | 172 | 179 | 252 | 157 | 154 | 157 | 162 | 256 |
| 21. | 154 | 240 | 337 | 208 | 209 | 180 | 170 | 210 | 225 | 157 | 152 | 156 | 161 | 242 |
| 22. | 154 | 250 | 397 | 205 | 207 | 187 | 168 | 178 | 212 | 163 | 153 | 155 | 160 | 238 |
| 23. | 153 | 282 | 428 | 209 | 206 | 193 | 166 | 168 | 202 | 160 | 152 | 155 | 159 | 327 |
| 24. | 153 | 315 | 423 | 228 | 204 | 185 | 165 | 165 | 193 | 157 | 153 | 155 | 167 | 430 |
| 25. | 153 | 345 | 425 | 292 | 201 | 183 | 163 | 171 | 186 | 183 | 162 | 155 | 164 | 434 |
| 26. | 153 | 317 | 420 | 288 | 198 | 180 | 163 | 170 | 181 | 174 | 155 | 154 | 162 | 437 |
| 27. | 153 | 312 | 390 | 270 | 193 | 178 | 162 | 165 | 177 | 175 | 155 | 156 | 167 | 436 |
| 28. | 153 | 299 | 359 | 259 | 192 | 176 | 162 | 167 | 204 | 165 | 157 | 154 | 164 | 432 |
| 29. | 153 | 277 | 336 | 265 | 191 | 176 | 162 | 167 | 181 | 161 | 154 | 154 | 164 | 428 |
| 30. | 153 | 316 | 311 | | 194 | 175 | 163 | 171 | 180 | 161 | 152 | 156 | 168 | 401 |
| 31. | | 323 | 288 | | 199 | | 165 | | 173 | 173 | | 158 | | 350 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23.+ | 1. | 31. | 12. | 29. | 30. | 27.+ | 19. | 5. | 15.+ | 21.+ | 3. | 1. | 9. |
| NW | 153 | 153 | 288 | 203 | 191 | 175 | 162 | 161 | 162 | 157 | 152 | 151 | 156 | 161 |
| MW | 155 | 234 | 376 | 229 | 226 | 186 | 178 | 176 | 197 | 165 | 157 | 160 | 167 | 259 |
| HW | 159 | 354 | 442 | 306 | 291 | 222 | 267 | 272 | 322 | 209 | 233 | 195 | 213 | 440 |
| Tag | 1. | 25. | 10. | 25. | 2. | 13. | 3. | 5. | 17. | 25. | 12. | 4. | 8. | 23. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2009 | 2012 | 2012 | 2012 | 2011 | 2011 | 2011 | 2012 | 2012 | 2011 | 2011 |
| NW | 153 | 153 | 165 | 180 | 191 | 175 | 162 | 159 | 158 | 156 | 152 | 151 | 153 | 153 |
| MNW | 182 | 200 | 226 | 226 | 235 | 206 | 186 | 176 | 172 | 168 | 167 | 168 | 172 | 192 |
| MW | 237 | 253 | 315 | 291 | 292 | 243 | 211 | 195 | 191 | 186 | 184 | 192 | 218 | 247 |
| MHW | 339 | 386 | 463 | 426 | 393 | 314 | 313 | 278 | 280 | 258 | 288 | 270 | 315 | 376 |
| HW | 523 | 537 | 645 | 534 | 480 | 452 | 468 | 362 | 418 | 482 | 653 | 623 | 523 | 458 |
| Jahr | 2010 | 2002 | 2003 | 2008 | 2007 | 2006 | 2004 | 2007+ | 2007 | 2007 | 2007 | 2007 | 2010 | 2007 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 151 | am 03.10.2012 | 153 | 151 | 151 | am 03.10.2012 |
| MW | cm | 203 | | 235 | 172 | 207 | |
| HW | cm | 442 | am 10.01.2012 | 442 | 322 | 442 | am 10.01.2012 |
| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NW | cm | 151 | am 03.10.2012 | 153 | 151 | 151 | am 03.10.2012 |
| MNW | cm | 160 | | 176 | 161 | 161 | |
| MW | cm | 232 | | 272 | 193 | 230 | |
| MHW | cm | 527 | | 508 | 368 | 528 | |
| HW | cm | 653 | am 30.09.2007 | 645 | 653 | 653 | am 30.09.2007 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 147 | 27.09.1996 | 712 | 05.06.1981 |
| 2 | 150 | 12.10.1991 | 671 | 01.11.1998 |
| 3 | 151 | 03.10.2012 | 665 | 13.03.1981 |
| 4 | 153 | 01.12.2011 | 663 | 01.01.1987 |
| 5 | 155 | 12.09.2009 | 653 | 30.09.2007 |
| 6 | 156 | 28.10.2006 | 645 | 04.01.2003 |
| 7 | 157 | 22.08.2003 | 643 | 07.01.1982 |
| 8 | 158 | 06.10.1997 | 632 | 31.01.1995 |
| 9 | 159 | 28.09.1992 | 624 | 19.03.1994 |
| 10 | 159 | 25.08.1989 | 621 | 06.12.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 440 | 440 | | | |
| 364 | 434 | 437 | 642 | 602 | 426 |
| 363 | 433 | 436 | 638 | 585 | 418 |
| 362 | 431 | 436 | 635 | 537 | 414 |
| 361 | 431 | 436 | 633 | 507 | 412 |
| 360 | 431 | 433 | 631 | 470 | 412 |
| 359 | 428 | 432 | 628 | 452 | 412 |
| 358 | 425 | 431 | 627 | 448 | 406 |
| 357 | 423 | 430 | 603 | 444 | 402 |
| 356 | 420 | 430 | 585 | 440 | 401 |
| 350 | 389 | 420 | 500 | 424 | 377 |
| 340 | 333 | 359 | 441 | 381 | 316 |
| 330 | 299 | 311 | 432 | 345 | 301 |
| 320 | 277 | 277 | 416 | 320 | 277 |
| 300 | 244 | 242 | 364 | 287 | 242 |
| 270 | 214 | 216 | 322 | 253 | 214 |
| 240 | 196 | 196 | 300 | 231 | 194 |
| 210 | 187 | 184 | 281 | 215 | 184 |
| 183 | 179 | 179 | 270 | 203 | 176 |
| 150 | 172 | 172 | 255 | 192 | 170 |
| 130 | 168 | 169 | 248 | 185 | 168 |
| 120 | 166 | 167 | 244 | 183 | 167 |
| 110 | 164 | 166 | 242 | 181 | 165 |
| 100 | 163 | 166 | 237 | 178 | 164 |
| 90 | 162 | 164 | 235 | 176 | 163 |
| 80 | 160 | 164 | 230 | 174 | 162 |
| 70 | 158 | 163 | 226 | 172 | 161 |
| 60 | 158 | 162 | 223 | 170 | 161 |
| 50 | 157 | 160 | 220 | 168 | 159 |
| 40 | 156 | 158 | 212 | 166 | 158 |
| 30 | 155 | 157 | 206 | 164 | 157 |
| 25 | 155 | 157 | 198 | 163 | 156 |
| 20 | 155 | 156 | 198 | 162 | 156 |
| 15 | 154 | 155 | 194 | 161 | 155 |
| 10 | 154 | 155 | 188 | 159 | 155 |
| 9 | 154 | 155 | 186 | 158 | 155 |
| 8 | 154 | 155 | 185 | 158 | 154 |
| 7 | 154 | 154 | 185 | 157 | 154 |
| 6 | 154 | 154 | 185 | 157 | 154 |
| 5 | 154 | 154 | 185 | 156 | 154 |
| 4 | 153 | 153 | 184 | 156 | 153 |
| 3 | 153 | 153 | 184 | 155 | 153 |
| 2 | 153 | 153 | 182 | 155 | 153 |
| 1 | 153 | 153 | 181 | 154 | 153 |
| 0 | 151 | 151 | 179 | 151 | 151 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Leine
Odertalsperre seit 1934 Sösetalsperre seit 1931
RB Salzderhelden seit 1985

NLWKN

$A_{Eo}$ : 3463 $km^2$

PNP : NN + 68.46 m

Lage: 130.0 km oberhalb der Mündung rechts

W

cm

Pegel : Poppenburg Nr. 4885154

Gewässer : Leine

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 85 | 79 | 186 | 173 | 169 | 113 | 98 | 114 | 107 | 103 | 101 | 88 | 93 | 98 |
| 2. | 84 | 81 | 197 | 160 | 173 | 110 | 98 | 103 | 105 | 101 | 97 | 89 | 93 | 96 |
| 3. | 84 | 85 | 235 | 151 | 169 | 109 | 129 | 96 | 98 | 100 | 92 | 89 | 96 | 98 |
| 4. | 85 | 90 | 229 | 146 | 163 | 110 | 125 | 108 | 95 | 98 | 92 | 98 | 99 | 99 |
| 5. | 84 | 94 | 264 | 141 | 157 | 112 | 113 | 141 | 94 | 97 | 92 | 116 | 101 | 106 |
| 6. | 84 | 96 | 282 | 136 | 152 | 107 | 124 | 126 | 105 | 104 | 91 | 113 | 98 | 102 |
| 7. | 84 | 100 | 277 | 129 | 146 | 109 | 117 | 108 | 100 | 112 | 90 | 113 | 101 | 99 |
| 8. | 83 | 112 | 282 | 130 | 148 | 107 | 109 | 102 | 105 | 99 | 89 | 103 | 124 | 97 |
| 9. | 84 | 119 | 279 | 131 | 148 | 106 | 108 | 97 | 102 | 98 | 89 | 96 | 113 | 95 |
| 10. | 84 | 123 | 280 | 127 | 141 | 107 | 109 | 94 | 96 | 96 | 88 | 95 | 107 | 105 |
| 11. | 84 | 111 | 274 | 125 | 139 | 109 | 106 | 93 | 97 | 95 | 90 | 93 | 112 | 113 |
| 12. | 83 | 106 | 266 | 123 | 139 | 107 | 104 | 94 | 104 | 95 | 113 | 94 | 109 | 102 |
| 13. | 82 | 112 | 256 | 121 | 139 | 121 | 102 | 95 | 104 | 94 | 97 | 98 | 103 | 100 |
| 14. | 82 | 124 | 248 | 122 | 137 | 114 | 98 | 92 | 122 | 94 | 93 | 97 | 101 | 99 |
| 15. | 82 | 130 | 231 | 128 | 134 | 108 | 98 | 92 | 156 | 92 | 91 | 103 | 100 | 128 |
| 16. | 82 | 137 | 215 | 131 | 132 | 105 | 104 | 92 | 137 | 96 | 89 | 106 | 99 | 167 |
| 17. | 82 | 196 | 199 | 128 | 131 | 103 | 101 | 96 | 146 | 101 | 88 | 100 | 98 | 171 |
| 18. | 82 | 171 | 186 | 137 | 131 | 103 | 98 | 92 | 187 | 93 | 90 | 97 | 98 | 170 |
| 19. | 82 | 151 | 190 | 135 | 132 | 101 | 96 | 90 | 167 | 91 | 90 | 95 | 97 | 176 |
| 20. | 81 | 142 | 230 | 135 | 127 | 100 | 96 | 93 | 159 | 91 | 90 | 93 | 97 | 166 |
| 21. | 81 | 147 | 227 | 127 | 123 | 101 | 93 | 128 | 143 | 90 | 89 | 93 | 95 | 155 |
| 22. | 81 | 155 | 251 | 124 | 121 | 104 | 93 | 105 | 133 | 91 | 88 | 92 | 95 | 152 |
| 23. | 81 | 172 | 287 | 125 | 121 | 111 | 90 | 98 | 126 | 94 | 89 | 92 | 94 | 190 |
| 24. | 80 | 187 | 277 | 135 | 120 | 106 | 90 | 95 | 120 | 90 | 90 | 92 | 98 | 275 |
| 25. | 80 | 210 | 276 | 171 | 118 | 105 | 89 | 98 | 115 | 102 | 95 | 92 | 100 | 269 |
| 26. | 79 | 197 | 269 | 180 | 115 | 102 | 87 | 99 | 111 | 108 | 92 | 91 | 97 | 273 |
| 27. | 79 | 190 | 254 | 168 | 113 | 101 | 88 | 95 | 107 | 104 | 90 | 92 | 98 | 275 |
| 28. | 80 | 185 | 233 | 162 | 110 | 100 | 84 | 95 | 123 | 100 | 93 | 91 | 99 | 273 |
| 29. | 80 | 173 | 217 | 161 | 109 | 99 | 87 | 96 | 114 | 93 | 91 | 90 | 98 | 267 |
| 30. | 80 | 190 | 202 | | 110 | 99 | 88 | 101 | 110 | 93 | 89 | 92 | 100 | 258 |
| 31. | | 211 | 186 | | 115 | | 89 | | 105 | 101 | | 95 | | 227 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26.+ | 1. | 1.+ | 13. | 29. | 29.+ | 28. | 19. | 5. | 21.+ | 10.+ | 1. | 1.+ | 9. |
| NW | 79 | 79 | 186 | 121 | 109 | 99 | 84 | 90 | 94 | 90 | 88 | 88 | 93 | 95 |
| MW | 82 | 141 | 241 | 140 | 135 | 106 | 100 | 101 | 119 | 97 | 92 | 96 | 100 | 161 |
| HW | 90 | 220 | 298 | 186 | 176 | 127 | 159 | 164 | 198 | 123 | 136 | 120 | 130 | 281 |
| Tag | 7. | 31. | 5. | 25. | 2. | 13. | 3. | 5. | 18. | 25. | 12. | 5. | 8. | 24. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2009 | 2012 | 2012 | 2012 | 2011 | 2011 | 2003 | 2011 | 2011 | 2011 | 2011 |
| NW | 79 | 79 | 85 | 99 | 109 | 99 | 84 | 82 | 81 | 79 | 78 | 79 | 79 | 79 |
| MNW | 105 | 119 | 140 | 140 | 148 | 126 | 108 | 99 | 96 | 93 | 94 | 94 | 97 | 114 |
| MW | 146 | 159 | 206 | 189 | 188 | 152 | 130 | 114 | 110 | 108 | 107 | 113 | 132 | 154 |
| MHW | 222 | 256 | 309 | 283 | 263 | 201 | 199 | 164 | 167 | 158 | 173 | 166 | 204 | 247 |
| HW | 348 | 375 | 448 | 350 | 369 | 299 | 365 | 216 | 251 | 339 | 389 | 410 | 348 | 340 |
| Jahr | 2007 | 2002 | 2003 | 2008+ | 2007 | 2006 | 2004 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 79 | am 26.11.2011 | 79 | 84 | 84 | am 28.05.2012 |
| MW | cm | 121 | | 142 | 101 | 124 | |
| HW | cm | 298 | am 05.01.2012 | 298 | 198 | 298 | am 05.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 78 | am 30.09.2011 | 79 | 78 | 78 | am 30.09.2011 |
| MNW | cm | 86 | | 100 | 87 | 87 | |
| MW | cm | 143 | | 174 | 113 | 142 | |
| MHW | cm | 354 | | 343 | 232 | 355 | |
| HW | cm | 448 | am 03.01.2003 | 448 | 410 | 448 | am 03.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 76 | 10.09.1996 | 485 | 06.06.1981 |
| 2 | 78 | 30.09.2011 | 471 | 02.11.1998 |
| 3 | 79 | 26.11.2011 | 451 | 01.01.1987 |
| 4 | 79 | 22.08.2003 | 448 | 03.01.2003 |
| 5 | 80 | 06.10.1997 | 446 | 13.03.1981 |
| 6 | 81 | 12.09.2009 | 440 | 18.07.1956 |
| 7 | 84 | 28.05.2012 | 416 | 07.01.1982 |
| 8 | 85 | 07.01.2009 | 415 | 25.02.1970 |
| 9 | 86 | 25.08.2001 | 414 | 20.03.1994 |
| 10 | 86 | 16.12.1959 | 410 | 01.10.2007 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 287 | 287 | | | |
| 364 | 287 | 287 | 440 | 387 | 273 |
| 363 | 287 | 287 | 439 | 377 | 268 |
| 362 | 280 | 280 | 430 | 362 | 266 |
| 361 | 279 | 279 | 420 | 351 | 264 |
| 360 | 279 | 279 | 417 | 335 | 262 |
| 359 | 279 | 279 | 416 | 316 | 261 |
| 358 | 276 | 276 | 414 | 306 | 260 |
| 357 | 274 | 276 | 404 | 299 | 257 |
| 356 | 269 | 276 | 373 | 295 | 256 |
| 350 | 248 | 267 | 334 | 277 | 239 |
| 340 | 210 | 231 | 295 | 254 | 209 |
| 330 | 190 | 197 | 286 | 229 | 192 |
| 320 | 172 | 173 | 274 | 210 | 173 |
| 300 | 147 | 151 | 248 | 186 | 151 |
| 270 | 130 | 129 | 213 | 162 | 128 |
| 240 | 116 | 116 | 196 | 145 | 115 |
| 210 | 110 | 109 | 184 | 132 | 109 |
| 183 | 105 | 105 | 176 | 123 | 101 |
| 150 | 100 | 101 | 164 | 114 | 94 |
| 130 | 98 | 99 | 159 | 109 | 91 |
| 120 | 97 | 99 | 155 | 107 | 90 |
| 110 | 96 | 98 | 154 | 104 | 89 |
| 100 | 94 | 97 | 150 | 102 | 88 |
| 90 | 94 | 96 | 148 | 100 | 87 |
| 80 | 93 | 96 | 145 | 99 | 86 |
| 70 | 92 | 95 | 141 | 97 | 85 |
| 60 | 91 | 94 | 139 | 96 | 85 |
| 50 | 90 | 93 | 137 | 94 | 84 |
| 40 | 89 | 93 | 132 | 93 | 83 |
| 30 | 85 | 91 | 128 | 91 | 83 |
| 25 | 85 | 91 | 125 | 90 | 82 |
| 20 | 84 | 91 | 123 | 89 | 82 |
| 15 | 83 | 90 | 119 | 87 | 81 |
| 10 | 82 | 90 | 114 | 85 | 81 |
| 9 | 82 | 90 | 112 | 85 | 81 |
| 8 | 82 | 89 | 111 | 85 | 81 |
| 7 | 81 | 89 | 111 | 84 | 81 |
| 6 | 81 | 89 | 111 | 84 | 80 |
| 5 | 81 | 89 | 111 | 83 | 80 |
| 4 | 81 | 89 | 111 | 83 | 80 |
| 3 | 81 | 89 | 110 | 82 | 80 |
| 2 | 80 | 88 | 110 | 82 | 80 |
| 1 | 80 | 88 | 109 | 81 | 80 |
| 0 | 79 | 84 | 107 | 78 | 78 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Leine
Odertalsperre seit 1934 Sösetalsperre seit 1931
RB Salzderhelden seit 1985

NLWKN

$A_{Eo}$ : 5304 km²
PNP : NN + 43.81 m
Lage: 87.1 km oberhalb der Mündung, links

W
cm

Pegel : Herrenhausen Nr. 48800108
Gewässer : Leine
Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 73 | 68 | 253 | 248 | 217 | 128 | 94 | 109 | 88 | 86 | 90 | 60 | 72 | 77 |
| 2. | 77 | 70 | 253 | 224 | 225 | 122 | 92 | 109 | 109 | 85 | 81 | 61 | 70 | 74 |
| 3. | 71 | 75 | 313 | 204 | 225 | 119 | 111 | 92 | 85 | 81 | 70 | 62 | 73 | 76 |
| 4. | 72 | 83 | 326 | 194 | 214 | 124 | 144 | 109 | 85 | 79 | 68 | 100 | 75 | 78 |
| 5. | 71 | 92 | 365 | 186 | 206 | 125 | 116 | 151 | 78 | 80 | 67 | 114 | 78 | 83 |
| 6. | 71 | 94 | 460 | 175 | 196 | 117 | 123 | 157 | 97 | 84 | 68 | 115 | 78 | 88 |
| 7. | 74 | 103 | 443 | 158 | 187 | 118 | 125 | 113 | 101 | 95 | 66 | 107 | 76 | 79 |
| 8. | 69 | 121 | 441 | 168 | 192 | 117 | 111 | 103 | 99 | 81 | 64 | 89 | 96 | 75 |
| 9. | 74 | 128 | 440 | 165 | 196 | 113 | 106 | 96 | 92 | 79 | 63 | 77 | 100 | 75 |
| 10. | 70 | 131 | 433 | 161 | 184 | 116 | 117 | 88 | 86 | 74 | 62 | 74 | 87 | 93 |
| 11. | 70 | 116 | 423 | 155 | 178 | 119 | 130 | 83 | 80 | 72 | 72 | 71 | 88 | 102 |
| 12. | 70 | 105 | 407 | 151 | 176 | 119 | 105 | 86 | 95 | 72 | 88 | 73 | 90 | 89 |
| 13. | 69 | 110 | 393 | 149 | 175 | 133 | 103 | 95 | 98 | 70 | 83 | 74 | 82 | 83 |
| 14. | 69 | 128 | 374 | 148 | 172 | 135 | 96 | 85 | 109 | 70 | 70 | 76 | 77 | 81 |
| 15. | 70 | 149 | 346 | 156 | 168 | 119 | 99 | 83 | 158 | 68 | 68 | 81 | 75 | 115 |
| 16. | 70 | 165 | 320 | 161 | 164 | 115 | 108 | 82 | 146 | 79 | 66 | 90 | 75 | 186 |
| 17. | 70 | 266 | 284 | 152 | 161 | 110 | 104 | 85 | 141 | 80 | 63 | 80 | 74 | 196 |
| 18. | 70 | 244 | 260 | 165 | 160 | 110 | 96 | 81 | 220 | 72 | 62 | 74 | 73 | 189 |
| 19. | 69 | 194 | 267 | 168 | 160 | 108 | 93 | 80 | 210 | 67 | 63 | 72 | 74 | 197 |
| 20. | 69 | 173 | 344 | 169 | 156 | 108 | 92 | 80 | 192 | 67 | 64 | 69 | 72 | 185 |
| 21. | 69 | 169 | 370 | 153 | 148 | 106 | 90 | 117 | 162 | 65 | 60 | 67 | 71 | 168 |
| 22. | 69 | 186 | 406 | 147 | 145 | 112 | 87 | 106 | 139 | 65 | 61 | 66 | 70 | 161 |
| 23. | 67 | 208 | 472 | 148 | 144 | 115 | 84 | 90 | 128 | 70 | 62 | 65 | 70 | 221 |
| 24. | 68 | 233 | 480 | 158 | 142 | 115 | 83 | 85 | 118 | 67 | 64 | 65 | 71 | 376 |
| 25. | 67 | 264 | 457 | 198 | 139 | 108 | 80 | 98 | 108 | 72 | 66 | 65 | 79 | 373 |
| 26. | 67 | 258 | 432 | 235 | 136 | 105 | 79 | 94 | 103 | 93 | 68 | 65 | 74 | 365 |
| 27. | 68 | 236 | 406 | 220 | 129 | 102 | 77 | 86 | 99 | 82 | 64 | 65 | 74 | 363 |
| 28. | 68 | 231 | 365 | 211 | 123 | 99 | 74 | 81 | 108 | 81 | 64 | 65 | 77 | 367 |
| 29. | 68 | 216 | 330 | 209 | 121 | 96 | 76 | 91 | 116 | 71 | 64 | 64 | 74 | 350 |
| 30. | 68 | 232 | 304 | | 124 | 95 | 76 | 95 | 97 | 70 | 62 | 67 | 76 | 342 |
| 31. | | 286 | 274 | | 129 | | 86 | | 94 | 90 | | 71 | | 306 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23.+ | 1. | 1.+ | 22. | 29. | 30. | 28. | 19.+ | 5. | 21.+ | 21. | 1. | 2.+ | 2. |
| NW | 67 | 68 | 253 | 147 | 121 | 95 | 74 | 80 | 78 | 65 | 60 | 60 | 70 | 74 |
| MW | 70 | 166 | 369 | 177 | 167 | 114 | 99 | 97 | 117 | 76 | 68 | 76 | 77 | 181 |
| HW | 86 | 296 | 491 | 262 | 237 | 145 | 186 | 195 | 253 | 181 | 124 | 160 | 133 | 399 |
| Tag | 2. | 31. | 23.+ | 1. | 2. | 13. | 11. | 5. | 18. | 31. | 11. | 4. | 8. | 24. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2009 | 2012 | 2012 | 2012 | 2011 | 2003 + | 2003 | 2003 + | 2012 | 2011 | 2011 |
| NW | 67 | 68 | 89 | 110 | 121 | 95 | 74 | 76 | 75 | 63 | 60 | 60 | 67 | 68 |
| MNW | 108 | 133 | 175 | 177 | 193 | 146 | 112 | 98 | 89 | 84 | 85 | 87 | 92 | 122 |
| MW | 183 | 204 | 287 | 266 | 268 | 197 | 153 | 123 | 114 | 111 | 109 | 120 | 155 | 193 |
| MHW | 306 | 364 | 451 | 425 | 394 | 299 | 268 | 201 | 208 | 217 | 216 | 212 | 271 | 351 |
| HW | 534 | 530 | 597 | 528 | 526 | 471 | 522 | 313 | 334 | 496 | 529 | 569 | 534 | 508 |
| Jahr | 2007 | 2002 | 2003 | 2010 | 2010 | 2008 | 2004 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 60 | am 21.09.2012 | 67 | 60 | 60 | am 21.09.2012 |
| MW | cm | 133 | | 178 | 89 | 135 | |
| HW | cm | 491 | am 23.01.2012 | 491 | 253 | 491 | am 23.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 60 | am 05.09.2003 | 67 | 60 | 60 | am 05.09.2003 |
| MNW | cm | 71 | | 100 | 74 | 74 | |
| MW | cm | 178 | | 234 | 122 | 174 | |
| MHW | cm | 517 | | 507 | 318 | 518 | |
| HW | cm | 597 | am 04.01.2003 | 597 | 569 | 597 | am 04.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 38 | 06.10.1947 | 644 | 10.02.1946 |
| 2 | 51 | 16.09.1991 | 597 | 04.01.2003 |
| 3 | 52 | 06.10.1959 | 589 | 13.03.1981 |
| 4 | 52 | 23.06.1954 | 588 | 02.01.1987 |
| 5 | 52 | 11.10.1949 | 587 | 03.11.1998 |
| 6 | 53 | 13.10.1991 | 578 | 16.03.1947 |
| 7 | 54 | 07.08.1996 | 575 | 07.06.1981 |
| 8 | 57 | 07.08.1990 | 569 | 02.10.2007 |
| 9 | 57 | 31.12.1976 | 565 | 24.02.1970 |
| 10 | 58 | 14.09.1999 | 560 | 16.01.1968 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 480 | 480 | | | |
| 364 | 472 | 472 | 594 | 547 | 440 |
| 363 | 460 | 460 | 583 | 540 | 437 |
| 362 | 457 | 457 | 567 | 533 | 427 |
| 361 | 443 | 443 | 562 | 526 | 425 |
| 360 | 441 | 441 | 562 | 520 | 420 |
| 359 | 440 | 440 | 556 | 509 | 413 |
| 358 | 433 | 433 | 553 | 493 | 401 |
| 357 | 432 | 432 | 550 | 487 | 399 |
| 356 | 423 | 423 | 550 | 471 | 397 |
| 350 | 370 | 374 | 524 | 434 | 359 |
| 340 | 286 | 344 | 470 | 388 | 291 |
| 330 | 248 | 267 | 443 | 341 | 257 |
| 320 | 224 | 221 | 420 | 309 | 221 |
| 300 | 186 | 186 | 369 | 258 | 186 |
| 270 | 153 | 153 | 300 | 210 | 153 |
| 240 | 125 | 123 | 264 | 180 | 123 |
| 210 | 112 | 110 | 244 | 156 | 110 |
| 183 | 103 | 100 | 230 | 138 | 100 |
| 150 | 91 | 90 | 212 | 121 | 90 |
| 130 | 85 | 85 | 203 | 112 | 85 |
| 120 | 82 | 82 | 197 | 108 | 82 |
| 110 | 81 | 81 | 193 | 104 | 81 |
| 100 | 78 | 80 | 190 | 100 | 80 |
| 90 | 75 | 77 | 184 | 96 | 77 |
| 80 | 73 | 76 | 180 | 94 | 76 |
| 70 | 71 | 75 | 175 | 90 | 75 |
| 60 | 71 | 73 | 168 | 87 | 73 |
| 50 | 69 | 71 | 159 | 84 | 71 |
| 40 | 68 | 69 | 153 | 81 | 69 |
| 30 | 67 | 67 | 144 | 77 | 67 |
| 25 | 66 | 66 | 139 | 76 | 66 |
| 20 | 66 | 66 | 133 | 74 | 66 |
| 15 | 65 | 65 | 130 | 72 | 65 |
| 10 | 64 | 64 | 122 | 70 | 64 |
| 9 | 63 | 63 | 120 | 70 | 63 |
| 8 | 63 | 63 | 118 | 69 | 63 |
| 7 | 63 | 63 | 117 | 69 | 63 |
| 6 | 63 | 63 | 114 | 68 | 63 |
| 5 | 63 | 63 | 113 | 68 | 63 |
| 4 | 62 | 62 | 112 | 66 | 62 |
| 3 | 62 | 62 | 111 | 66 | 62 |
| 2 | 61 | 61 | 109 | 65 | 61 |
| 1 | 61 | 61 | 107 | 62 | 61 |
| 0 | 60 | 60 | 106 | 60 | 60 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1941
eisfrei
die Wasserstände sind im erforderlichem Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 6443 km²
PNP : NN + 20.99 m
Lage: 6.2 km oberhalb der Mündung, rechts

W
cm

Pegel : Schwarmstedt Nr. 48800301
Gewässer : Leine
Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 86 | 81 | 261 | 284 | 224 | 147 | 111 | 109 | 111 | 106 | 103 | 72 | 80 | 86 |
| 2. | 85 | 81 | 245 | 260 | 227 | 144 | 110 | 122 | 104 | 100 | 100 | 71 | 80 | 86 |
| 3. | 87 | 84 | 268 | 241 | 230 | 141 | 111 | 113 | 111 | 98 | 89 | 72 | 80 | 86 |
| 4. | 84 | 89 | 288 | 225 | 227 | 142 | 129 | 111 | 99 | 95 | 82 | 79 | 83 | 87 |
| 5. | 84 | 93 | 310 | 215 | 219 | 150 | 139 | 121 | 94 | 95 | 80 | 131 | 85 | 90 |
| 6. | 82 | 101 | 373 | 206 | 212 | 144 | 128 | 149 | 99 | 96 | 78 | 126 | 88 | 94 |
| 7. | 83 | 106 | 407 | 194 | 204 | 139 | 132 | 145 | 108 | 99 | 78 | 135 | 87 | 95 |
| 8. | 84 | 127 | 418 | 186 | 204 | 138 | 131 | 122 | 112 | 104 | 76 | 117 | 87 | 89 |
| 9. | 82 | 135 | 424 | 188 | 212 | 135 | 122 | 113 | 110 | 95 | 75 | 100 | 99 | 88 |
| 10. | 84 | 135 | 422 | 184 | 208 | 134 | 121 | 107 | 103 | 93 | 74 | 89 | 100 | 95 |
| 11. | 82 | 133 | 412 | 179 | 198 | 135 | 138 | 101 | 99 | 89 | 74 | 85 | 94 | 113 |
| 12. | 83 | 122 | 398 | 175 | 193 | 135 | 145 | 98 | 98 | 86 | 85 | 84 | 94 | 112 |
| 13. | 82 | 117 | 388 | 171 | 190 | 137 | 122 | 100 | 106 | 85 | 95 | 89 | 95 | 103 |
| 14. | 82 | 123 | 377 | 170 | 188 | 146 | 117 | 103 | 111 | 83 | 87 | 87 | 89 | 97 |
| 15. | 84 | 135 | 356 | 172 | 185 | 143 | 113 | 97 | 119 | 83 | 81 | 88 | 86 | 105 |
| 16. | 83 | 146 | 332 | 179 | 182 | 133 | 118 | 97 | 148 | 84 | 78 | 93 | 84 | 146 |
| 17. | 83 | 195 | 310 | 178 | 179 | 129 | 121 | 97 | 143 | 95 | 76 | 95 | 84 | 183 |
| 18. | 82 | 251 | 284 | 177 | 176 | 126 | 115 | 97 | 148 | 91 | 74 | 89 | 83 | 192 |
| 19. | 82 | 230 | 272 | 186 | 175 | 125 | 111 | 94 | 196 | 83 | 74 | 84 | 84 | 187 |
| 20. | 82 | 200 | 307 | 191 | 173 | 126 | 108 | 92 | 201 | 79 | 74 | 82 | 84 | 189 |
| 21. | 82 | 184 | 363 | 185 | 168 | 123 | 107 | 95 | 183 | 79 | 73 | 79 | 82 | 179 |
| 22. | 82 | 184 | 392 | 176 | 164 | 124 | 104 | 118 | 159 | 77 | 71 | 78 | 81 | 168 |
| 23. | 81 | 199 | 424 | 174 | 161 | 126 | 102 | 109 | 143 | 77 | 71 | 77 | 81 | 178 |
| 24. | 81 | 215 | 448 | 180 | 160 | 129 | 100 | 99 | 134 | 79 | 74 | 76 | 81 | 281 |
| 25. | 81 | 237 | 457 | 204 | 158 | 127 | 98 | 100 | 126 | 78 | 78 | 76 | 83 | 337 |
| 26. | 80 | 251 | 452 | 229 | 154 | 123 | 95 | 114 | 120 | 83 | 78 | 77 | 88 | 336 |
| 27. | 80 | 245 | 435 | 241 | 152 | 120 | 93 | 105 | 114 | 96 | 79 | 76 | 86 | 329 |
| 28. | 81 | 226 | 412 | 232 | 146 | 118 | 92 | 99 | 115 | 90 | 77 | 75 | 86 | 331 |
| 29. | 81 | 220 | 379 | 226 | 142 | 116 | 90 | 96 | 122 | 87 | 75 | 75 | 87 | 323 |
| 30. | 81 | 222 | 342 | | 142 | 113 | 90 | 113 | 119 | 82 | 75 | 76 | 85 | 312 |
| 31. | | 247 | 313 | | 144 | | 91 | | 110 | 81 | | 82 | | 303 |

## Hauptwerte

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26.+ | 1.+ | 2. | 14. | 29.+ | 30. | 29.+ | 20. | 5. | 22.+ | 22.+ | 2. | 1.+ | 1.+ |
| NW | 80 | 81 | 245 | 170 | 142 | 113 | 90 | 92 | 94 | 77 | 71 | 71 | 80 | 86 |
| MW | 83 | 165 | 364 | 200 | 184 | 132 | 113 | 108 | 125 | 89 | 79 | 88 | 86 | 174 |
| HW | 89 | 260 | 458 | 297 | 231 | 152 | 161 | 161 | 203 | 111 | 121 | 145 | 106 | 345 |
| Tag | 3. | 26.+ | 25. | 1. | 3. | 5. | 11.+ | 6. | 19.+ | 1. | 1. | 5. | 9. | 25. |
| Jahr | 2011 | 2011 | 2009 | 2009 | 2012 | 2012 | 2012 | 2012 | 2011 | 2009 | 2012 | 2012 | 2011 + | 2011 |
| NW | 80 | 81 | 109 | 126 | 142 | 113 | 90 | 92 | 88 | 76 | 71 | 71 | 80 | 81 |
| MNW | 125 | 150 | 193 | 200 | 216 | 168 | 132 | 115 | 104 | 98 | 100 | 101 | 107 | 138 |
| MW | 190 | 214 | 294 | 280 | 279 | 214 | 169 | 139 | 125 | 121 | 119 | 133 | 162 | 201 |
| MHW | 272 | 324 | 420 | 406 | 369 | 295 | 246 | 198 | 179 | 186 | 195 | 207 | 237 | 311 |
| HW | 493 | 479 | 586 | 524 | 492 | 420 | 425 | 374 | 269 | 385 | 400 | 505 | 493 | 466 |
| Jahr | 2007 | 2002 | 2003 | 2008 | 2010 | 2008 | 2004 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 71 | am 22.09.2012 | 80 | 71 | 71 | am 22.09.2012 |
| MW cm | 144 | | 189 | 100 | 145 | |
| HW cm | 458 | am 25.01.2012 | 458 | 203 | 458 | am 25.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NW cm | 71 | am 22.09.2012 | 80 | 71 | 71 | am 22.09.2012 |
| MNW cm | 85 | | 116 | 89 | 89 | |
| MW cm | 189 | | 245 | 134 | 186 | |
| MHW cm | 477 | | 473 | 283 | 477 | |
| HW cm | 586 | am 05.01.2003 | 586 | 505 | 586 | am 05.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 71 | 22.09.2012 | 590 | 14.03.1981 |
| 2 | 76 | 29.08.2009 | 589 | 03.01.1987 |
| 3 | 76 | 25.01.1996 | 586 | 05.01.2003 |
| 4 | 77 | 21.10.2006 | 577 | 04.11.1998 |
| 5 | 77 | 26.08.2001 | 573 | 25.02.1970 |
| 6 | 78 | 25.08.2001 | 566 | 18.01.1968 |
| 7 | 80 | 15.08.2003 | 566 | 20.07.1956 |
| 8 | 81 | 20.10.2005 | 561 | 06.03.1956 |
| 9 | 81 | 23.09.1991 | 555 | 04.01.1994 |
| 10 | 86 | 24.08.1989 | 554 | 29.03.1988 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 457 | 457 | | | |
| 364 | 452 | 452 | 584 | 532 | 397 |
| 363 | 448 | 448 | 575 | 518 | 392 |
| 362 | 435 | 435 | 562 | 505 | 391 |
| 361 | 435 | 435 | 556 | 494 | 389 |
| 360 | 424 | 424 | 549 | 489 | 385 |
| 359 | 422 | 422 | 545 | 478 | 380 |
| 358 | 418 | 418 | 545 | 465 | 380 |
| 357 | 418 | 418 | 535 | 456 | 378 |
| 356 | 412 | 412 | 532 | 447 | 364 |
| 350 | 377 | 377 | 494 | 415 | 337 |
| 340 | 288 | 323 | 439 | 378 | 281 |
| 330 | 247 | 281 | 423 | 345 | 265 |
| 320 | 227 | 229 | 403 | 316 | 229 |
| 300 | 198 | 192 | 358 | 270 | 192 |
| 270 | 172 | 171 | 310 | 226 | 171 |
| 240 | 141 | 141 | 272 | 195 | 141 |
| 210 | 126 | 123 | 255 | 172 | 123 |
| 183 | 115 | 113 | 238 | 154 | 113 |
| 150 | 104 | 101 | 219 | 136 | 101 |
| 130 | 98 | 98 | 212 | 127 | 98 |
| 120 | 96 | 96 | 206 | 123 | 96 |
| 110 | 94 | 94 | 203 | 119 | 94 |
| 100 | 90 | 91 | 200 | 115 | 91 |
| 90 | 87 | 89 | 194 | 111 | 89 |
| 80 | 85 | 87 | 190 | 108 | 87 |
| 70 | 84 | 86 | 185 | 104 | 86 |
| 60 | 83 | 84 | 177 | 100 | 84 |
| 50 | 82 | 82 | 174 | 98 | 82 |
| 40 | 80 | 80 | 167 | 94 | 80 |
| 30 | 79 | 79 | 161 | 90 | 79 |
| 25 | 78 | 78 | 159 | 88 | 78 |
| 20 | 77 | 77 | 153 | 86 | 77 |
| 15 | 76 | 76 | 148 | 84 | 76 |
| 10 | 75 | 75 | 141 | 82 | 75 |
| 9 | 75 | 75 | 141 | 82 | 75 |
| 8 | 75 | 75 | 139 | 81 | 75 |
| 7 | 75 | 75 | 137 | 81 | 75 |
| 6 | 74 | 74 | 136 | 80 | 74 |
| 5 | 73 | 73 | 136 | 79 | 73 |
| 4 | 73 | 73 | 134 | 78 | 73 |
| 3 | 72 | 72 | 132 | 78 | 72 |
| 2 | 72 | 72 | 129 | 77 | 72 |
| 1 | 72 | 72 | 128 | 75 | 72 |
| 0 | 71 | 71 | 127 | 71 | 71 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1953
eisfrei
die Wasserstände sind im erforderlichen Umfang an die Kontrollablesungen angepasst

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 908 $km^2$

PNP : NN + 9.60 m

Lage: 44.0 km oberhalb der Mündung links

W

cm

Pegel : Hellwege-Schleuse Nr. 4945108

Gewässer : Wümme

Gebiet : Lesum

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 96 | 81 | 234 | 163 | 189 | 102 | 84 | 75 | 77 | 50 | 50 | 63 | 76 | 88 |
| 2. | 95 | 88 | 233 | 150 | 181 | 101 | 80 | 76 | 69 | 48 | 49 | 58 | 79 | 89 |
| 3. | 94 | 98 | 246 | 143 | 171 | 102 | 82 | 69 | 64 | 46 | 46 | 57 | 82 | 90 |
| 4. | 93 | 112 | 255 | 135 | 163 | 104 | 83 | 68 | 61 | 49 | 44 | 67 | 86 | 93 |
| 5. | 90 | 122 | 266 | 129 | 158 | 106 | 80 | 68 | 58 | 55 | 43 | 96 | 94 | 97 |
| 6. | 88 | 144 | 281 | 126 | 149 | 102 | 77 | 67 | 56 | 54 | 41 | 122 | 95 | 96 |
| 7. | 86 | 170 | 286 | 124 | 143 | 104 | 76 | 70 | 54 | 59 | 40 | 146 | 99 | 93 |
| 8. | 86 | 214 | 286 | 118 | 169 | 104 | 76 | 74 | 56 | 57 | 40 | 127 | 114 | 88 |
| 9. | 85 | 234 | 286 | 119 | 176 | 101 | 76 | 72 | 57 | 58 | 40 | 110 | 109 | 87 |
| 10. | 84 | 249 | 286 | 119 | 162 | 110 | 81 | 66 | 55 | 57 | 40 | 99 | 104 | 111 |
| 11. | 83 | 259 | 284 | 116 | 154 | 115 | 88 | 64 | 57 | 55 | 39 | 93 | 100 | 131 |
| 12. | 82 | 264 | 280 | 116 | 147 | 111 | 87 | 63 | 57 | 53 | 41 | 90 | 98 | 124 |
| 13. | 81 | 260 | 276 | 117 | 142 | 111 | 79 | 61 | 58 | 50 | 43 | 100 | 92 | 118 |
| 14. | 81 | 254 | 271 | 120 | 138 | 105 | 75 | 59 | 59 | 47 | 44 | 107 | 88 | 113 |
| 15. | 81 | 252 | 262 | 147 | 134 | 100 | 75 | 57 | 60 | 45 | 44 | 101 | 87 | 135 |
| 16. | 80 | 250 | 250 | 153 | 132 | 96 | 78 | 57 | 60 | 44 | 45 | 96 | 85 | 173 |
| 17. | 81 | 258 | 232 | 159 | 128 | 93 | 78 | 62 | 63 | 44 | 44 | 91 | 84 | 171 |
| 18. | 80 | 266 | 211 | 176 | 126 | 91 | 76 | 60 | 71 | 45 | 43 | 89 | 84 | 162 |
| 19. | 80 | 272 | 214 | 203 | 121 | 90 | 72 | 56 | 86 | 44 | 42 | 84 | 86 | 154 |
| 20. | 80 | 273 | 241 | 217 | 115 | 90 | 70 | 54 | 101 | 41 | 42 | 80 | 88 | 142 |
| 21. | 79 | 269 | 256 | 204 | 112 | 90 | 68 | 54 | 88 | 40 | 41 | 78 | 87 | 132 |
| 22. | 80 | 264 | 272 | 219 | 111 | 91 | 65 | 52 | 75 | 42 | 41 | 76 | 84 | 123 |
| 23. | 79 | 260 | 285 | 221 | 110 | 93 | 62 | 50 | 68 | 42 | 40 | 75 | 83 | 137 |
| 24. | 78 | 257 | 287 | 227 | 109 | 94 | 60 | 50 | 62 | 41 | 45 | 75 | 85 | 209 |
| 25. | 79 | 257 | 286 | 234 | 106 | 95 | 55 | 72 | 58 | 41 | 59 | 78 | 88 | 210 |
| 26. | 80 | 253 | 283 | 234 | 102 | 92 | 55 | 77 | 54 | 43 | 63 | 75 | 92 | 227 |
| 27. | 81 | 244 | 278 | 216 | 102 | 90 | 54 | 73 | 52 | 44 | 69 | 74 | 93 | 226 |
| 28. | 81 | 226 | 269 | 204 | 101 | 88 | 54 | 77 | 50 | 45 | 73 | 73 | 95 | 213 |
| 29. | 82 | 206 | 252 | 198 | 100 | 90 | 53 | 73 | 52 | 44 | 70 | 73 | 93 | 186 |
| 30. | 82 | 222 | 221 | | 100 | 88 | 52 | 80 | 53 | 43 | 68 | 74 | 92 | 174 |
| 31. | | 243 | 186 | | 103 | | 53 | | 52 | 45 | | 77 | | 165 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 31. | 11.+ | 29.+ | 28.+ | 30. | 23.+ | 28. | 21. | 11. | 3. | 1. | 9. |
| NW | 78 | 81 | 186 | 116 | 100 | 88 | 52 | 50 | 50 | 40 | 39 | 57 | 76 | 87 |
| MW | 84 | 220 | 260 | 166 | 134 | 98 | 71 | 65 | 63 | 47 | 48 | 87 | 91 | 141 |
| HW | 96 | 273 | 287 | 237 | 193 | 115 | 93 | 84 | 106 | 59 | 78 | 149 | 115 | 230 |
| Tag | 1. | 19. | 24. | 25. | 1. | 10. | 11. | 30. | 20. | 6. | 28. | 7. | 8. | 26. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2003 | 2009 | 2006 | 2011 | 2011 | 2011 | 2003 | 2010 | 2003 | 2009 | 2009 | 2003 | 2003 |
| NW | 60 | 60 | 87 | 98 | 94 | 65 | 51 | 41 | 30 | 28 | 35 | 41 | 60 | 60 |
| MNW | 92 | 99 | 120 | 115 | 116 | 85 | 63 | 51 | 49 | 47 | 53 | 62 | 85 | 98 |
| MW | 133 | 147 | 174 | 163 | 159 | 110 | 88 | 69 | 76 | 72 | 72 | 88 | 123 | 148 |
| MHW | 191 | 217 | 243 | 242 | 225 | 159 | 134 | 108 | 133 | 122 | 123 | 142 | 177 | 217 |
| HW | 284 | 282 | 292 | 277 | 279 | 261 | 202 | 202 | 228 | 217 | 207 | 244 | 284 | 282 |
| Jahr | 2007 | 2007 | 2008 | 2011 | 2007 | 2010 | 2005 | 2006 | 2007 | 2005 | 2011 | 2011 | 2007 | 2007 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 39 | am 11.09.2012 | 78 | 39 | 39 | am 11.09.2012 |
| MW | cm | 112 | | 161 | 64 | 106 | |
| HW | cm | 287 | am 24.01.2012 | 287 | 149 | 287 | am 24.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 28 | am 26.08.2003 | 60 | 28 | 28 | am 26.08.2003 |
| MNW | cm | 40 | | 76 | 40 | 40 | |
| MW | cm | 112 | | 148 | 78 | 112 | |
| MHW | cm | 268 | | 268 | 185 | 269 | |
| HW | cm | 292 | am 23.01.2008 | 292 | 244 | 292 | am 23.01.2008 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 25 | 27.08.1996 | 308 | 20.07.2002 |
| 2 | 25 | 23.08.1995 | 302 | 05.03.1979 |
| 3 | 28 | 26.08.2003 | 300 | 31.12.1961 |
| 4 | 30 | 21.07.2010 | 292 | 23.01.2008 |
| 5 | 31 | 05.08.1999 | 291 | 16.01.1968 |
| 6 | 34 | 27.07.2006 | 289 | 12.03.1981 |
| 7 | 35 | 29.09.2009 | 287 | 24.01.2012 |
| 8 | 35 | 03.07.1992 | 286 | 06.01.2012 |
| 9 | 37 | 12.08.2004 | 284 | 14.11.2007 |
| 10 | 38 | 01.08.1994 | 282 | 09.12.2007 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 287 | 287 | | | |
| 364 | 287 | 287 | 287 | 284 | 239 |
| 363 | 287 | 287 | 287 | 281 | 239 |
| 362 | 287 | 287 | 287 | 278 | 239 |
| 361 | 287 | 287 | 287 | 275 | 234 |
| 360 | 287 | 287 | 287 | 271 | 233 |
| 359 | 285 | 285 | 285 | 267 | 228 |
| 358 | 284 | 284 | 284 | 265 | 227 |
| 357 | 283 | 283 | 283 | 261 | 223 |
| 356 | 281 | 281 | 281 | 259 | 223 |
| 350 | 273 | 269 | 275 | 242 | 202 |
| 340 | 262 | 241 | 261 | 222 | 179 |
| 330 | 253 | 217 | 244 | 200 | 164 |
| 320 | 241 | 198 | 226 | 183 | 154 |
| 300 | 189 | 158 | 201 | 160 | 131 |
| 270 | 127 | 120 | 180 | 140 | 110 |
| 240 | 105 | 103 | 162 | 122 | 99 |
| 210 | 94 | 94 | 147 | 110 | 82 |
| 183 | 84 | 89 | 141 | 101 | 70 |
| 150 | 78 | 78 | 121 | 89 | 63 |
| 130 | 75 | 75 | 113 | 83 | 61 |
| 120 | 71 | 71 | 107 | 79 | 61 |
| 110 | 69 | 69 | 103 | 76 | 59 |
| 100 | 64 | 64 | 101 | 73 | 55 |
| 90 | 60 | 60 | 100 | 69 | 50 |
| 80 | 58 | 58 | 95 | 66 | 49 |
| 70 | 56 | 56 | 91 | 63 | 46 |
| 60 | 55 | 55 | 89 | 60 | 43 |
| 50 | 53 | 53 | 85 | 57 | 41 |
| 40 | 47 | 47 | 82 | 53 | 40 |
| 30 | 45 | 45 | 79 | 49 | 36 |
| 25 | 45 | 45 | 78 | 46 | 35 |
| 20 | 44 | 44 | 77 | 44 | 32 |
| 15 | 43 | 43 | 73 | 42 | 31 |
| 10 | 42 | 42 | 71 | 40 | 30 |
| 9 | 42 | 42 | 71 | 40 | 30 |
| 8 | 42 | 42 | 69 | 39 | 30 |
| 7 | 42 | 42 | 68 | 39 | 30 |
| 6 | 41 | 41 | 66 | 38 | 30 |
| 5 | 41 | 41 | 66 | 37 | 30 |
| 4 | 41 | 41 | 66 | 36 | 30 |
| 3 | 41 | 41 | 66 | 34 | 30 |
| 2 | 41 | 41 | 63 | 32 | 28 |
| 1 | 41 | 41 | 62 | 31 | 28 |
| 0 | 39 | 39 | 61 | 28 | 28 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Wümmegeest

NLWKN

$A_{Eo}$ : 772 $km^2$

PNP : NN + 29.95 m

Lage: 104.6 km oberhalb der Mündung links

W

cm

Pegel : Hoopen OP Nr. 4963101

Gewässer : Hunte

Gebiet : Hunte

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 347 | 337 | 368 | 361 | 354 | 343 | 339 | 336 | 333 | 335 | 332 | 334 | 337 | 337 |
| 2. | 352 | 337 | 371 | 359 | 354 | 344 | 339 | 335 | 333 | 335 | 334 | 334 | 350 | 337 |
| 3. | 354 | 338 | 374 | 358 | 353 | 345 | 340 | 335 | 333 | 334 | 334 | 333 | 350 | 340 |
| 4. | 353 | 339 | 375 | 357 | 353 | 342 | 340 | 336 | 333 | 334 | 334 | 337 | 349 | 349 |
| 5. | 352 | 341 | 383 | 355 | 352 | 341 | 339 | 336 | 333 | 335 | 333 | 341 | 350 | 349 |
| 6. | 351 | 347 | 385 | 353 | 352 | 341 | 339 | 336 | 333 | 334 | 333 | 347 | 350 | 349 |
| 7. | 349 | 350 | 383 | 352 | 351 | 341 | 339 | 336 | 331 | 335 | 332 | 348 | 349 | 351 |
| 8. | 349 | 354 | 389 | 354 | 351 | 340 | 339 | 337 | 333 | 334 | 332 | 346 | 349 | 347 |
| 9. | 349 | 358 | 389 | 354 | 350 | 341 | 339 | 337 | 333 | 334 | 332 | 343 | 341 | 351 |
| 10. | 348 | 358 | 385 | 352 | 349 | 346 | 339 | 336 | 333 | 334 | 332 | 341 | 338 | 354 |
| 11. | 343 | 356 | 381 | 352 | 346 | 346 | 341 | 336 | 332 | 334 | 333 | 340 | 337 | 354 |
| 12. | 340 | 354 | 379 | 351 | 345 | 344 | 339 | 336 | 333 | 333 | 334 | 340 | 337 | 353 |
| 13. | 339 | 356 | 379 | 351 | 345 | 343 | 338 | 335 | 334 | 333 | 334 | 340 | 337 | 352 |
| 14. | 339 | 358 | 377 | 350 | 344 | 343 | 338 | 335 | 332 | 333 | 333 | 340 | 337 | 351 |
| 15. | 339 | 361 | 375 | 352 | 344 | 342 | 337 | 335 | 332 | 332 | 333 | 340 | 337 | 354 |
| 16. | 339 | 363 | 372 | 351 | 343 | 342 | 337 | 335 | 332 | 333 | 332 | 340 | 336 | 355 |
| 17. | 339 | 373 | 371 | 352 | 343 | 342 | 338 | 335 | 334 | 333 | 332 | 345 | 336 | 354 |
| 18. | 337 | 370 | 370 | 350 | 343 | 342 | 337 | 335 | 336 | 332 | 332 | 347 | 336 | 354 |
| 19. | 336 | 367 | 372 | 353 | 343 | 341 | 337 | 335 | 336 | 332 | 332 | 347 | 337 | 353 |
| 20. | 336 | 367 | 379 | 352 | 342 | 341 | 337 | 334 | 337 | 332 | 332 | 346 | 337 | 349 |
| 21. | 336 | 367 | 380 | 351 | 342 | 341 | 337 | 334 | 337 | 332 | 332 | 346 | 337 | 347 |
| 22. | 336 | 366 | 384 | 351 | 342 | 342 | 336 | 334 | 337 | 331 | 332 | 346 | 336 | 347 |
| 23. | 336 | 367 | 389 | 352 | 341 | 344 | 336 | 334 | 337 | 331 | 332 | 345 | 337 | 359 |
| 24. | 337 | 367 | 385 | 350 | 341 | 345 | 335 | 334 | 336 | 331 | 335 | 343 | 336 | 365 |
| 25. | 337 | 368 | 380 | 353 | 341 | 346 | 336 | 334 | 336 | 332 | 333 | 338 | 337 | 363 |
| 26. | 336 | 367 | 377 | 351 | 341 | 346 | 335 | 334 | 337 | 332 | 334 | 337 | 338 | 365 |
| 27. | 337 | 365 | 376 | 350 | 341 | 344 | 334 | 334 | 336 | 332 | 335 | 337 | 338 | 367 |
| 28. | 337 | 364 | 374 | 350 | 341 | 342 | 334 | 334 | 337 | 332 | 334 | 337 | 338 | 364 |
| 29. | 337 | 363 | 372 | 351 | 341 | 340 | 334 | 334 | 335 | 332 | 336 | 337 | 338 | 362 |
| 30. | 336 | 369 | 369 | | 342 | 339 | 334 | 334 | 335 | 332 | 335 | 337 | 338 | 361 |
| 31. | | 371 | 359 | | 343 | | 335 | | 335 | 332 | | 337 | | 362 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 19.+ | 1.+ | 31. | 14.+ | 23.+ | 30. | 27.+ | 20.+ | 7. | 22.+ | 1.+ | 3. | 16.+ | 1.+ |
| NW | 336 | 337 | 359 | 350 | 341 | 339 | 334 | 334 | 331 | 331 | 332 | 333 | 336 | 337 |
| MW | 342 | 359 | 377 | 353 | 346 | 343 | 337 | 335 | 334 | 333 | 333 | 341 | 340 | 353 |
| HW | 355 | 373 | 391 | 363 | 354 | 352 | 342 | 339 | 338 | 337 | 340 | 353 | 353 | 368 |
| Tag | 3. | 17. | 23. | 1. | 1. | 10. | 11. | 8. | 18. | 7. | 12. | 6. | 2. | 27. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2005+ | 2003 | 2009 | 2008 | 2011 | 2007+ | 2011 | 2010+ | 2010 | 2003 | 2003 | 2003 | 2005+ | 2003 |
| NW | 336 | 336 | 339 | 345 | 339 | 336 | 333 | 332 | 328 | 326 | 328 | 330 | 336 | 336 |
| MNW | 345 | 348 | 353 | 353 | 348 | 341 | 337 | 334 | 332 | 331 | 335 | 338 | 342 | 346 |
| MW | 353 | 357 | 366 | 363 | 356 | 346 | 341 | 337 | 334 | 334 | 339 | 343 | 349 | 356 |
| MHW | 365 | 370 | 383 | 376 | 367 | 355 | 348 | 342 | 341 | 343 | 345 | 351 | 361 | 367 |
| HW | 397 | 399 | 406 | 395 | 389 | 366 | 359 | 346 | 352 | 355 | 359 | 358 | 380 | 384 |
| Jahr | 2002 | 2002 | 2003 | 2004 | 2007 | 2008 | 2007 | 2006+ | 2007 | 2006 | 2010 | 2007+ | 2007 | 2007 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 331 | am 07.07.2012 | 336 | 331 | 331 | am 07.07.2012 |
| MW | cm | 344 | | 353 | 336 | 344 | |
| HW | cm | 391 | am 23.01.2012 | 391 | 353 | 391 | am 23.01.2012 |
| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NW | cm | 326 | am 24.08.2003 | 336 | 326 | 326 | am 24.08.2003 |
| MNW | cm | 331 | | 338 | 331 | 331 | |
| MW | cm | 347 | | 357 | 338 | 347 | |
| MHW | cm | 386 | | 386 | 354 | 387 | |
| HW | cm | 406 | am 03.01.2003 | 406 | 359 | 406 | am 03.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 299 | 05.10.1988 | 473 | 19.01.1987 |
| 2 | 324 | 23.09.1999 | 415 | 12.03.1981 |
| 3 | 326 | 24.08.2003 | 415 | 15.01.1968 |
| 4 | 326 | 22.11.1995 | 413 | 28.10.1998 |
| 5 | 328 | 24.07.2010 | 413 | 06.01.1987 |
| 6 | 328 | 19.09.1991 | 410 | 28.01.1994 |
| 7 | 328 | 21.08.1976 | 409 | 10.11.1998 |
| 8 | 328 | 05.09.1973 | 409 | 19.03.1994 |
| 9 | 329 | 30.07.1996 | 409 | 31.12.1993 |
| 10 | 329 | 08.09.1983 | 406 | 03.01.2003 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 390 | 390 | | | |
| 364 | 390 | 390 | 404 | 392 | 363 |
| 363 | 390 | 390 | 397 | 389 | 363 |
| 362 | 389 | 389 | 396 | 387 | 363 |
| 361 | 389 | 389 | 393 | 386 | 363 |
| 360 | 389 | 389 | 392 | 384 | 361 |
| 359 | 384 | 384 | 391 | 383 | 361 |
| 358 | 384 | 384 | 388 | 382 | 361 |
| 357 | 384 | 384 | 388 | 381 | 361 |
| 356 | 381 | 381 | 388 | 380 | 361 |
| 350 | 379 | 379 | 384 | 376 | 361 |
| 340 | 373 | 372 | 380 | 370 | 360 |
| 330 | 368 | 363 | 376 | 366 | 359 |
| 320 | 364 | 357 | 372 | 363 | 357 |
| 300 | 354 | 353 | 368 | 360 | 353 |
| 270 | 351 | 350 | 363 | 356 | 349 |
| 240 | 345 | 345 | 360 | 352 | 345 |
| 210 | 342 | 342 | 356 | 348 | 342 |
| 183 | 340 | 340 | 355 | 345 | 340 |
| 150 | 338 | 338 | 348 | 342 | 338 |
| 130 | 337 | 337 | 346 | 340 | 336 |
| 120 | 337 | 337 | 345 | 339 | 336 |
| 110 | 337 | 337 | 343 | 339 | 335 |
| 100 | 336 | 336 | 342 | 338 | 334 |
| 90 | 336 | 336 | 341 | 337 | 333 |
| 80 | 335 | 335 | 340 | 337 | 332 |
| 70 | 335 | 335 | 340 | 336 | 331 |
| 60 | 335 | 335 | 339 | 335 | 331 |
| 50 | 334 | 334 | 339 | 335 | 330 |
| 40 | 334 | 334 | 338 | 334 | 330 |
| 30 | 333 | 333 | 337 | 333 | 329 |
| 25 | 333 | 333 | 337 | 333 | 328 |
| 20 | 333 | 333 | 337 | 332 | 328 |
| 15 | 333 | 333 | 337 | 332 | 327 |
| 10 | 333 | 333 | 336 | 332 | 327 |
| 9 | 333 | 333 | 336 | 331 | 327 |
| 8 | 333 | 333 | 336 | 331 | 327 |
| 7 | 333 | 333 | 336 | 331 | 327 |
| 6 | 333 | 333 | 336 | 331 | 327 |
| 5 | 333 | 333 | 336 | 331 | 327 |
| 4 | 333 | 333 | 336 | 330 | 327 |
| 3 | 332 | 332 | 336 | 330 | 326 |
| 2 | 332 | 332 | 336 | 329 | 326 |
| 1 | 332 | 332 | 336 | 328 | 326 |
| 0 | 331 | 331 | 335 | 326 | 326 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Hunte

NLWKN

PNP : NN - 5.00 m

W Tide
cm

Pegel : Bremen, Gr. Weserbrücke
Gewässer : Weser
Gebiet : Unterweser

Nr. 4910050

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.24 | 294 | 6.24 | 752 | 1.27 | 306 | 6.22 | 746 | 2.24 | 351 | 7.19 | 809 | 2.34 | 334 | 7.55 | 668 | 2.20 | 335 | 7.30 | 744 | 3.16 | 357 | 8.35 | 708 | 4.14 | 302 | 9.33 | 668 | 1. |
| | 13.47 | 283 | 19.05 | 742 | 13.48 | 265 | 19.01 | 703 | 14.58 | 375 | 19.40 | 752 | 14.57 | 335 | 20.02 | 649 | 14.35 | 347 | 19.36 | 740 | 15.20 | 367 | 21.33 | 769 | 16.30 | 306 | 22.27 | 727 | |
| 2. | 1.56 | 315 | 7.01 | 778 | 1.40 | 348 | 6.54 | 853 | 2.52 | 378 | 7.56 | 813 | 3.12 | 329 | 8.50 | 652 | 2.51 | 343 | 7.57 | 720 | 4.44 | 383 | 10.13 | 729 | 5.42 | 307 | 11.13 | 712 | 2. |
| | 14.23 | 312 | 19.40 | 722 | 14.42 | 339 | 19.51 | 739 | 15.38 | 400 | 20.36 | 771 | 15.26 | 342 | 21.09 | 667 | 15.14 | 338 | 20.15 | 686 | 17.14 | 351 | 22.52 | 728 | 18.14 | 314 | 23.39 | 733 | |
| 3. | 2.41 | 303 | 8.05 | 716 | 2.43 | 326 | 7.56 | 724 | 3.44 | 418 | 8.27 | 750 | 4.03 | 345 | 10.02 T | 681 | 3.37 | 319 | 9.02 | 637 | 6.09 | 317 | 11.40 | 703 | 6.53 | 301 | - | - | 3. |
| | 15.12 | 298 | 20.34 | 691 | 14.48 | 357 | 20.59 | 792 | 16.06 | 380 | 20.44 | 816 | 17.13 | 337 | 22.47 T | 683 | 15.57 | 322 | 21.45 | 682 | 18.53 | 310 | - | - | 19.19 | 317 | 12.27 | 731 | |
| 4. | 3.22 | 330 | 8.50 | 723 | 3.32 | 471 | 8.15 | 889 | 1.03 | 596 | 8.46 | 808 | 5.52 | 333 | 11.27 T | 701 | 5.02 | 332 | 10.37 | 690 | 7.36 | 285 | 0.10 | 714 | 8.06 | 298 | 0.42 | 767 | 4. |
| | 15.52 | 320 | 21.30 | 703 | 16.37 | 399 | 21.31 | 766 | 17.24 | 531 | 21.42 | 854 | 18.46 | 314 | 23.56 T | 697 | 17.44 | 359 | 23.20 | 746 | 19.54 | 302 | 13.00 | 694 | 20.33 | 312 | 13.27 | 759 | |
| 5. | 4.33 | 349 | 10.03 | 732 | 4.51 | 376 | 10.16 | 804 | 5.14 | 488 | 10.20 | 877 | 7.31 | 289 | - | - | 7.09 | 332 | - | - | 8.49 | 297 | 1.22 | 735 | 9.07 | 313 | 1.45 | 789 | 5. |
| | 17.32 | 325 | 23.08 | 695 | 17.30 | 387 | 22.41 | 767 | 14.51 | 625 | 23.16 | 925 | 19.44 | 311 | 12.30 T | 654 | 19.23 | 337 | 12.20 | 699 | 21.09 | 293 | 14.06 | 731 | 21.30 | 314 | 14.19 | 782 | |
| 6. | 5.47 | 351 | 11.31 | 741 | 5.47 | 361 | 11.11 | 760 | 7.38 | 565 | 11.53 | 844 | 8.36 | 303 | 0.55 T | 722 | 8.21 | 320 | 0.50 | 750 | 9.40 | 293 | 2.22 | 763 | 9.57 | 301 | 2.34 | 788 | 6. |
| | 18.44 | 332 | - | - | 18.06 | 382 | 23.54 | 815 | 19.56 | 464 | - | - | 20.53 | 309 | 13.35 T | 709 | 20.44 | 316 | 13.35 | 726 | 22.05 | 306 | 14.56 | 776 | 22.25 | 297 | 15.11 | 776 | |
| 7. | 7.03 | 327 | 0.13 | 696 | 7.35 | 367 | - | - | 8.25 | 426 | 0.51 | 762 | 9.43 | 296 | 2.08 T | 720 | 9.24 | 299 | 1.53 | 737 | 10.42 | 315 | 2.55 | 843 | 10.53 | 296 | 3.27 | 789 | 7. |
| | 19.39 | 305 | 12.41 | 724 | 19.20 | 393 | 12.42 | 756 | 20.46 | 473 | 13.24 | 821 | 22.01 | 286 | 14.40 T | 698 | 21.32 | 312 | 14.19 | 703 | 22.52 | 307 | 15.43 | 812 | 23.23 | 276 | 15.54 | 777 | |
| 8. | 8.07 | 304 | 1.12 | 682 | 8.27 | 376 | 0.16 | 881 | 9.19 | 491 | 1.18 | 904 | 10.43 | 270 | 3.03 T | 705 | 10.13 | 360 | 2.55 | 804 | 11.20 | 291 | 3.56 | 815 | 11.45 | 267 | 4.19 | 746 | 8. |
| | 20.29 | 280 | 13.32 | 714 | 20.45 | 304 | 13.00 | 791 | 21.50 | 456 | 13.49 | 861 | 22.43 | 284 | 15.50 T | 680 | 22.33 | 337 | 14.52 | 825 | 23.38 | 283 | 16.17 | 780 | - | - | 16.49 | 757 | |
| 9. | 8.57 | 296 | 1.50 | 695 | 7.05 | 459 | 2.15 | 768 | 10.11 | 435 | 2.23 | 817 | 11.06 | 298 | 3.57 T | 728 | 11.04 | 308 | 3.26 | 810 | 11.59 | 291 | 4.36 | 770 | 0.10 | 278 | 5.10 | 772 | 9. |
| | 21.18 | 287 | 14.09 | 716 | 21.04 | 464 | 13.19 | 892 | 22.20 | 460 | 15.10 | 808 | 23.34 | 288 | 16.16 T | 718 | 23.16 | 315 | 16.02 | 753 | - | - | 17.05 | 804 | 12.24 | 291 | 17.20 | 789 | |
| 10. | 9.45 | 289 | 2.31 | 715 | 9.36 | 389 | 1.26 | 936 | 11.07 | 455 | 2.58 | 886 | - | - | 4.31 T | 742 | 11.47 | 325 | 4.05 | 820 | 0.19 | 295 | 5.11 | 784 | 0.54 | 292 | 5.55 | 760 | 10. |
| | 22.02 | 276 | 14.57 | 717 | 22.03 | 372 | 14.30 | 869 | 23.08 | 450 | 15.35 | 808 | 12.08 | 277 | 17.01 T | 705 | - | - | 16.39 | 817 | 12.36 | 306 | 17.34 | 810 | 13.10 | 291 | 18.12 | 789 | |
| 11. | 10.22 | 267 | 3.11 | 698 | 10.25 | 324 | 2.44 | 814 | 11.37 | 453 | 3.46 | 840 | 0.21 | 267 | 5.18 T | 725 | 0.01 | 325 | 4.43 | 843 | 1.01 | 302 | 6.06 | 812 | 1.40 | 304 | 6.46 | 767 | 11. |
| | 22.37 | 251 | 15.28 | 669 | 22.35 | 308 | 15.16 | 766 | 23.52 | 444 | 15.58 | 816 | 12.43 | 271 | 17.48 T | 726 | 12.27 | 322 | 17.21 | 791 | 13.18 | 317 | 18.25 | 819 | 13.46 | 324 | 18.58 | 820 | |
| 12. | 10.49 | 260 | 3.44 | 647 | 10.59 | 312 | 3.31 | 779 | - | - | 4.21 | 838 | 0.56 | 285 | 6.00 T | 767 | 0.45 | 313 | 5.43 | 823 | 1.44 | 308 | 6.49 | 779 | 2.20 | 337 | 7.33 | 787 | 12. |
| | 23.05 | 274 | 16.19 | 679 | 23.15 | 346 | 16.00 | 816 | 12.10 | 448 | 16.56 | 946 | 13.20 | 298 | 18.19 T | 747 | 13.06 | 327 | 18.09 | 800 | 13.58 | 323 | 19.03 | 791 | 14.27 | 369 | 19.45 | 822 | |
| 13. | 11.27 | 296 | 4.15 | 747 | 11.30 | 300 | 3.52 | 793 | 0.35 | 478 | 4.24 | 951 | 1.32 | 295 | 6.37 T | 770 | 1.23 | 313 | 6.20 | 795 | 2.27 | 314 | 7.38 | 769 | 3.10 | 319 | 8.25 | 711 | 13. |
| | 23.37 | 293 | 16.29 | 758 | 23.30 | 362 | 16.19 | 720 | 13.01 | 478 | 17.18 | 920 | 13.56 | 298 | 19.07 T | 758 | 13.45 | 313 | 18.46 | 767 | 14.42 | 332 | 19.51 | 783 | 15.10 | 316 | 20.40 | 753 | |
| 14. | 11.49 | 288 | 4.44 | 729 | 12.13 | 356 | 4.05 | 837 | 1.18 | 451 | 5.45 | 852 | 2.06 | 315 | 7.21 T | 815 | 2.01 | 306 | 7.02 | 766 | 3.14 | 322 | 8.31 | 749 | 3.57 | 303 | 9.22 | 709 | 14. |
| | - | - | 17.09 | 708 | 23.58 | 371 | 17.00 | 764 | 13.38 | 412 | 18.32 | 792 | 14.33 | 332 | 19.36 T | 781 | 14.18 | 311 | 19.24 | 754 | 15.28 | 343 | 20.55 | 772 | 16.02 | 343 | 21.44 | 797 | |
| 15. | 0.05 | 290 | 5.17 | 736 | - | - | 4.55 | 855 | 1.52 | 405 | 6.31 | 828 | 2.21 | 350 | 7.32 | 900 | 2.37 | 304 | 7.53 | 744 | 4.18 | 333 | 9.45 | 722 | 5.03 | 348 | 10.06 | 720 | 15. |
| | 12.28 | 286 | 17.40 | 698 | 12.55 | 339 | 17.56 | 760 | 14.20 | 396 | 19.07 | 782 | 15.00 | 389 | 20.04 | 828 | 14.52 | 318 | 20.04 | 751 | 16.33 | 358 | 22.17 | 771 | 17.05 | 345 | 23.11 | 801 | |
| 16. | 0.41 | 287 | 5.50 | 705 | 1.00 | 336 | 5.53 | 794 | 2.28 | 390 | 7.18 | 807 | 3.42 | 327 | 8.51 | 758 | 3.20 | 317 | 8.43 | 732 | 5.34 | 342 | 11.18 | 732 | 5.58 | 385 | 11.45 | 797 | 16. |
| | 13.05 | 277 | 18.25 | 683 | 13.38 | 311 | 18.56 | 800 | 14.47 | 390 | 19.43 | 764 | 15.55 | 318 | 21.33 | 756 | 15.29 | 352 | 20.59 | 745 | 18.07 | 360 | 23.30 | 763 | 18.43 | 397 | - | - | |
| 17. | 1.09 | 294 | 6.29 | 728 | 1.49 | 377 | 6.40 | 870 | 3.06 | 383 | 8.00 | 798 | 4.36 | 329 | 9.48 | 749 | 4.27 | 321 | 10.00 | 716 | 7.08 | 313 | - | - | 7.10 | 350 | 0.01 | 807 | 17. |
| | 13.35 | 299 | 18.58 | 700 | 14.31 | 392 | 19.06 | 818 | 15.36 | 376 | 20.31 | 770 | 17.13 | 336 | 22.33 | 748 | 16.44 | 362 | 22.21 | 754 | 19.29 | 298 | 12.18 | 708 | 19.32 | 322 | 12.13 | 740 | |
| 18. | 1.48 | 309 | 6.54 | 731 | 2.34 | 372 | 7.36 | 856 | 3.53 | 379 | 8.43 | 781 | 6.03 | 316 | 11.22 | 723 | 5.57 | 327 | 11.24 | 716 | 7.58 | 294 | 0.17 | 721 | 8.13 | 305 | 0.54 | 748 | 18. |
| | 14.21 | 303 | 19.37 | 688 | 15.12 | 385 | 20.09 | 788 | 16.26 | 373 | 21.49 | 790 | 18.36 | 340 | - | - | 18.25 | 351 | 23.46 | 783 | 20.22 | 313 | 13.22 | 725 | 20.27 | 295 | 13.24 | 703 | |
| 19. | 2.23 | 323 | 7.55 | 738 | 3.24 | 369 | 8.22 | 807 | 4.55 | 394 | 9.56 | 832 | 7.16 | 368 | 0.01 | 786 | 7.16 | 341 | - | - | 8.59 | 297 | 1.21 | 758 | 9.02 | 311 | 1.48 | 752 | 19. |
| | 15.11 | 320 | 20.35 | 700 | 16.00 | 362 | 20.50 | 736 | 17.40 | 407 | 22.18 | 873 | 20.07 | 396 | 12.18 | 848 | 19.57 | 339 | 12.56 | 752 | 21.18 | 300 | 14.06 | 738 | 21.23 | 310 | 14.10 | 755 | |
| 20. | 3.29 | 329 | 9.04 | 720 | 4.23 | 349 | 9.23 | 727 | 5.29 | 423 | 11.15 | 851 | 8.57 | 322 | 0.55 | 830 | 8.30 | 315 | 1.09 | 762 | 9.43 | 304 | 2.27 | 764 | 9.41 | 313 | 2.31 | 767 | 20. |
| | 16.17 | 314 | 22.05 | 696 | 16.40 | 379 | 21.54 | 815 | 19.01 | 426 | 23.41 | 834 | 21.13 | 320 | 14.10 | 737 | 20.56 | 332 | 13.55 | 745 | 22.00 | 303 | 14.54 | 762 | 22.01 | 307 | 14.52 | 758 | |
| 21. | 4.54 | 327 | 10.20 | 715 | 5.37 | 416 | 10.25 | 795 | 7.53 | 386 | - | - | 9.52 | 336 | 2.18 | 771 | 9.38 | 314 | 2.02 | 781 | 10.18 | 302 | 3.03 | 771 | 10.19 | 315 | 3.17 | 760 | 21. |
| | 17.48 | 305 | 23.20 | 694 | 18.16 | 349 | 23.31 | 751 | 20.28 | 434 | 13.33 | 770 | 22.17 | 331 | 14.48 | 778 | 21.51 | 315 | 14.41 | 754 | 22.36 | 302 | 15.19 | 759 | 22.42 | 311 | 15.34 | 771 | |
| 22. | 6.14 | 314 | 11.42 | 730 | 6.55 | 334 | - | - | 9.12 | 503 | 1.07 | 936 | 10.48 | 315 | 2.59 | 783 | 10.19 | 306 | 2.56 | 776 | 10.55 | 306 | 3.37 | 779 | 10.56 | 313 | 3.50 | 770 | 22. |
| | 18.59 | 300 | - | - | 19.38 | 348 | 12.03 | 778 | 21.17 | 453 | 12.56 | 908 | 22.47 | 338 | 15.34 | 747 | 22.38 | 302 | 15.23 | 748 | 23.12 | 307 | 16.01 | 767 | 23.21 | 302 | 15.57 | 779 | |
| 23. | 7.28 | 303 | 0.32 | 712 | 8.09 | 346 | 0.36 | 807 | 10.04 | 431 | 2.10 | 813 | 11.34 | 330 | 3.22 | 838 | 11.02 | 297 | 3.39 | 772 | 11.26 | 302 | 4.08 | 763 | 11.34 | 306 | 4.26 | 762 | 23. |
| | 20.09 | 302 | 12.44 | 746 | 20.37 | 352 | 13.05 | 786 | 22.27 | 442 | 14.50 | 812 | 23.29 | 336 | 16.06 | 790 | 23.14 | 292 | 16.01 | 750 | 23.46 | 295 | 16.27 | 758 | 23.57 | 290 | 16.32 | 772 | |
| 24. | 8.36 | 319 | 1.29 | 747 | 9.28 | 381 | 1.22 | 824 | 11.08 | 450 | 3.02 | 852 | 11.57 | 341 | 4.15 | 835 | 11.35 | 294 | 4.16 | 771 | 11.52 | 302 | 4.46 | 754 | - | - | 5.03 | 736 | 24. |
| | 21.14 | 305 | 13.40 | 778 | 21.48 | 372 | 14.13 | 869 | 23.21 | 447 | 15.39 | 811 | - | - | 16.43 | 831 | 23.46 | 296 | 16.34 | 759 | - | - | 16.55 | 766 | 12.05 | 293 | 17.15 | 754 | |
| 25. | 9.45 | 289 | 2.19 | 743 | 10.09 | 350 | 2.33 | 802 | - | - | 3.56 | 818 | 0.12 | 349 | 4.45 | 853 | - | - | 4.49 | 774 | 0.11 | 303 | 5.17 | 761 | 0.25 | 288 | 5.40 | 731 | 25. |
| | 21.53 | 344 | 14.53 | 775 | 22.29 | 375 | 15.04 | 806 | 12.06 | 438 | 16.30 | 734 | 12.29 | 350 | 17.08 | 824 | 12.03 | 302 | 17.04 | 764 | 12.25 | 303 | 17.21 | 745 | 12.36 | 298 | 17.43 | 761 | |
| 26. | 10.30 | 349 | 2.48 | 944 | 11.09 | 357 | 3.04 | 827 | 0.24 | 424 | 4.40 | 723 | 0.39 | 333 | 5.29 | 822 | 0.15 | 296 | 5.16 | 766 | 0.42 | 280 | 5.48 | 719 | 1.03 | 287 | 6.15 | 715 | 26. |
| | 22.22 | 340 | 15.06 | 838 | 23.29 | 368 | 15.53 | 854 | 12.55 | 416 | 16.38 | 667 | 13.04 | 329 | 17.52 | 773 | 12.31 | 300 | 17.29 | 753 | 12.42 | 303 | 17.37 | 754 | 13.01 | 297 | 18.21 | 754 | |
| 27. | 11.07 | 317 | 3.44 | 813 | 11.53 | 362 | 4.09 | 810 | 0.29 | 423 | 5.17 | 786 | 1.11 | 319 | 6.07 | 773 | 0.45 | 296 | 5.45 | 758 | 1.11 | 302 | 6.01 | 721 | 1.35 | 292 | 6.54 | 722 | 27. |
| | 23.31 | 445 | 16.52 | 891 | - | - | 16.24 | 821 | 12.59 | 437 | 17.17 | 775 | 13.26 | 325 | 18.15 | 766 | 12.50 | 309 | 17.56 | 760 | 13.07 | 319 | 18.14 | 759 | 13.42 | 303 | 18.58 | 761 | |
| 28. | - | - | 4.04 | 949 | 0.13 | 355 | 4.52 | 819 | 1.02 | 431 | 5.44 | 809 | 1.33 | 329 | 6.22 | 782 | 1.08 | 301 | 6.14 | 748 | 1.41 | 311 | 6.45 | 722 | 2.14 | 303 | 7.33 | 729 | 28. |
| | 12.10 | 321 | 17.05 | 782 | 12.29 | 326 | 17.35 | 720 | 13.33 | 421 | 18.11 | 750 | 13.44 | 345 | 18.29 | 777 | 13.14 | 312 | 18.29 | 768 | 13.45 | 311 | 18.53 | 712 | 14.26 | 319 | 19.45 | 767 | |
| 29. | 0.26 | 270 | 5.28 | 754 | 0.38 | 345 | 5.42 | 887 | 1.38 | 405 | 6.33 | 765 | 1.54 | 347 | 6.59 | 769 | 1.29 | 329 | 6.44 | 777 | 2.05 | 301 | 7.01 | 653 | 2.53 | 327 | 8.29 | 757 | 29. |
| | 12.53 | 259 | 17.52 | 730 | 13.20 | 434 | 17.28 | 907 | 13.57 | 397 | 18.40 | 721 | 14.10 | 339 | 19.09 | 746 | 13.32 | 362 | 18.50 | 822 | 13.45 | 306 | 19.47 | 687 | 15.21 | 343 | 20.40 | 763 | |
| 30. | 0.57 | 286 | 6.16 | 839 | 1.27 | 391 | 5.48 | 887 | 2.09 | 379 | 6.50 | 712 | | | | | 1.48 | 369 | 7.11 | 802 | 2.36 | 325 | 8.19 | 697 | 3.49 | 325 | 9.28 | 740 | 30. |
| | 13.27 | 332 | 17.56 | 782 | 13.42 | 381 | 18.32 | 836 | 14.20 | 364 | 19.03 | 670 | | | | | 13.46 | 400 | 19.09 | 779 | 15.16 | 320 | 20.45 | 733 | 16.21 | 333 | 21.43 | 749 | |
| 31. | | | | | 2.15 | 350 | 6.59 | 776 | 2.23 | 349 | 7.13 | 672 | | | | | 2.18 | 371 | 8.02 | 778 | | | | | 4.59 | 311 | 10.30 | 718 | 31. |
| | | | | | 14.37 | 326 | 19.25 | 716 | 14.33 | 340 | 19.21 | 647 | | | | | 15.15 | 402 | 20.09 | 771 | | | | | 17.32 | 322 | 22.57 | 760 | |
| Mittel | | 306 | | 737 | | 362 | | 804 | | 432 | | 808 | | 322 | | 753 | | 326 | | 759 | | 312 | | 753 | | 313 | | 758 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 344 | 770 |

Winterhalbjahr: 1.11. bis 30.4.
12 Tage Treibeis

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide
cm

Pegel : Bremen, Gr. Weserbrücke
Gewässer : Weser
Gebiet : Unterweser

Nr. 4910050

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.11 | 328 | 11.41 | 782 | 6.45 | 331 | - | - | 9.11 | 324 | 1.53 | 746 | 10.44 | 309 | 3.37 | 760 | 10.53 | 314 | 3.45 | 727 | 11.27 | 302 | 4.14 | 721 | 11.38 | 314 | 4.21 | 777 | 1. |
| | 18.51 | 356 | - | - | 19.30 | 336 | 12.17 | 756 | 21.50 | 297 | 14.19 | 759 | 23.10 | 299 | 15.50 | 784 | 23.14 | 312 | 15.46 | 779 | 23.27 | 324 | 16.27 | 723 | 23.55 | 310 | 16.40 | 754 | |
| 2. | 7.37 | 330 | 0.12 | 802 | 8.11 | 321 | 0.45 | 756 | 10.07 | 316 | 2.59 | ○ 737 | 11.18 | 304 | 4.16 | 749 | 11.28 | 316 | 4.14 | 763 | 11.50 | 350 | 4.31 | 781 | - | - | 4.56 | 747 | 2. |
| | 20.04 | 331 | 12.53 | 774 | 20.44 | 303 | 13.24 | 743 | 22.44 | 318 | 15.22 | ○ 802 | 23.46 | 311 | 16.25 | 787 | 23.41 | 309 | 16.18 | 770 | - | - | 16.50 | 759 | 12.05 | 316 | 17.16 | 742 | |
| 3. | 8.38 | 312 | 1.10 | 776 | 9.14 | 302 | 1.58 | ○ 745 | 10.59 | 317 | 3.43 | 767 | 11.59 | 309 | 4.42 | 767 | 11.56 | 309 | 4.41 | 745 | 0.08 | 339 | 5.14 | 763 | 0.16 | 321 | 5.22 | 763 | 3. |
| | 20.57 | 315 | 13.54 | 763 | 21.52 | 288 | 14.35 | ○ 762 | 23.34 | 307 | 16.06 | 787 | - | - | 17.00 | 790 | - | - | 16.54 | 768 | 12.23 | 336 | 17.31 | 748 | 12.33 | 314 | 17.51 | 716 | |
| 4. | 9.37 | 317 | 2.20 | ○ 804 | 10.21 | 296 | 3.03 | 759 | 11.38 | 310 | 4.36 | 753 | 0.21 | 308 | 5.21 | 758 | 0.10 | 321 | 5.05 | 761 | 0.21 | 341 | 5.39 | 792 | 0.48 | 306 | 5.59 | 779 | 4. |
| | 22.03 | 318 | 14.58 | ○ 799 | 22.52 | 279 | 15.25 | 774 | - | - | 16.59 | 799 | 12.25 | 305 | 17.48 | 791 | 12.23 | 331 | 17.35 | 784 | 12.57 | 337 | 17.55 | 741 | 13.22 | 339 | 18.19 | 734 | |
| 5. | 10.34 | 327 | 3.12 | 825 | 11.14 | 289 | 4.00 | 754 | 0.15 | 305 | 5.15 | 756 | 0.48 | 327 | 5.59 | 799 | 0.41 | 349 | 5.32 | 758 | 0.53 | 329 | 6.00 | 768 | 1.14 | 355 | 6.22 | 754 | 5. |
| | 23.06 | 299 | 15.43 | 807 | 23.41 | 284 | 16.16 | 774 | 12.19 | 305 | 17.22 | 785 | 12.58 | 341 | 18.09 | 811 | 13.04 | 329 | 18.31 | 785 | 13.22 | 350 | 18.37 | 765 | 13.45 | 322 | 19.12 | 720 | |
| 6. | 11.27 | 285 | 4.05 | 759 | 11.59 | 293 | 4.51 | 762 | 0.51 | 303 | 5.54 | 759 | 1.14 | 333 | 6.17 | 755 | 1.12 | 388 | 5.39 | 760 | 1.29 | 351 | 6.47 | 755 | 1.43 | 364 | 7.24 | 774 | 6. |
| | 23.51 | 285 | 16.29 | 766 | - | - | 17.06 | 786 | 12.55 | 307 | 18.12 | 792 | 13.26 | 315 | 18.34 | 746 | 13.07 | 357 | 18.22 | 767 | 13.49 | 353 | 19.47 | 752 | 14.35 | 344 | 19.41 | 698 | |
| 7. | - | - | 4.58 | 769 | 0.29 | 291 | 5.35 | 751 | 1.20 | 317 | 6.20 | 760 | 1.24 | 328 | 6.31 | 754 | 1.23 | 369 | 6.27 | 770 | 1.47 | 410 | 7.46 | 795 | 2.40 | 316 | 7.48 | 683 | 7. |
| | 12.10 | 305 | 17.18 | 808 | 12.42 | 298 | 17.49 | 790 | 13.26 | 324 | 18.37 | 816 | 13.33 | 341 | 18.41 | 765 | 13.34 | 392 | 19.08 | 796 | 14.57 | 384 | 19.59 | 728 | 15.02 | 306 | 20.52 | 659 | |
| 8. | 0.47 | 290 | 5.55 | 757 | 1.12 | 291 | 6.15 | 746 | 1.52 | 329 | 6.49 | 746 | 1.59 | 335 | 7.08 | 741 | 2.05 | 390 | 7.06 | 750 | 2.52 | 384 | 8.15 | 749 | 3.22 | 344 | 8.48 | 718 | 8. |
| | 12.58 | 306 | 18.04 | 793 | 13.21 | 296 | 18.28 | 773 | 13.53 | 325 | 19.03 | 773 | 14.09 | 334 | 19.29 | 728 | 14.17 | 356 | 19.34 | 703 | 15.43 | 393 | 20.58 | 729 | 16.12 | 308 | 21.47 | 687 | |
| 9. | 1.21 | 317 | 6.16 | 741 | 1.43 | 300 | 6.51 | 741 | 2.16 | 324 | 7.25 | 742 | 2.25 | 327 | 7.48 | 714 | 2.11 | 366 | 7.43 | 768 | 4.11 | 382 | 9.28 | 738 | 4.26 | 325 | 10.31 | 738 | 9. |
| | 13.29 | 322 | 18.37 | 783 | 13.43 | 332 | 18.56 | 797 | 14.23 | 333 | 19.40 | 753 | 14.45 | 326 | 20.12 | 697 | 14.46 | 416 | 20.19 | 725 | 17.03 | 338 | 22.31 | 692 | 17.17 | 373 | 22.44 | 783 | |
| 10. | 2.06 | 319 | 7.10 | 746 | 2.20 | 332 | 7.08 | 752 | 2.48 | 330 | 7.53 | 723 | 3.02 | 335 | 8.37 | 724 | 3.31 | 378 | 9.06 | 727 | 5.42 | 337 | 11.02 | 737 | 6.04 | 383 | 11.11 | 777 | 10. |
| | 14.13 | 326 | 19.22 | 786 | 14.21 | 324 | 19.35 | 775 | 14.47 | 339 | 20.11 | 734 | 15.28 | 363 | 21.10 | 713 | 16.03 | 367 | 21.58 | 694 | 18.31 | 341 | 23.46 | 747 | 18.45 | 348 | - | - | |
| 11. | 2.50 | 307 | 7.59 | 733 | 2.53 | 320 | 7.51 | 724 | 3.20 | 329 | 8.38 | 706 | 4.08 | 369 | 10.00 | 726 | 4.59 | 356 | 10.26 | 715 | 6.58 | 349 | - | - | 7.16 | 324 | 0.06 | 730 | 11. |
| | 14.57 | 317 | 20.18 | 772 | 15.00 | 315 | 20.22 | 769 | 15.32 | 331 | 21.01 | 697 | 16.49 | 394 | 22.41 | 730 | 17.57 | 326 | 23.26 | 677 | 19.42 | 334 | 12.16 | 787 | 20.03 | 311 | 12.54 | 741 | |
| 12. | 3.32 | 314 | 8.52 | 730 | 3.30 | 329 | 8.34 | 728 | 4.07 | 319 | 9.36 | 679 | 5.48 | 386 | 11.26 | 736 | 6.29 | 318 | 11.48 | 662 | 8.06 | 339 | 0.53 | 757 | 8.36 | 309 | 1.19 | 753 | 12. |
| | 15.31 | 331 | 21.08 | 782 | 15.32 | 354 | 20.54 | 772 | 16.31 | 330 | 22.22 | 678 | 18.44 | 371 | - | - | 18.56 | 297 | - | - | 20.39 | 309 | 13.18 | 751 | 21.07 | 305 | 13.41 | 759 | |
| 13. | 4.18 | 338 | 9.39 | 735 | 4.18 | 345 | 9.25 | 710 | 5.17 | 326 | 10.54 | 680 | 7.27 | 358 | 0.18 | 724 | 8.00 | 353 | 1.02 | 732 | 9.09 | 306 | 1.50 | ● 735 | 9.31 | 307 | 2.12 | ● 760 | 13. |
| | 16.36 | 345 | 22.04 | 759 | 16.20 | 344 | 21.50 | 719 | 18.01 | 314 | 23.44 | 680 | 20.09 | 334 | 12.46 | 745 | 20.21 | 310 | 12.57 | 718 | 21.35 | 295 | 14.09 | ● 735 | 22.06 | 298 | 14.36 | ● 766 | |
| 14. | 5.15 | 331 | 10.38 | 717 | 5.02 | 344 | 10.22 | 720 | 6.51 | 312 | - | - | 8.18 | 350 | 1.31 | 729 | 8.41 | 315 | 1.39 | 703 | 10.02 | 298 | 2.42 | 758 | 10.38 | 285 | 3.06 | 761 | 14. |
| | 17.38 | 330 | 23.10 | 731 | 17.28 | 375 | 23.02 | 751 | 19.31 | 313 | 12.29 | 692 | 20.38 | 401 | 13.30 | 737 | 21.18 | 308 | 13.55 | 738 | 22.26 | 298 | 15.08 | 770 | 23.30 | 241 | 15.38 | 717 | |
| 15. | 6.25 | 307 | 11.42 | 680 | 6.20 | 354 | 11.44 | 747 | 8.03 | 315 | 0.58 | 705 | 9.29 | 380 | 1.42 | 828 | 9.35 | 322 | 2.32 | ● 730 | 10.51 | 301 | 3.33 | 774 | 11.18 | 283 | 4.40 | 662 | 15. |
| | 18.29 | 305 | - | - | 19.05 | 351 | - | - | 20.45 | 293 | 13.30 | 722 | 22.00 | 319 | 14.27 | 803 | 22.17 | 320 | 15.07 | 809 | 23.16 | 300 | 15.53 | 785 | 23.37 | 301 | 16.16 | 728 | |
| 16. | 7.18 | 314 | 0.11 | 736 | 7.24 | 356 | 0.27 | 739 | 8.49 | 323 | 2.04 | 694 | 10.10 | 315 | 3.03 | ● 758 | 10.27 | 298 | 3.09 | 746 | 11.42 | 288 | 4.17 | 775 | - | - | 4.33 | 793 | 16. |
| | 19.42 | 335 | 12.34 | 724 | 20.10 | 359 | 12.46 | 751 | 21.38 | 310 | 14.05 | 754 | 22.39 | 309 | 15.17 | ● 778 | 22.39 | 314 | 15.33 | 739 | - | - | 16.45 | 768 | 12.13 | 306 | 17.15 | 788 | |
| 17. | 8.14 | 331 | 0.58 | 746 | 8.31 | 358 | 1.22 | 736 | 9.53 | 316 | 2.51 | ● 741 | 10.54 | 334 | 3.43 | 767 | 11.23 | 314 | 3.42 | 829 | 0.02 | 298 | 4.57 | 772 | 0.34 | 323 | 5.26 | 820 | 17. |
| | 20.56 | 328 | 13.40 | 741 | 21.13 | 354 | 13.49 | 775 | 22.25 | 304 | 15.02 | ● 772 | 23.23 | 312 | 15.59 | 812 | 23.30 | 308 | 16.04 | 771 | 12.33 | 282 | 17.46 | 752 | 13.07 | 312 | 17.58 | 770 | |
| 18. | 9.01 | 312 | 1.53 | 731 | 9.33 | 346 | 2.14 | 762 | 10.39 | 302 | 3.37 | 745 | 11.37 | 319 | 4.22 | 762 | 11.58 | 293 | 4.34 | 769 | 0.43 | 311 | 5.55 | 793 | 1.16 | 321 | 6.18 | 818 | 18. |
| | 21.44 | 316 | 14.30 | 747 | 21.57 | 349 | 14.34 | 760 | 23.05 | 299 | 15.46 | 764 | 23.49 | 339 | 16.50 | 805 | - | - | 17.05 | 782 | 13.06 | 315 | 18.19 | 774 | 13.52 | 328 | 18.45 | 762 | |
| 19. | 9.55 | 312 | 2.52 | ● 759 | 10.08 | 356 | 2.56 | ● 748 | 11.20 | 307 | 4.12 | 771 | - | - | 5.00 | 821 | 0.19 | 303 | 5.19 | 777 | 1.27 | 327 | 6.28 | 780 | 1.56 | 329 | 7.04 | 774 | 19. |
| | 22.21 | 303 | 15.03 | ● 755 | 22.50 | 411 | 15.18 | ● 830 | 23.46 | 301 | 16.35 | 789 | 12.16 | 347 | 17.10 | 833 | 12.37 | 297 | 17.40 | 776 | 14.01 | 306 | 18.56 | 693 | 14.31 | 323 | 19.22 | 707 | |
| 20. | 10.37 | 305 | 3.32 | 745 | 10.58 | 368 | 3.36 | 807 | 11.58 | 319 | 4.55 | 769 | 0.40 | 318 | 5.57 | 780 | 0.58 | 298 | 6.01 | 772 | 2.01 | 286 | 7.23 | 725 | 2.43 | 314 | 7.42 | 710 | 20. |
| | 23.02 | 298 | 15.42 | 768 | 23.27 | 345 | 16.00 | 809 | - | - | 17.14 | 814 | 12.49 | 314 | 18.04 | 785 | 13.16 | 302 | 18.25 | 770 | 14.42 | 296 | 20.04 | 725 | 15.27 | 304 | 19.47 | 614 | |
| 21. | 11.17 | 296 | 4.08 | 748 | 11.37 | 351 | 4.29 | 783 | 0.25 | 309 | 5.26 | 770 | 1.20 | 306 | 6.27 | 749 | 1.39 | 310 | 6.43 | 768 | 2.53 | 333 | 7.55 | 731 | 3.16 | 290 | 8.21 | 635 | 21. |
| | 23.46 | 275 | 16.24 | 758 | - | - | 16.47 | 806 | 12.37 | 304 | 17.41 | 787 | 13.35 | 308 | 18.41 | 758 | 14.09 | 307 | 19.28 | 735 | 15.32 | 293 | 20.59 | 682 | 15.59 | 297 | 20.31 | 616 | |
| 22. | 11.32 | 322 | 4.55 | 730 | 0.09 | 331 | 5.08 | 767 | 1.01 | 297 | 6.18 | 775 | 1.51 | 308 | 6.59 | 761 | 2.16 | 309 | 7.36 | 734 | 3.26 | 352 | 9.01 | 817 | 3.49 | 311 | 9.11 | 665 | 22. |
| | - | - | 16.39 | 752 | 12.17 | 327 | 17.15 | 786 | 13.04 | 328 | 18.14 | 827 | 14.11 | 331 | 19.31 | 764 | 14.47 | 307 | 20.14 | 711 | 16.45 | 337 | 21.42 | 679 | 16.33 | 320 | 21.14 | 623 | |
| 23. | 0.02 | 300 | 5.11 | 724 | 0.46 | 310 | 5.48 | 740 | 1.39 | 321 | 6.36 | 773 | 2.31 | 333 | 7.50 | 745 | 2.59 | 319 | 8.31 | 739 | 4.42 | 318 | 10.06 | 675 | 5.07 | 297 | 9.47 | 618 | 23. |
| | 12.18 | 315 | 17.28 | 772 | 12.45 | 319 | 17.48 | 785 | 13.48 | 327 | 19.05 | 805 | 14.53 | 316 | 20.21 | 710 | 15.47 | 309 | 21.08 | 689 | 17.28 | 335 | 23.03 | 727 | 16.19 | 350 | 21.59 | 694 | |
| 24. | 0.52 | 309 | 5.54 | 738 | 1.17 | 315 | 6.23 | 764 | 2.18 | 312 | 7.25 | 754 | 3.20 | 308 | 8.11 | 644 | 4.00 | 330 | 9.47 | 740 | 6.02 | 354 | 11.24 | 760 | 6.01 | 397 | 11.10 | 767 | 24. |
| | 13.02 | 312 | 18.13 | 769 | 13.28 | 325 | 18.30 | 784 | 14.24 | 316 | 19.44 | 760 | 15.20 | 284 | 21.05 | 611 | 17.08 | 321 | 22.42 | 701 | 18.51 | 328 | - | - | 18.59 | 387 | - | - | |
| 25. | 1.23 | 344 | 6.37 | 773 | 1.54 | 314 | 7.04 | 758 | 2.52 | 314 | 8.16 | 743 | 2.24 | 393 | 8.42 | 671 | 5.29 | 342 | 11.20 | 762 | 7.30 | 289 | 0.08 | 705 | 8.25 | 420 | 0.09 | 742 | 25. |
| | 13.29 | 364 | 18.29 | 838 | 14.05 | 321 | 19.10 | 790 | 15.10 | 327 | 20.22 | 759 | 16.27 | 350 | 22.12 | 679 | 18.32 | 361 | - | - | 18.41 | 414 | 12.53 | 658 | 19.59 | 411 | 12.54 | 760 | |
| 26. | 2.09 | 352 | 7.06 | 774 | 2.36 | 322 | 7.43 | 756 | 3.30 | 345 | 8.44 | 725 | 6.03 | 333 | 11.10 | 706 | 7.32 | 347 | 0.29 | 788 | 8.13 | 353 | 0.09 | 790 | 8.41 | 441 | 1.00 | 777 | 26. |
| | 14.13 | 341 | 19.27 | 783 | 14.42 | 326 | 20.01 | 765 | 15.54 | 362 | 21.37 | 772 | 18.40 | 311 | - | - | 19.33 | 315 | 12.25 | 760 | 20.41 | 317 | 13.03 | 753 | 20.43 | 440 | 13.23 | 797 | |
| 27. | 2.52 | 313 | 8.06 | 729 | 3.17 | 311 | 8.31 | 717 | 4.53 | 362 | 10.08 | 738 | 7.27 | 328 | 0.12 | 699 | 7.54 | 334 | 1.04 | 723 | 9.08 | 318 | 1.50 | 759 | 8.42 | 454 | 1.22 | 778 | 27. |
| | 14.57 | 312 | 20.19 | 764 | 15.28 | 313 | 20.52 | 757 | 17.30 | 320 | 22.59 | 691 | 20.09 | 319 | 12.47 | 740 | 20.24 | 333 | 13.24 | 763 | 21.22 | 308 | 14.16 | 749 | 21.45 | 417 | 13.39 | 806 | |
| 28. | 3.36 | 317 | 8.49 | 731 | 4.04 | 327 | 9.39 | 762 | 6.20 | 297 | 11.52 | 710 | 8.39 | 335 | 1.33 | 755 | 8.51 | 323 | 1.38 | 743 | 9.45 | 315 | 2.39 | ○ 746 | 10.18 | 408 | 2.25 | ○ 815 | 28. |
| | 15.47 | 313 | 21.06 | 737 | 16.34 | 350 | 21.50 | 746 | 19.01 | 330 | - | - | 21.05 | 319 | 13.44 | 759 | 21.18 | 306 | 14.06 | 765 | 22.00 | 321 | 15.03 | ○ 752 | 22.31 | 380 | 14.48 | ○ 744 | |
| 29. | 4.26 | 299 | 9.58 | 743 | 5.03 | 334 | 10.33 | 726 | 7.52 | 350 | 0.35 | 766 | 9.26 | 336 | 2.25 | 732 | 9.33 | 310 | 2.26 | ○ 723 | 10.27 | 322 | 3.16 | 769 | 10.42 | 392 | 3.08 | 725 | 29. |
| | 17.09 | 322 | 22.31 | 757 | 17.37 | 342 | 23.13 | 746 | 20.33 | 320 | 13.03 | 760 | 21.53 | 355 | 14.46 | 816 | 21.54 | 327 | 14.43 | ○ 753 | 22.41 | 328 | 15.44 | 765 | 22.59 | 396 | 15.32 | 749 | |
| 30. | 5.35 | 323 | 11.03 | 733 | 6.25 | 334 | 11.51 | 732 | 9.05 | 341 | 1.58 | 753 | 10.17 | 332 | 3.03 | ○ 791 | 10.22 | 331 | 3.06 | 776 | 11.06 | 315 | 3.50 | 775 | 11.24 | 424 | 3.38 | 845 | 30. |
| | 18.12 | 324 | 23.32 | 758 | 19.10 | 340 | - | - | 21.28 | 322 | 14.12 | 755 | 22.38 | 311 | 15.13 | ○ 773 | 22.37 | 319 | 15.20 | 787 | 23.16 | 310 | 16.11 | 761 | 23.38 | 431 | 15.36 | 841 | |
| 31. | | | | | 7.55 | 337 | 0.35 | 739 | 9.53 | 329 | 2.40 | ○ 767 | | | | | 10.56 | 317 | 3.39 | 764 | | | | | 11.51 | 427 | 3.49 | 838 | 31. |
| | | | | | 20.38 | 323 | 13.06 | 757 | 22.28 | 325 | 15.14 | ○ 814 | | | | | 23.06 | 309 | 15.57 | 743 | | | | | - | - | 16.07 | 763 | |
| Mittel | | 318 | | 759 | | 328 | | 760 | | 319 | | 752 | | 332 | | 753 | | 328 | | 750 | | 329 | | 749 | | 343 | | 742 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 323 | 755 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide

cm

Pegel : Bremen, Gr. Weserbrücke — Nr. 4910050

Gewässer : Weser

Gebiet : Unterweser

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 1. | 1. | 31. | 31. | 11. | 1. | 23. | 3. | 26. | 29. | 8. | 1. | 21. | 15. | 4. | 13. | 15. | 12. | 24. | 24. | 18. | 12. | 17. | 25. | 14. | 20. |
| N | 251 | 647 | 265 | 703 | 340 | 647 | 267 | 649 | 292 | 637 | 280 | 653 | 267 | 668 | 275 | 680 | 279 | 710 | 293 | 678 | 284 | 611 | 293 | 662 | 282 | 658 | 241 | 614 |
| M | 306 | 737 | 362 | 804 | 432 | 808 | 322 | 753 | 326 | 759 | 312 | 753 | 313 | 758 | 318 | 759 | 328 | 760 | 319 | 752 | 332 | 753 | 328 | 750 | 329 | 749 | 343 | 742 |
| H | 445 | 949 | 471 | 936 | 625 | 951 | 396 | 900 | 402 | 843 | 383 | 843 | 397 | 822 | 364 | 838 | 411 | 830 | 362 | 827 | 401 | 833 | 416 | 829 | 414 | 817 | 454 | 845 |
| Tag | 27. | 28. | 4. | 10. | 5. | 13. | 19. | 15. | 31. | 11. | 2. | 7. | 16. | 12. | 25. | 25. | 19. | 19. | 26.+ | 22. | 14. | 19. | 9. | 17. | 25. | 22. | 27. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2002 | 2008 | 2010 | 2009 | 2004 | 2009 | 2007 | 2004 | 2004 | 2007 | 2004 | 2012 | 2011 | 2009+ | 2003 | 2010 | 2004 | 2009 | 2005 | 2010 | 2012 | 2011+ | 2011 | 2011 | 2005 | 2008+ | 2010 |
| N | 251 | 584 | 241 | 592 | 240 | 582 | 247 | 593 | 274 | 629 | 268 | 632 | 267 | 644 | 275 | 678 | 268 | 664 | 269 | 664 | 265 | 611 | 235 | 587 | 251 | 604 | 241 | 592 |
| MN | 288 | 644 | 283 | 648 | 294 | 653 | 291 | 645 | 305 | 658 | 287 | 666 | 284 | 668 | 288 | 690 | 284 | 694 | 291 | 683 | 282 | 658 | 272 | 639 | 286 | 652 | 279 | 650 |
| M | 352 | 757 | 350 | 755 | 387 | 770 | 354 | 755 | 356 | 762 | 329 | 753 | 322 | 753 | 323 | 757 | 325 | 756 | 330 | 754 | 332 | 751 | 333 | 748 | 344 | 756 | 350 | 759 |
| MH | 483 | 905 | 462 | 887 | 503 | 892 | 457 | 897 | 450 | 888 | 393 | 844 | 380 | 831 | 390 | 844 | 384 | 842 | 394 | 846 | 425 | 843 | 433 | 863 | 475 | 899 | 463 | 892 |
| H | 569 | 1008 | 544 | 949 | 625 | 961 | 567 | 966 | 631 | 964 | 464 | 904 | 429 | 865 | 500 | 882 | 415 | 885 | 416 | 873 | 489 | 883 | 475 | 933 | 569 | 1008 | 544 | 949 |
| Jahr | 2006 | 2007 | 2003 | 2005 | 2012 | 2007 | 2008 | 2004 | 2008 | 2007 | 2006 | 2003 | 2004 | 2006 | 2007 | 2007 | 2007 | 2005+ | 2009 | 2008 | 2004 | 2004 | 2005 | 2009 | 2006 | 2007 | 2003 | 2005 |
| HThw ab 1901 | 1008 | | 981 | | 1043 | | 1041 | | 964 | | 965 | | 865 | | 902 | | 885 | | 903 | | 946 | | 955 | | 1008 | | 981 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 251 | 11.11.2011 | 251 | 267 | 241 | 14.12.2012 |
| NThw | 611 | 24.09.2012 | 637 | 611 | 611 | 24.09.2012 |
| M | 333 | 762 | 344 | 770 | 323 | 755 | 334 | 758 |
| HTnw | 625 | 05.01.2012 | 625 | 416 | 625 | 05.01.2012 |
| HThw | 951 | 13.01.2012 | 951 | 838 | 951 | 13.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 235 | +24.10.2011 | 240 | 235 | 235 | +24.10.2011 |
| NThw | 582 | 01.01.2004 | 582 | 587 | 582 | 01.01.2004 |
| MN | 254 | 599 | 262 | 604 | 262 | 630 | 250 | 602 |
| M | 341 | 756 | 355 | 759 | 328 | 753 | 340 | 756 |
| MH | 550 | 950 | 550 | 946 | 455 | 884 | 554 | 959 |
| HTnw | 631 | 01.03.2008 | 631 | 500 | 631 | 01.03.2008 |
| HThw | 1008 | 09.11.2007 | 1008 | 933 | 1008 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | | Datum | NThw cm | | Datum | HTnw cm | Datum | HThw cm | Datum |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 188 | e | 25.01.1996 | 435 | e | 07.12.1959 | 1280 | 13.03.1881 | 1282 | 13.03.1881 |
| 2 | 190 | e | 26.01.1996 | 442 | e | 18.11.1916 | 1004 | 23.01.1918 | 1043 | 28.01.1994 |
| 3 | 192 | e | 10.02.1996 | 454 | e | 01.02.1950 | 1000 | 23.01.1918 | 1041 | 17.02.1962 |
| 4 | 192 | e | 08.12.1959 | 460 | e | 19.11.1916 | 997 | 24.01.1918 | 1033 | 03.01.1976 |
| 5 | 196 | e | 08.12.1978 | 477 | e | 26.01.1922 | 987 | 24.01.1918 | 1016 | 23.01.1918 |
| 6 | 200 | | 15.03.1964 | 491 | | 25.01.1937 | 985 | 06.01.1926 | 1013 | 24.01.1918 |
| 7 | 201 | | 10.02.1996 | 494 | | 15.03.1964 | 984 | 06.01.1926 | 1011 | 21.01.1976 |
| 8 | 201 | | 26.01.1996 | 495 | | 19.10.1908 | 975 | 25.01.1918 | 1008 | 09.11.2007 |
| 9 | 201 | | 17.01.1972 | 497 | | 26.01.1922 | 975 | 22.01.1918 | 1005 | 28.02.1990 |
| 10 | 205 | | 25.01.1996 | 499 | | 19.01.1963 | 969 | 07.01.1926 | 1005 | 24.01.1918 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | 60 | | | | | | | | | | | | 352 | | 708 | 707 | 705.8 |
| 620 | | | 59 | | | | | | | | | | | | 351 | | 707 | 706 | 705.6 |
| 600 | | | 59 | | | | | | | | | | | | 351 | | 707 | 706 | 705.6 |
| 580 | | | 58 | | | | | | | | | | | | 350 | | 706 | 705 | 705.2 |
| 560 | | | 57 | | | | | | | | | | | | 349 | | 705 | 704 | 704.6 |
| 540 | | | 57 | | | | | | | | | | | | 349 | | 705 | 704 | 703.6 |
| 520 | | | 56 | | | | | | | | | | | | 348 | | 704 | 703 | 701.2 |
| 500 | | | 55 | | | | | | | | | | | | 347 | | 703 | 702 | 698.2 |
| 480 | | 60 | 53 | | | | | | | | | | | | 345 | | 701 | 700 | 694.8 |
| 460 | 58 | 58 | 48 | | | | | | | | | | | 59 | 338 | | 694 | 695 | 688.7 |
| 440 | 57 | 57 | 37 | | | | | | | | | | | 56 | 325 | | 681 | 681 | 678.1 |
| 420 | 57 | 56 | 25 | | 60 | | | | 60 | | 58 | 60 | 58 | 52 | 312 | 356 | 668 | 665 | 663.6 |
| 400 | 57 | 55 | 18 | 56 | 58 | 58 | 60 | | 59 | | 57 | 59 | 56 | 49 | 302 | 353 | 655 | 648 | 639.2 |
| 380 | 57 | 45 | 10 | 54 | 58 | 57 | 58 | 58 | 59 | 60 | 53 | 56 | 52 | 43 | 281 | 344 | 625 | 618 | 598.1 |
| 360 | 57 | 29 | 3 | 53 | 53 | 55 | 57 | 57 | 57 | 58 | 50 | 51 | 52 | 41 | 250 | 330 | 580 | 587 | 537.0 |
| 340 | 52 | 15 | | 44 | 47 | 50 | 52 | 52 | 39 | 55 | 43 | 44 | 42 | 36 | 208 | 285 | 493 | 504 | 425.1 |
| 320 | 41 | 7 | | 23 | 30 | 44 | 45 | 35 | 20 | 32 | 25 | 31 | 25 | 25 | 145 | 188 | 333 | 335 | 256.3 |
| 300 | 25 | 1 | | 14 | 7 | 13 | 17 | 8 | 10 | 5 | 2 | 5 | 10 | 7 | 60 | 47 | 107 | 98 | 81.2 |
| 280 | 8 | 1 | | 4 | | | 3 | 1 | 1 | | | | | 1 | 13 | 5 | 18 | 10 | 12.5 |
| 260 | 2 | | | | | | | | | | | | | 1 | 2 | | 2 | 1 | 2.2 |
| 240 | | | | | | | | | | | | | | | | | | | 0.3 |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | 705.9 |
| 1000 | | | | | | | | | | | | | | | | | | | 705.8 |
| 980 | | | | | | | | | | | | | | | | | | | 705.7 |
| 960 | 58 | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.3 |
| 940 | 56 | 60 | 58 | | | | | | | | | | | | 348 | | 703 | 705 | 704.3 |
| 920 | 56 | 59 | 55 | 56 | | | | | | | | | | | 344 | | 699 | 702 | 703.2 |
| 900 | 56 | 58 | 53 | 55 | | | | | | | | | | | 340 | | 695 | 699 | 700.4 |
| 880 | 55 | 53 | 52 | 55 | | | | | | | | | | | 333 | | 688 | 698 | 696.0 |
| 860 | 55 | 50 | 49 | 55 | 60 | 58 | | | | | | | | 60 | 327 | | 682 | 695 | 689.1 |
| 840 | 55 | 46 | 43 | 53 | 59 | 57 | 60 | 58 | 59 | 60 | 58 | 60 | | 58 | 313 | 355 | 668 | 683 | 675.7 |
| 820 | 53 | 41 | 38 | 46 | 55 | 57 | 58 | 56 | 58 | 59 | 55 | 59 | 58 | 56 | 290 | 345 | 635 | 655 | 645.6 |
| 800 | 52 | 28 | 24 | 45 | 50 | 51 | 56 | 52 | 55 | 54 | 50 | 58 | 57 | 53 | 250 | 325 | 575 | 605 | 597.6 |
| 780 | 50 | 21 | 18 | 40 | 46 | 47 | 47 | 45 | 47 | 48 | 42 | 52 | 49 | 49 | 222 | 281 | 503 | 530 | 533.7 |
| 760 | 47 | 11 | 11 | 31 | 31 | 30 | 29 | 33 | 32 | 33 | 33 | 30 | 35 | 33 | 161 | 190 | 351 | 361 | 386.0 |
| 740 | 38 | 8 | 8 | 22 | 12 | 22 | 15 | 16 | 11 | 17 | 19 | 22 | 19 | 23 | 110 | 100 | 210 | 206 | 240.7 |
| 720 | 26 | 2 | 5 | 15 | 8 | 10 | 7 | 2 | 3 | 11 | 10 | 10 | 7 | 17 | 66 | 43 | 109 | 105 | 133.5 |
| 700 | 14 | | 4 | 10 | 5 | 4 | 1 | 1 | | 8 | 6 | 4 | 6 | 12 | 37 | 20 | 57 | 61 | 68.2 |
| 680 | 3 | | 4 | 5 | 1 | 1 | 1 | | | 2 | 4 | 2 | 3 | 8 | 14 | 9 | 23 | 31 | 28.0 |
| 660 | 1 | | 1 | 3 | 1 | 1 | | | | | 2 | | 1 | 6 | 7 | 2 | 9 | 15 | 12.7 |
| 640 | | | | | 1 | | | | | | 1 | | | 5 | 1 | 1 | 2 | 7 | 5.0 |
| 620 | | | | | | | | | | | 1 | | | 3 | | 1 | 1 | 4 | 2.5 |
| 600 | | | | | | | | | | | | | | | | | | | 1.1 |
| 580 | | | | | | | | | | | | | | | | | | | |
| 560 | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

**) Extremwerte ab 1901

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide

cm

Pegel : Vegesack

Gewässer : Weser

Gebiet : Unterweser

Nr. 4950010

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | Jan Thw | Feb Tnw | Feb Thw | Mrz Tnw | Mrz Thw | Apr Tnw | Apr Thw | Mai Tnw | Mai Thw | Jun Tnw | Jun Thw | Jul Tnw | Jul Thw | Aug Tnw | Aug Thw | Sep Tnw | Sep Thw | Okt Tnw | Okt Thw | Nov Tnw | Nov Thw | Dez Tnw | Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 1. | 1. | 26. | 31. | 10. | 1. | 7. | 3. | 25. | 29. | 8. | 1. | 21. | 15. | 4. | 13. | 28. | 12. | 24. | 24. | 18. | 12. | 17. | 25. | 14. | 20. |
| N | 268 | 631 | 280 | 684 | 287 | 630 | 254 | 633 | 289 | 618 | 287 | 630 | 274 | 648 | 290 | 663 | 294 | 690 | 307 | 660 | 292 | 597 | 307 | 645 | 295 | 640 | 237 | 596 |
| M | 320 | 718 | 366 | 784 | 384 | 786 | 313 | 730 | 323 | 734 | 318 | 728 | 321 | 732 | 329 | 735 | 337 | 736 | 332 | 729 | 344 | 730 | 340 | 728 | 339 | 728 | 335 | 719 |
| H | 455 | 921 | 477 | 916 | 619 | 927 | 392 | 855 | 403 | 808 | 384 | 803 | 402 | 791 | 373 | 805 | 414 | 797 | 374 | 794 | 407 | 802 | 421 | 795 | 418 | 786 | 420 | 812 |
| Tag | 27. | 28. | 9. | 10. | 5. | 13. | 19. | 15. | 31. | 11. | 2. | 7. | 16. | 11. | 25. | 25. | 19. | 19. | 27. | 22. | 25. | 15. | 9. | 17. | 25. | 22. | 27. | 30.+ |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2002 | 2002 | 2008 | 2010 | 2010 | 2004 | 2009+ | 2007 | 2006 | 2012 | 2004 | 2004 | 2012 | 2008+ | 2012 | 2012 | 2010 | 2004 | 2009 | 2005 | 2010 | 2012 | 2011 | 2011 | 2011 | 2005 | 2008 | 2010 |
| N | 254 | 566 | 234 | 574 | 231 | 574 | 254 | 580 | 274 | 618 | 271 | 624 | 274 | 636 | 290 | 663 | 287 | 650 | 290 | 652 | 269 | 597 | 238 | 579 | 268 | 600 | 234 | 574 |
| MN | 292 | 632 | 280 | 636 | 283 | 639 | 278 | 632 | 290 | 644 | 290 | 653 | 296 | 657 | 304 | 679 | 302 | 681 | 310 | 671 | 298 | 647 | 286 | 629 | 296 | 639 | 280 | 637 |
| M | 353 | 740 | 348 | 739 | 362 | 751 | 338 | 736 | 339 | 742 | 327 | 736 | 332 | 736 | 338 | 741 | 342 | 739 | 346 | 738 | 347 | 734 | 345 | 731 | 352 | 739 | 350 | 741 |
| MH | 483 | 888 | 457 | 866 | 477 | 870 | 443 | 873 | 436 | 866 | 390 | 818 | 384 | 806 | 399 | 821 | 398 | 819 | 404 | 820 | 434 | 820 | 438 | 844 | 481 | 882 | 459 | 869 |
| H | 572 | 1003 | 543 | 927 | 619 | 948 | 545 | 944 | 626 | 952 | 427 | 888 | 421 | 838 | 505 | 874 | 423 | 870 | 431 | 847 | 495 | 872 | 486 | 916 | 572 | 1003 | 543 | 927 |
| Jahr | 2006 | 2007 | 2003 | 2005 | 2012 | 2007 | 2008 | 2004 | 2008 | 2008 | 2011 | 2003 | 2007 | 2006 | 2007 | 2007 | 2005+ | 2005 | 2009 | 2008 | 2004 | 2004 | 2005 | 2009 | 2006 | 2007 | 2003 | 2005 |
| HThw ab 1949 | 1003 | | 971 | | 1033 | | 1022 | | 952 | | 944 | | 840 | | 881 | | 870 | | 892 | | 918 | | 940 | | 1003 | | 971 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 254 | 10.02.2012 | 254 | 274 | 237 | 14.12.2012 |
| NThw | 597 | 24.09.2012 | 618 | 597 | 596 | 20.12.2012 |
| M | 336 739 | | 338 747 | 334 732 | 335 735 | |
| HTnw | 619 | 05.01.2012 | 619 | 421 | 619 | 05.01.2012 |
| HThw | 927 | 13.01.2012 | 927 | 805 | 927 | 13.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 231 | 16.01.2010 | 231 | 238 | 231 | 16.01.2010 |
| NThw | 566 | 03.11.2002 | 566 | 579 | 574 | 01.01.2004 |
| MN | 252 588 | | 255 591 | 275 620 | 254 591 | |
| M | 343 739 | | 344 741 | 342 736 | 343 739 | |
| MH | 537 932 | | 537 928 | 463 866 | 544 941 | |
| HTnw | 626 | 01.03.2008 | 626 | 505 | 626 | 01.03.2008 |
| HThw | 1003 | 09.11.2007 | 1003 | 916 | 1003 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | 171 | 15.03.1964 | 413 | 18.01.1912 | 753 | 17.02.1962 | 1033 | 28.01.1994 |
| 2 | 181 | 02.03.1987 | 415 | 18.11.1916 | 730 | 14.01.1916 | 1022 | 17.02.1962 |
| 3 | 194 | 15.02.1994 | 425 | 18.01.1912 | 701 | 16.02.1962 | 1013 | 03.01.1976 |
| 4 | 194 | 08.12.1959 | 428 | 07.12.1959 | 694 | 13.03.1906 | 1003 | 09.11.2007 |
| 5 | 197 | 15.02.1994 | 428 | 30.12.1908 | 694 | 07.01.1905 | 1000 | 10.01.1995 |
| 6 | 198 | 10.02.1996 | 440 | 16.01.1905 | 690 | 23.12.1954 | 997 | 28.02.1990 |
| 7 | 200 | 25.01.1996 | 449 | 25.01.1937 | 690 | 10.10.1926 | 994 | 21.01.1976 |
| 8 | 200 | 09.01.1970 | 450 | 01.02.1950 | 683 | 10.02.1949 | 985 | 01.11.2006 |
| 9 | 201 | 14.03.1964 | 450 | 26.01.1922 | 682 | 06.01.1926 | 985 | 23.01.1993 |
| 10 | 203 | 26.01.1996 | 451 | 11.11.1941 | 682 | 05.01.1926 | 980 | 27.02.1990 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | | | | | | | | | | | | | | | | | 705.9 |
| 620 | | | 60 | | | | | | | | | | | | 352 | | 708 | 708 | 705.8 |
| 600 | | | 59 | | | | | | | | | | | | 351 | | 707 | 707 | 705.7 |
| 580 | | | 58 | | | | | | | | | | | | 350 | | 706 | 706 | 705.6 |
| 560 | | | 58 | | | | | | | | | | | | 350 | | 706 | 706 | 705.5 |
| 540 | | | 57 | | | | | | | | | | | | 349 | | 705 | 705 | 704.9 |
| 520 | | | 56 | | | | | | | | | | | | 348 | | 704 | 704 | 704.5 |
| 500 | | | 56 | | | | | | | | | | | | 348 | | 704 | 704 | 703.6 |
| 480 | | 60 | 55 | | | | | | | | | | | | 347 | | 703 | 703 | 702.3 |
| 460 | 58 | 57 | 54 | | | | | | | | | | | | 343 | | 699 | 702 | 699.5 |
| 440 | 57 | 56 | 51 | | | | | | | | | 60 | | 60 | 338 | 356 | 694 | 699 | 694.9 |
| 420 | 57 | 56 | 49 | | 60 | | 60 | | 60 | | 58 | 59 | 58 | 59 | 336 | 355 | 691 | 695 | 685.8 |
| 400 | 57 | 53 | 42 | 56 | 59 | 58 | 59 | | 59 | | 55 | 58 | 56 | 56 | 325 | 349 | 674 | 676 | 662.7 |
| 380 | 57 | 41 | 36 | 54 | 58 | 57 | 58 | 58 | 58 | 60 | 52 | 55 | 52 | 49 | 303 | 341 | 644 | 647 | 623.8 |
| 360 | 54 | 28 | 25 | 53 | 54 | 53 | 57 | 55 | 49 | 57 | 47 | 46 | 46 | 43 | 267 | 311 | 578 | 585 | 536.7 |
| 340 | 46 | 12 | 15 | 50 | 48 | 50 | 50 | 45 | 32 | 44 | 29 | 38 | 29 | 38 | 221 | 238 | 459 | 468 | 371.4 |
| 320 | 33 | 4 | 7 | 31 | 35 | 40 | 31 | 16 | 15 | 12 | 2 | 10 | 15 | 20 | 150 | 86 | 236 | 234 | 149.9 |
| 300 | 9 | 1 | 3 | 16 | 8 | 9 | 6 | 3 | 2 | | 1 | | 3 | 9 | 46 | 12 | 58 | 60 | 36.7 |
| 280 | 3 | | | 9 | | | 1 | | | | | | | 5 | 12 | 1 | 13 | 15 | 7.2 |
| 260 | | | | 3 | | | | | | | | | | 2 | 3 | | 3 | 5 | 2.0 |
| 240 | | | | | | | | | | | | | | 1 | | | | 1 | 0.4 |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | 705.9 |
| 1000 | | | | | | | | | | | | | | | | | | | 705.8 |
| 980 | | | | | | | | | | | | | | | | | | | 705.7 |
| 960 | | | | | | | | | | | | | | | | | | | 705.7 |
| 940 | 58 | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.3 |
| 920 | 57 | 60 | 58 | | | | | | | | | | | | 349 | | 704 | 705 | 704.4 |
| 900 | 56 | 59 | 56 | | | | | | | | | | | | 345 | | 700 | 703 | 703.1 |
| 880 | 56 | 58 | 54 | | | | | | | | | | | | 342 | | 697 | 701 | 701.0 |
| 860 | 55 | 54 | 53 | 56 | | | | | | | | | | | 336 | | 691 | 700 | 697.5 |
| 840 | 55 | 50 | 49 | 55 | | | | | | | | | | | 327 | | 682 | 695 | 691.1 |
| 820 | 55 | 46 | 44 | 53 | 60 | 58 | | 58 | | | 58 | | | 60 | 316 | 355 | 671 | 688 | 680.5 |
| 800 | 53 | 41 | 39 | 51 | 59 | 57 | 60 | 57 | 59 | 60 | 56 | 60 | 58 | 57 | 300 | 352 | 652 | 673 | 657.3 |
| 780 | 52 | 30 | 24 | 45 | 54 | 54 | 58 | 56 | 56 | 56 | 52 | 58 | 57 | 54 | 259 | 336 | 595 | 624 | 599.7 |
| 760 | 51 | 19 | 20 | 43 | 47 | 50 | 48 | 48 | 49 | 48 | 44 | 53 | 49 | 49 | 230 | 290 | 520 | 548 | 522.0 |
| 740 | 47 | 13 | 11 | 31 | 35 | 36 | 36 | 35 | 38 | 36 | 37 | 31 | 37 | 38 | 173 | 213 | 386 | 401 | 365.2 |
| 720 | 38 | 7 | 8 | 22 | 14 | 22 | 18 | 17 | 13 | 19 | 19 | 23 | 19 | 26 | 111 | 109 | 220 | 220 | 214.3 |
| 700 | 26 | 1 | 6 | 14 | 9 | 13 | 9 | 2 | 2 | 11 | 10 | 10 | 7 | 17 | 69 | 44 | 113 | 110 | 111.0 |
| 680 | 11 | | 4 | 8 | 5 | 4 | 1 | 1 | | 8 | 5 | 4 | 6 | 12 | 32 | 19 | 51 | 58 | 50.1 |
| 660 | 2 | | 4 | 5 | 1 | 1 | 1 | | | | 3 | 1 | 2 | 8 | 13 | 5 | 18 | 26 | 21.2 |
| 640 | 1 | | 2 | 2 | 1 | 1 | | | | | 2 | | | 5 | 7 | 2 | 9 | 13 | 8.7 |
| 620 | | | | | 1 | | | | | | 1 | | | 5 | 1 | 1 | 2 | 7 | 3.5 |
| 600 | | | | | | | | | | | 1 | | | 3 | | 1 | 1 | 4 | 1.9 |
| 580 | | | | | | | | | | | | | | | | | | | 0.5 |
| 560 | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

**)Extremwerte ab 1905

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide
cm

Pegel : Vegesack
Gewässer : Weser
Gebiet : Unterweser

Nr. 4950010

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.45 | 308 | 6.14 | 731 | 0.50 | 320 | 6.07 | 724 | 1.40 | 343 | 7.14 | 786 | 1.57 | 290 | 7.43 | 653 | 1.39 | 325 | 7.17 | 721 | 2.40 | 360 | 8.24 | 688 | 3.34 | 307 | 9.22 | 648 | 1. |
| | 13.03 | 299 | 18.49 | 722 | 13.10 | 280 | 19.02 | 684 | 14.17 | 371 | 19.23 | 738 | 14.19 | 305 | 19.46 | 633 | 13.57 | 336 | 19.27 | 718 | 14.54 | 366 | 21.20 | 748 | 15.54 | 313 | 22.06 | 704 | |
| 2. | 1.17 | 331 | 6.49 | 758 | 1.07 | 357 | 6.55 | 827 | 2.15 | 372 | 7.53 | 792 | 2.31 | 302 | 8.36 | 637 | 2.10 | 337 | 7.50 | 696 | 4.16 | 384 | 9.56 | 709 | 5.03 | 312 | 10.58 | 690 | 2. |
| | 13.47 | 328 | 19.24 | 705 | 14.08 | 350 | 19.35 | 718 | 15.04 | 394 | 20.19 | 755 | 14.49 | 329 | 21.00 | 653 | 14.35 | 332 | 20.01 | 664 | 16.41 | 355 | 22.37 | 708 | 17.33 | 322 | 23.26 | 711 | |
| 3. | 2.02 | 318 | 7.50 | 698 | 2.07 | 337 | 7.51 | 705 | 3.11 | 414 | 8.13 | 737 | 3.29 | 334 | 9.50 | 668 | 2.57 | 310 | 8.51 | 618 | 5.38 | 320 | 11.32 | 682 | 6.19 | 307 | - | - | 3. |
| | 14.31 | 313 | 20.22 | 677 | 14.16 | 364 | 20.48 | 766 | 15.22 | 368 | 20.28 | 780 | 16.31 | 326 | 22.38 | 670 | 15.18 | 312 | 21.33 | 661 | 18.13 | 315 | - | - | 18.48 | 321 | 12.16 | 707 | |
| 4. | 2.44 | 344 | 8.31 | 707 | 3.01 | 471 | 8.17 | 869 | 0.48 | 593 | 8.41 | 795 | 5.16 | 326 | 11.15 T | 686 | 4.22 | 323 | 10.34 | 669 | 6.56 | 289 | 0.00 | 692 | 7.26 | 305 | 0.30 | 741 | 4. |
| | 15.19 | 337 | 21.20 | 690 | 16.06 | 404 | 21.14 | 747 | 16.52 | 526 | 21.25 | 836 | 18.02 | 310 | 23.48 T | 683 | 17.11 | 353 | 23.11 | 724 | 19.19 | 306 | 12.47 | 673 | 19.51 | 320 | 13.14 | 732 | |
| 5. | 4.00 | 361 | 9.49 | 716 | 4.20 | 375 | 10.15 | 775 | 4.43 | 478 | 9.59 | 854 | 6.49 | 276 | - | - | 6.29 | 325 | - | - | 8.03 | 296 | 1.06 | 712 | 8.25 | 321 | 1.30 | 763 | 5. |
| | 16.58 | 339 | 22.58 | 679 | 16.59 | 389 | 22.22 | 739 | 14.40 | 619 | 23.26 | 915 | 19.01 | 305 | 12.27 T | 641 | 18.48 | 331 | 12.11 | 679 | 20.28 | 299 | 13.48 | 706 | 20.50 | 323 | 14.04 | 756 | |
| 6. | 5.14 | 364 | 11.14 | 723 | 5.18 | 368 | 11.02 | 732 | 7.06 | 557 | 11.31 | 829 | 7.55 | 297 | 0.45 T | 708 | 7.40 | 314 | 0.39 | 726 | 8.58 | 296 | 2.06 | 736 | 9.18 | 307 | 2.20 | 762 | 6. |
| | 18.08 | 346 | 23.58 | 680 | 17.39 | 388 | 23.44 | 780 | 19.23 | 431 | - | - | 20.20 | 304 | 13.29 T | 694 | 20.07 | 307 | 13.16 | 702 | 21.23 | 313 | 14.41 | 750 | 21.44 | 305 | 14.55 | 748 | |
| 7. | 6.34 | 340 | - | - | 7.01 | 371 | - | - | 7.41 | 373 | 0.32 | 744 | 8.56 T | 285 | 1.55 T | 703 | 8.40 | 289 | 1.39 | 714 | 10.00 | 319 | 2.43 | 803 | 10.10 | 304 | 3.14 | 761 | 7. |
| | 19.05 | 317 | 12.25 | 706 | 19.05 | 392 | 12.33 | 733 | 20.08 | 439 | 13.15 | 796 | 21.20 T | 279 | 14.26 T | 684 | 20.51 | 305 | 14.04 | 681 | 22.10 | 313 | 15.16 | 778 | 22.43 | 285 | 15.39 | 748 | |
| 8. | 7.27 | 318 | 0.58 | 665 | 7.52 | 383 | 0.18 | 841 | 8.44 | 459 | 1.02 | 878 | 9.56 T | 259 | 2.48 T | 690 | 9.32 | 356 | 2.33 | 777 | 10.37 | 294 | 3.31 | 782 | 11.03 | 274 | 4.04 | 719 | 8. |
| | 19.57 | 302 | 13.14 | 697 | 20.06 | 317 | 12.32 | 762 | 21.10 | 403 | 13.23 | 842 | 22.06 T | 272 | 15.34 T | 667 | 21.52 | 333 | 14.42 | 792 | 22.56 | 290 | 16.03 | 752 | 23.27 | 283 | 16.35 | 730 | |
| 9. | 8.15 | 309 | 1.42 | 678 | 6.44 | 471 | 1.58 | 756 | 9.31 | 358 | 2.09 | 791 | 10.29 T | 288 | 3.44 T | 714 | 10.20 | 297 | 2.59 | 777 | 11.16 | 295 | 4.23 | 744 | 11.44 | 300 | 4.56 | 745 | 9. |
| | 20.38 | 305 | 13.56 | 699 | 20.37 | 477 | 13.04 | 877 | 21.37 | 394 | 14.49 | 782 | 22.50 T | 277 | 16.00 T | 706 | 22.30 | 307 | 15.46 | 728 | 23.38 | 303 | 16.39 | 777 | - | - | 17.11 | 760 | |
| 10. | 9.03 | 302 | 2.17 | 697 | 8.55 | 401 | 1.25 | 916 | 10.21 | 382 | 2.29 | 855 | 11.20 | 263 | 4.17 | 722 | 11.01 | 314 | 3.50 | 782 | 11.56 | 312 | 4.59 | 759 | 0.12 | 299 | 5.42 | 732 | 10. |
| | 21.21 | 295 | 14.37 e | 698 | 21.28 | 384 | 14.16 | 847 | 22.24 | 369 | 15.15 | 781 | 23.36 | 254 | 16.46 | 685 | 23.18 | 318 | 16.15 | 781 | - | - | 17.11 | 778 | 12.30 | 298 | 18.02 | 762 | |
| 11. | 9.46 | 282 | 2.57 | 682 | 9.44 | 338 | 2.35 | 790 | 10.51 | 376 | 3.28 | 814 | - | - | 5.07 | 702 | 11.44 | 315 | 4.40 | 808 | 0.18 | 308 | 5.40 | 780 | 0.58 | 309 | 6.30 | 741 | 11. |
| | 21.58 | 268 | 15.10 | 653 | 21.54 | 323 | 14.59 | 751 | 23.06 | 364 | 15.52 | 795 | 12.01 | 259 | 17.35 | 704 | - | - | 17.06 | 762 | 12.37 | 323 | 18.04 | 791 | 13.06 | 332 | 18.32 | 791 | |
| 12. | 10.09 | 270 | 3.32 | 631 | 10.20 | 326 | 3.16 | 763 | 11.29 | 381 | 4.03 | 812 | 0.13 | 277 | 5.36 e | 746 | 0.01 | 309 | 5.22 | 788 | 1.02 | 315 | 6.33 | 753 | 1.40 | 340 | 7.18 | 763 | 12. |
| | 22.25 | 287 | 16.00 | 662 | 22.37 | 363 | 15.53 | 792 | 23.53 | 441 | 16.59 | 921 | 12.37 | 291 | 18.09 | 724 | 12.21 | 320 | 17.52 | 774 | 13.20 | 327 | 18.52 | 764 | 13.59 | 371 | 19.19 | 790 | |
| 13. | 10.48 | 311 | 4.04 | 724 | 10.47 | 314 | 3.24 | 772 | - | - | 4.39 | 927 | 0.49 | 289 | 6.19 e | 748 | 0.40 | 308 | 6.04 | 766 | 1.47 | 319 | 7.25 | 744 | 2.31 | 326 | 8.09 | 688 | 13. |
| | 22.57 | 307 | 16.16 | 734 | 22.51 | 375 | 16.30 | 713 | 12.22 | 440 | 17.10 | 894 | 13.14 | 293 | 18.51 e | 732 | 13.02 | 309 | 18.28 | 740 | 14.03 | 338 | 19.40 | 757 | 14.31 | 322 | 20.25 | 728 | |
| 14. | 11.10 | 300 | 4.29 | 705 | 11.39 | 368 | 4.07 | 815 | 0.35 | 405 | 5.22 | 832 | 1.24 | 311 | 7.14 e | 780 | 1.18 | 300 | 6.51 | 740 | 2.35 | 327 | 8.19 | 725 | 3.19 | 310 | 9.08 | 689 | 14. |
| | 23.26 | 302 | 16.52 | 687 | 23.24 | 383 | 16.50 | 752 | 12.55 | 346 | 18.09 | 769 | 13.54 | 331 | 19.24 e | 757 | 13.38 | 307 | 19.06 | 729 | 14.49 | 350 | 20.38 | 748 | 15.32 | 352 | 21.13 | 772 | |
| 15. | 11.50 | 303 | 5.06 | 714 | - | - | 4.37 | 834 | 1.06 | 341 | 6.17 | 803 | 1.44 | 345 | 7.14 e | 855 | 1.56 | 301 | 7.36 | 719 | 3.39 | 337 | 9.31 | 700 | 4.21 | 353 | 9.56 | 699 | 15. |
| | - | - | 17.30 | 680 | 12.25 | 353 | 17.35 | 746 | 13.31 | 336 | 18.43 | 759 | 14.22 | 387 | 19.51 | 795 | 14.14 | 317 | 19.52 | 727 | 15.56 | 360 | 21.56 | 746 | 16.34 | 353 | 22.41 | 775 | |
| 16. | 0.01 | 300 | 5.39 | 686 | 0.19 | 349 | 5.44 | 778 | 1.42 | 333 | 7.00 | 783 | 3.01 | 326 | 8.41 | 733 | 2.36 | 313 | 8.28 | 710 | 4.58 | 345 | 10.56 | 708 | 5.22 | 390 | 11.28 | 771 | 16. |
| | 12.24 | 295 | 18.06 | 666 | 12.56 | 321 | 18.47 | 778 | 14.09 | 338 | 19.26 | 744 | 15.19 | 313 | 21.17 | 733 | 14.57 | 350 | 20.44 | 723 | 17.32 | 362 | 23.24 | 740 | 18.10 | 402 | 23.32 | 776 | |
| 17. | 0.29 | 306 | 6.18 | 706 | 1.12 | 387 | 6.23 | 848 | 2.22 | 339 | 7.42 | 776 | 3.55 | 326 | 9.45 | 727 | 3.48 | 320 | 9.45 | 694 | 6.27 | 319 | - | - | 6.34 | 358 | - | - | 17. |
| | 12.57 | 313 | 18.39 | 684 | 13.49 | 394 | 18.54 | 800 | 14.58 | 337 | 20.18 | 749 | 16.33 | 333 | 22.21 | 727 | 16.12 | 361 | 22.05 | 731 | 18.48 | 308 | 12.05 | 687 | 18.56 | 329 | 12.09 | 716 | |
| 18. | 1.10 | 322 | 6.46 | 710 | 1.54 | 374 | 7.13 | 835 | 3.12 | 349 | 8.31 | 761 | 5.23 | 311 | 11.17 | 702 | 5.18 | 327 | 11.12 | 694 | 7.13 | 298 | 0.05 | 694 | 7.31 | 313 | 0.39 | 723 | 18. |
| | 13.39 | 318 | 19.26 | 672 | 14.29 | 385 | 19.41 | 772 | 15.42 | 351 | 21.21 | 771 | 17.56 | 336 | 23.58 | 763 | 17.46 | 348 | 23.30 | 762 | 19.44 | 322 | 13.06 | 706 | 19.48 | 306 | 13.19 | 683 | |
| 19. | 1.46 | 334 | 7.41 | 719 | 2.45 | 368 | 8.06 | 788 | 4.15 | 380 | 9.49 | 812 | 6.41 | 366 | - | - | 6.49 | 340 | - | - | 8.17 | 300 | 1.08 | 732 | 8.17 | 316 | 1.35 | 726 | 19. |
| | 14.36 | 334 | 20.26 | 682 | 15.19 | 358 | 20.38 | 723 | 16.59 | 395 | 21.58 | 847 | 19.39 | 392 | 12.23 | 820 | 19.20 | 340 | 12.42 | 729 | 20.37 | 309 | 13.56 | 708 | 20.44 | 320 | 13.56 | 731 | |
| 20. | 2.54 | 340 | 8.51 | 702 | 3.42 | 342 | 9.07 | 716 | 4.51 | 419 | 10.47 | 832 | 8.16 | 312 | 0.51 | 794 | 7.53 | 313 | 0.52 | 737 | 9.02 | 310 | 2.14 | 737 | 9.03 | 321 | 2.19 | 740 | 20. |
| | 15.48 | 327 | 21.49 | 678 | 16.05 | 376 | 21.45 | 799 | 18.27 | 414 | 23.37 | 809 | 20.32 | 310 | 13.54 | 713 | 20.21 | 332 | 13.38 | 722 | 21.18 | 310 | 14.27 | 732 | 21.22 | 317 | 14.39 | 732 | |
| 21. | 4.18 | 338 | 10.09 | 697 | 5.00 | 412 | 10.16 | 775 | 7.08 | 358 | - | - | 9.17 | 325 | 2.04 | 746 | 8.56 | 315 | 1.50 | 754 | 9.40 | 309 | 2.50 | 745 | 9.41 | 322 | 3.03 | 734 | 21. |
| | 17.07 | 317 | 23.04 | 677 | 17.44 | 345 | 23.17 | 737 | 19.53 | 412 | 13.12 | 751 | 21.34 | 325 | 14.33 | 751 | 21.11 | 316 | 14.25 | 728 | 21.55 | 311 | 15.08 | 734 | 22.02 | 323 | 15.18 | 745 | |
| 22. | 5.38 | 326 | 11.27 | 710 | 6.14 | 332 | 11.55 | 760 | 8.40 | 490 | 0.56 | 913 | 9.59 | 303 | 2.43 | 756 | 9.40 | 306 | 2.42 | 748 | 10.14 | 314 | 3.21 | 752 | 10.17 | 325 | 3.38 | 744 | 22. |
| | 18.21 | 312 | - | - | 18.59 | 349 | - | - | 20.37 | 418 | 12.49 | 885 | 22.05 | 329 | 15.22 | 725 | 21.56 | 302 | 15.12 | 723 | 22.30 | 315 | 15.43 | 744 | 22.40 | 315 | 15.47 | 752 | |
| 23. | 6.51 | 318 | 0.17 | 694 | 7.28 | 346 | 0.23 | 787 | 9.25 | 372 | 1.56 | 792 | 10.51 | 322 | 3.21 | 802 | 10.19 | 297 | 3.23 | 744 | 10.44 | 309 | 3.54 | 737 | 10.52 | 317 | 4.15 | 735 | 23. |
| | 19.25 | 313 | 12.35 | 725 | 19.58 | 354 | 12.58 | 766 | 21.42 | 374 | 14.33 | 788 | 22.46 | 326 | 15.51 | 761 | 22.31 | 294 | 15.48 | 723 | 23.05 | 303 | 16.13 | 733 | 23.18 | 303 | 16.20 | 745 | |
| 24. | 7.59 | 331 | 1.16 | 726 | 8.50 | 381 | 1.22 | 803 | 10.23 | 371 | 2.48 | 830 | 11.16 | 334 | 4.12 | 803 | 10.53 | 295 | 3.58 | 743 | 11.10 | 311 | 4.29 | 728 | 11.25 | 306 | 4.48 | 711 | 24. |
| | 20.38 | 320 | 13.32 | 756 | 21.09 | 374 | 13.53 | 853 | 22.37 | 361 | 15.23 | 784 | 23.31 | 345 | 16.38 | 798 | 23.03 | 297 | 16.17 | 731 | 23.29 | 308 | 16.43 | 739 | 23.46 | 301 | 17.00 | 728 | |
| 25. | 9.06 | 304 | 2.04 | 721 | 9.28 | 346 | 2.18 | 783 | 11.14 | 338 | 3.39 | 791 | 11.48 | 343 | 4.38 | 825 | 11.20 | 304 | 4.33 | 747 | 11.43 | 311 | 5.00 | 734 | 11.55 | 310 | 5.21 | 705 | 25. |
| | 21.16 | 358 | 14.43 | 751 | 21.49 | 373 | 14.57 | 783 | 23.34 | 307 | 16.07 | 705 | 23.57 | 322 | 16.59 | 787 | 23.31 | 299 | 16.46 | 738 | 23.59 | 287 | 17.04 | 720 | - | - | 17.33 | 735 | |
| 26. | 9.53 | 365 | 2.30 | 914 | 10.28 | 355 | 3.05 | 805 | 12.03 | 287 | 4.12 | 696 | - | - | 5.20 | 786 | 11.46 | 304 | 4.58 | 738 | - | - | 5.26 | 694 | 0.24 | 299 | 5.59 | 690 | 26. |
| | 21.46 | 351 | 14.57 | 809 | 22.48 | 364 | 15.33 | 831 | 23.47 | 302 | 16.30 | 637 | 12.19 | 319 | 17.34 | 746 | - | - | 17.13 | 726 | 12.01 | 311 | 17.31 | 729 | 12.26 | 308 | 18.06 | 729 | |
| 27. | 10.29 | 329 | 3.24 | 783 | 11.13 | 357 | 4.04 | 789 | - | - | 4.51 | 759 | 0.26 | 306 | 5.51 | 746 | 0.00 | 298 | 5.33 | 732 | 0.30 | 309 | 5.49 | 698 | 0.57 | 303 | 6.38 | 699 | 27. |
| | 23.03 | 455 | 16.44 | 870 | 23.31 | 353 | 16.16 | 799 | 12.10 | 349 | 17.01 | 749 | 12.40 | 307 | 18.03 | 741 | 12.12 | 311 | 17.41 | 734 | 12.24 | 326 | 18.00 | 733 | 13.03 | 315 | 18.43 | 734 | |
| 28. | 11.34 | 340 | 3.52 | 921 | 11.55 | 321 | 4.42 | 792 | 0.17 | 349 | 5.26 | 781 | 0.49 | 317 | 6.07 | 755 | 0.27 | 304 | 5.59 | 723 | 1.02 | 318 | 6.29 | 697 | 1.35 | 314 | 7.17 | 704 | 28. |
| | 23.45 | 286 | 16.47 | 758 | 23.55 | 342 | 17.22 | 707 | 12.46 | 343 | 17.49 | 727 | 13.02 | 335 | 18.16 | 753 | 12.35 | 316 | 18.15 | 743 | 13.09 | 318 | 18.34 | 688 | 13.43 | 331 | 19.31 | 742 | |
| 29. | - | - | 5.14 | 730 | - | - | 5.37 | 870 | 0.52 | 325 | 6.08 | 741 | 1.12 | 337 | 6.42 | 744 | 0.48 | 333 | 6.28 | 753 | 1.27 | 306 | 6.50 | 630 | 2.15 | 335 | 8.11 | 733 | 29. |
| | 12.11 | 271 | 17.41 | 709 | 12.43 | 441 | 17.17 | 888 | 13.12 | 328 | 18.19 | 701 | 13.27 | 331 | 18.50 | 722 | 12.57 | 364 | 18.36 | 786 | 13.10 | 313 | 19.40 | 667 | 14.42 | 353 | 20.26 | 738 | |
| 30. | 0.16 | 301 | 6.08 | 810 | 0.48 | 396 | 5.37 | 862 | 1.21 | 312 | 6.30 | 694 | | | | | 1.12 | 373 | 6.58 | 771 | 2.01 | 330 | 8.05 | 675 | 3.14 | 334 | 9.15 | 717 | 30. |
| | 12.48 | 348 | 17.46 | 760 | 13.07 | 385 | 18.17 | 818 | 13.39 | 301 | 18.43 | 654 | | | | | 13.18 | 399 | 18.53 | 755 | 14.43 | 328 | 20.29 | 710 | 15.43 | 346 | 21.28 | 727 | |
| 31. | | | | | 1.32 | 349 | 6.41 | 757 | 1.43 | 290 | 7.06 | 653 | | | | | 1.44 | 372 | 7.47 | 758 | | | | | 4.21 | 322 | 10.17 | 698 | 31. |
| | | | | | 13.52 | 316 | 19.05 | 701 | 13.58 | 295 | 19.06 | 630 | | | | | 14.43 | 403 | 19.50 | 747 | | | | | 16.53 | 331 | 22.44 | 735 | |
| Mittel | | 320 | | 718 | | 366 | | 784 | | 384 | | 786 | | 313 | | 730 | | 323 | | 734 | | 318 | | 728 | | 321 | | 732 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 338 | 747 |

Winterhalbjahr: 1.11. bis 30.4.
6 Tage Treibeis
e = ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide
cm

Pegel : Vegesack
Gewässer : Weser
Gebiet : Unterweser

Nr. 4950010

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.32 | 337 | 11.33 | 759 | 6.09 | 337 | - | - | 8.30 | 333 | 1.38 | 722 | 10.06 | 322 | 3.23 | 734 | 10.12 | 327 | 3.33 | 704 | 10.48 | 312 | 4.01 | 702 | 11.00 | 327 | 4.09 | 753 | 1. |
| | 18.14 | 366 | 23.43 | 771 | 18.52 | 343 | 12.01 | 733 | 21.08 | 308 | 14.04 | 735 | 22.29 | 312 | 15.34 | 758 | 22.35 | 328 | 15.39 | 754 | 22.48 | 338 | 16.23 | 703 | 23.15 | 323 | 16.29 | 731 | |
| 2. | 6.56 | 341 | - | - | 7.33 | 332 | 0.30 | 733 | 9.25 | 324 | 2.45 ○ | 713 | 10.39 | 320 | 4.00 | 726 | 10.45 | 332 | 4.01 | 740 | 11.13 | 361 | 4.20 | 761 | 11.26 | 328 | 4.43 | 725 | 2. |
| | 19.24 | 340 | 12.37 | 750 | 20.07 | 316 | 13.09 | 721 | 22.03 | 330 | 14.55 | 778 | 23.06 | 326 | 16.11 | 762 | 23.01 | 325 | 16.09 | 745 | 23.29 | 351 | 16.38 | 739 | 23.36 | 333 | 17.01 | 719 | |
| 3. | 7.59 | 321 | 0.58 | 750 | 8.35 | 312 | 1.42 | 720 | 10.19 | 330 | 3.29 | 743 | 11.17 | 323 | 4.29 | 742 | 11.15 | 322 | 4.31 | 722 | 11.47 | 350 | 5.02 | 742 | 11.58 | 325 | 5.10 | 738 | 3. |
| | 20.21 | 324 | 13.37 | 738 | 21.13 | 301 | 14.16 ○ | 738 | 22.53 | 318 | 15.52 | 766 | 23.43 | 320 | 16.49 | 762 | 23.29 | 336 | 16.44 | 743 | 23.43 | 354 | 17.17 | 727 | - | - | 17.34 | 697 | |
| 4. | 8.58 | 332 | 1.54 | 773 | 9.39 | 309 | 2.47 | 733 | 11.00 | 323 | 4.20 | 728 | 11.47 | 320 | 5.06 | 730 | 11.44 | 342 | 5.01 | 740 | - | - | 5.12 | 773 | 0.07 | 317 | 5.46 | 759 | 4. |
| | 21.24 | 330 | 14.25 ○ | 774 | 22.12 | 294 | 15.10 | 748 | 23.33 | 316 | 16.31 | 778 | - | - | 17.25 | 771 | - | - | 17.14 | 769 | 12.21 | 351 | 17.42 | 720 | 12.41 | 348 | 18.05 | 713 | |
| 5. | 9.53 | 339 | 2.59 | 788 | 10.33 | 304 | 3.46 | 728 | 11.40 | 320 | 4.57 | 730 | 0.07 | 339 | 5.34 | 776 | 0.02 | 360 | 5.15 | 736 | 0.15 | 342 | 5.51 | 746 | 0.40 | 364 | 6.08 | 732 | 5. |
| | 22.23 | 308 | 15.13 | 778 | 23.00 | 297 | 16.03 | 750 | - | - | 17.08 | 761 | 12.17 | 353 | 17.44 | 784 | 12.22 | 333 | 18.19 | 763 | 12.41 | 356 | 18.20 | 741 | 13.06 | 331 | 18.59 | 701 | |
| 6. | 10.46 | 295 | 3.47 | 734 | 11.19 | 305 | 4.37 | 737 | 0.08 | 316 | 5.42 | 734 | 0.36 | 346 | 5.57 | 730 | 0.34 | 401 | 5.23 | 741 | 0.53 | 364 | 6.30 | 734 | 1.12 | 367 | 7.10 | 753 | 6. |
| | 23.09 | 294 | 16.14 | 738 | 23.48 | 306 | 16.49 | 760 | 12.17 | 323 | 17.48 | 769 | 12.47 | 328 | 18.21 | 721 | 12.27 | 364 | 18.04 | 745 | 13.17 | 361 | 19.28 | 735 | 14.00 | 353 | 19.30 | 679 | |
| 7. | 11.29 | 314 | 4.43 | 744 | - | - | 5.19 | 723 | 0.40 | 329 | 6.08 | 737 | 0.45 | 339 | 6.20 | 731 | 0.46 | 378 | 6.20 | 751 | 1.21 | 417 | 7.17 | 772 | 2.02 | 327 | 7.39 | 668 | 7. |
| | - | - | 16.49 | 775 | 12.00 | 311 | 17.33 | 765 | 12.46 | 339 | 18.07 | 783 | 13.01 | 356 | 18.27 | 741 | 12.58 | 399 | 18.36 | 775 | 14.18 | 391 | 19.46 | 711 | 14.25 | 320 | 20.41 | 645 | |
| 8. | 0.06 | 300 | 5.36 | 733 | 0.31 | 303 | 5.55 | 721 | 1.12 | 342 | 6.31 | 722 | 1.21 | 347 | 6.54 | 719 | 1.33 | 398 | 6.52 | 729 | 2.17 | 391 | 8.03 | 729 | 2.46 | 351 | 8.32 | 700 | 8. |
| | 12.18 | 318 | 17.47 | 769 | 12.38 | 310 | 18.12 | 746 | 13.16 | 334 | 18.50 | 748 | 13.32 | 346 | 19.12 | 705 | 13.38 | 364 | 19.21 | 686 | 15.08 | 398 | 20.48 | 713 | 15.34 | 320 | 21.31 | 668 | |
| 9. | 0.41 | 329 | 6.05 | 717 | 1.01 | 311 | 6.41 | 718 | 1.37 | 336 | 7.09 | 719 | 1.47 | 340 | 7.32 | 693 | 1.38 | 375 | 7.28 | 746 | 3.41 | 389 | 9.22 | 717 | 3.53 | 333 | 10.13 | 720 | 9. |
| | 12.50 | 333 | 18.26 | 762 | 13.03 | 345 | 18.26 | 772 | 13.48 | 345 | 19.27 | 731 | 14.08 | 341 | 20.01 | 679 | 14.17 | 421 | 19.59 | 708 | 16.33 | 345 | 22.21 | 673 | 16.55 | 382 | 22.30 | 764 | |
| 10. | 1.26 | 331 | 6.54 | 724 | 1.40 | 343 | 6.58 | 730 | 2.09 | 342 | 7.45 | 703 | 2.25 | 347 | 8.27 | 704 | 2.55 | 383 | 8.46 | 704 | 5.09 | 344 | 10.52 | 715 | 5.33 | 391 | 10.59 | 753 | 10. |
| | 13.38 | 336 | 19.05 | 762 | 13.46 | 336 | 19.17 | 752 | 14.12 | 350 | 19.58 | 711 | 15.00 | 373 | 20.50 | 693 | 15.43 | 373 | 21.48 | 677 | 17.51 | 350 | 23.34 | 726 | 18.03 | 356 | 23.52 | 709 | |
| 11. | 2.11 | 318 | 7.42 | 710 | 2.13 | 333 | 7.42 | 702 | 2.42 | 341 | 8.24 | 685 | 3.35 | 378 | 9.42 | 705 | 4.26 | 363 | 10.17 | 696 | 6.19 | 357 | 11.48 | 765 | 6.43 | 332 | - | - | 11. |
| | 14.17 | 329 | 20.02 | 749 | 14.22 | 328 | 20.07 | 746 | 14.54 | 341 | 20.47 | 678 | 16.37 | 401 | 22.30 | 712 | 17.27 | 332 | 23.15 | 661 | 19.04 | 345 | - | - | 19.23 | 320 | 12.34 | 719 | |
| 12. | 2.53 | 328 | 8.37 | 710 | 2.51 | 342 | 8.19 | 707 | 3.29 | 330 | 9.24 | 662 | 5.24 | 393 | 11.19 | 718 | 5.53 | 327 | 11.30 | 645 | 7.28 | 347 | 0.37 | 734 | 7.54 | 316 | 1.05 | 729 | 12. |
| | 15.03 | 345 | 20.50 | 759 | 14.53 | 365 | 20.43 | 751 | 15.59 | 339 | 22.11 | 660 | 18.21 | 380 | - | - | 18.22 | 309 | - | - | 20.00 | 321 | 13.00 | 730 | 20.24 | 313 | 13.32 | 737 | |
| 13. | 3.39 | 350 | 9.26 | 714 | 3.41 | 356 | 9.08 | 690 | 4.43 | 336 | 10.41 | 664 | 6.50 | 366 | 0.03 | 704 | 7.23 | 363 | 0.47 | 711 | 8.26 | 315 | 1.38 ● | 715 | 8.54 | 312 | 1.58 ● | 737 | 13. |
| | 15.59 | 357 | 21.49 | 737 | 15.45 | 352 | 21.39 | 700 | 17.28 | 328 | 23.34 | 662 | 19.34 | 345 | 12.29 | 723 | 19.45 | 322 | 12.40 | 699 | 20.54 | 307 | 13.58 | 714 | 21.24 | 307 | 14.24 | 742 | |
| 14. | 4.37 | 342 | 10.22 | 697 | 4.22 | 354 | 10.12 | 701 | 6.12 | 322 | - | - | 7.41 | 361 | 1.20 | 706 | 8.04 | 326 | 1.25 | 683 | 9.23 | 308 | 2.31 | 734 | 9.56 | 293 | 2.53 | 737 | 14. |
| | 17.01 | 339 | 22.52 | 709 | 16.55 | 383 | 22.47 | 729 | 18.55 | 327 | 12.12 | 673 | 20.12 | 406 | 13.24 | 721 | 20.39 | 320 | 13.45 | 718 | 21.46 | 308 | 14.51 | 744 | 22.43 | 237 | 15.18 | 696 | |
| 15. | 5.43 | 318 | 11.25 | 663 | 5.43 | 362 | 11.31 | 726 | 7.25 | 328 | 0.44 | 685 | 8.55 | 390 | 1.40 | 802 | 8.53 | 332 | 2.19 ● | 707 | 10.09 | 310 | 3.17 | 749 | 10.37 | 290 | 4.22 | 641 | 15. |
| | 18.00 | 315 | 23.55 | 713 | 18.28 | 360 | - | - | 20.07 | 309 | 13.13 | 700 | 21.23 | 333 | 14.03 | 775 | 21.37 | 334 | 14.37 | 785 | 22.36 | 312 | 15.41 | 760 | 22.56 | 308 | 15.57 | 706 | |
| 16. | 6.40 | 327 | - | - | 6.51 | 364 | 0.12 | 716 | 8.12 | 336 | 1.50 | 673 | 9.31 | 326 | 2.48 ● | 733 | 9.46 | 313 | 2.57 | 723 | 10.59 | 302 | 4.03 | 750 | 11.31 | 310 | 4.20 | 771 | 16. |
| | 19.06 | 344 | 12.22 | 703 | 19.37 | 362 | 12.37 | 730 | 21.00 | 325 | 13.57 | 731 | 21.59 | 325 | 15.04 | 753 | 21.59 | 329 | 15.23 | 718 | 23.20 e | 312 | 16.32 | 743 | 23.53 | 328 | 16.59 | 763 | |
| 17. | 7.35 | 340 | 0.42 | 724 | 7.51 | 361 | 1.05 | 715 | 9.12 | 327 | 2.32 | 716 | 10.15 | 348 | 3.30 | 743 | 10.41 | 323 | 3.12 | 795 | 11.50 e | 295 | 4.48 e | 750 | - | - | 5.00 | 788 | 17. |
| | 20.19 | 339 | 13.21 | 721 | 20.33 | 361 | 13.34 | 753 | 21.46 | 319 | 14.50 ● | 749 | 22.45 | 328 | 15.37 | 782 | 22.50 | 318 | 15.53 | 745 | - | - | 17.34 e | 730 | 12.23 | 313 | 17.47 | 745 | |
| 18. | 8.27 | 322 | 1.37 | 709 | 8.51 | 348 | 1.57 | 738 | 10.00 | 316 | 3.19 | 721 | 10.56 | 331 | 4.08 | 737 | 11.17 | 307 | 4.21 | 744 | 0.02 e | 324 | 5.34 e | 772 | 0.33 | 321 | 5.52 | 786 | 18. |
| | 21.06 | 327 | 14.12 | 723 | 21.15 | 353 | 14.22 | 735 | 22.24 | 313 | 15.31 | 740 | 23.12 | 354 | 16.25 | 773 | 23.39 | 316 | 16.49 | 758 | 12.28 e | 326 | 18.02 e | 753 | 13.10 | 326 | 18.26 | 739 | |
| 19. | 9.16 | 324 | 2.35 ● | 733 | 9.30 | 358 | 2.42 ● | 726 | 10.41 | 322 | 3.57 | 746 | 11.37 | 359 | 4.43 | 786 | 11.59 | 308 | 5.06 | 751 | 0.48 e | 340 | 6.15 e | 760 | 1.13 | 320 | 6.41 | 750 | 19. |
| | 21.41 | 314 | 14.48 | 729 | 22.13 | 414 | 15.06 | 797 | 23.05 | 315 | 16.15 | 766 | - | - | 17.04 | 801 | - | - | 17.30 | 750 | 13.23 | 313 | 18.46 | 672 | 13.48 | 310 | 19.08 | 686 | |
| 20. | 9.54 | 319 | 3.16 | 720 | 10.17 | 371 | 3.07 | 780 | 11.21 | 331 | 4.39 | 745 | 0.01 | 334 | 5.30 | 759 | 0.17 | 312 | 5.48 | 745 | 1.21 | 299 | 7.10 | 703 | 1.58 | 297 | 7.25 | 688 | 20. |
| | 22.23 | 312 | 15.31 | 744 | 22.47 | 348 | 15.28 | 784 | 23.46 | 326 | 16.49 | 783 | 12.14 | 329 | 17.40 | 763 | 12.35 | 315 | 18.13 | 746 | 13.59 | 306 | 19.49 | 705 | 14.41 | 279 | 19.28 | 596 | |
| 21. | 10.36 | 309 | 3.53 | 722 | 10.57 | 353 | 4.13 | 756 | 11.58 | 319 | 5.11 | 745 | 0.40 | 320 | 6.12 | 726 | 1.00 | 325 | 6.31 | 745 | 2.15 | 345 | 7.40 | 712 | 2.35 | 259 | 8.05 | 616 | 21. |
| | 23.06 | 290 | 16.08 | 733 | 23.27 | 334 | 16.20 | 779 | - | - | 17.27 | 761 | 12.52 | 322 | 18.25 | 734 | 13.28 | 318 | 19.08 | 712 | 14.58 | 303 | 20.48 | 665 | 15.11 | 271 | 20.25 | 597 | |
| 22. | 10.51 | 333 | 4.35 | 703 | 11.35 | 331 | 4.51 | 741 | 0.21 | 313 | 6.02 | 748 | 1.12 | 324 | 6.48 | 738 | 1.37 | 322 | 7.24 | 712 | 2.54 | 360 | 8.51 | 786 | 3.11 | 292 | 9.01 | 648 | 22. |
| | 23.24 | 314 | 16.28 | 734 | - | - | 16.59 | 760 | 12.26 | 342 | 18.01 | 794 | 13.33 | 343 | 19.12 | 739 | 14.06 | 318 | 19.58 | 691 | 16.05 | 349 | 21.24 | 661 | 16.02 | 303 | 21.08 | 604 | |
| 23. | 11.41 | 324 | 4.54 | 702 | 0.03 | 317 | 5.28 | 715 | 0.59 | 337 | 6.20 | 748 | 1.54 | 345 | 7.35 | 722 | 2.22 | 332 | 8.15 | 718 | 4.08 | 327 | 9.50 | 658 | 4.26 | 278 | 9.40 | 598 | 23. |
| | - | - | 17.13 | 748 | 12.08 | 325 | 17.34 | 760 | 13.08 | 340 | 18.29 | 774 | 14.22 | 330 | 20.06 | 689 | 15.08 | 320 | 21.03 | 671 | 16.49 | 341 | 22.44 | 706 | 15.52 | 337 | 21.55 | 674 | |
| 24. | 0.12 | 322 | 5.37 | 715 | 0.35 | 323 | 6.04 | 739 | 1.38 | 328 | 7.10 | 729 | 2.44 | 321 | 8.11 | 628 | 3.25 | 340 | 9.29 | 718 | 5.27 | 361 | 11.11 | 738 | 5.30 | 384 | 10.58 | 743 | 24. |
| | 12.23 | 324 | 17.58 | 744 | 12.47 | 331 | 18.16 | 759 | 13.46 | 330 | 19.26 | 736 | 14.57 | 292 | 21.07 | 597 | 16.30 | 333 | 22.24 | 682 | 18.16 | 339 | 23.51 | 686 | 18.19 | 366 | 23.58 | 718 | |
| 25. | 0.46 | 353 | 6.20 | 750 | 1.14 | 322 | 6.47 | 733 | 2.13 | 328 | 7.58 | 720 | 1.50 | 407 | 8.29 | 657 | 4.48 | 349 | 11.04 | 740 | 6.52 | 297 | 12.40 | 640 | 7.45 | 400 | - | - | 25. |
| | 12.49 | 373 | 18.24 | 805 | 13.26 | 331 | 19.00 | 764 | 14.30 | 340 | 20.10 | 736 | 16.13 | 358 | 22.07 | 664 | 17.59 | 371 | - | - | 18.15 | 418 | 23.41 | 768 | 19.19 | 382 | 12.37 | 735 | |
| 26. | 1.31 | 362 | 6.58 | 752 | 1.54 | 331 | 7.28 | 732 | 2.54 | 359 | 8.37 | 706 | 5.28 | 339 | 11.02 | 686 | 6.52 | 358 | 0.08 | 765 | 7.33 | 363 | - | - | 8.03 | 413 | 0.44 | 752 | 26. |
| | 13.36 | 353 | 19.08 | 758 | 14.09 | 335 | 19.44 | 740 | 15.20 | 373 | 21.19 | 751 | 18.08 | 322 | 23.56 | 680 | 18.55 | 330 | 12.11 | 736 | 20.01 | 330 | 12.52 | 732 | 20.08 | 407 | 12.54 | 769 | |
| 27. | 2.13 | 323 | 7.46 | 707 | 2.26 | 317 | 8.18 | 695 | 4.18 | 374 | 9.56 | 715 | 6.50 | 337 | - | - | 7.19 | 343 | 0.49 | 702 | 8.28 | 330 | 1.36 | 734 | 8.07 | 420 | 1.04 | 753 | 27. |
| | 14.19 | 323 | 20.08 | 740 | 14.50 | 326 | 20.42 | 733 | 16.57 | 330 | 22.47 | 672 | 19.29 | 331 | 12.37 | 721 | 19.47 | 347 | 13.10 | 740 | 20.44 | 321 | 14.03 | 726 | 21.03 | 372 | 13.33 | 773 | |
| 28. | 2.56 | 327 | 8.37 | 710 | 3.25 | 337 | 9.16 | 739 | 5.45 | 307 | 11.41 | 690 | 8.01 | 347 | 1.17 | 732 | 8.12 | 332 | 1.25 | 721 | 9.07 | 323 | 2.26 ○ | 723 | 9.34 | 362 | 2.22 ○ | 781 | 28. |
| | 15.14 | 326 | 20.54 | 714 | 15.55 | 361 | 21.35 | 723 | 18.21 | 342 | - | - | 20.28 | 334 | 13.34 | 736 | 20.40 | 322 | 13.53 | 740 | 21.20 | 331 | 14.49 | 728 | 21.45 | 312 | 14.29 | 716 | |
| 29. | 3.49 | 309 | 9.46 | 720 | 4.25 | 342 | 10.20 | 706 | 7.12 | 361 | 0.17 | 744 | 8.49 | 348 | 2.12 | 711 | 8.56 | 320 | 2.15 ○ | 702 | 9.47 | 332 | 3.03 | 746 | 9.56 | 332 | 2.55 | 697 | 29. |
| | 16.24 | 334 | 22.14 | 731 | 17.00 | 351 | 22.58 | 723 | 19.53 | 332 | 12.50 | 737 | 21.17 | 368 | 14.18 | 784 | 21.15 | 341 | 14.33 | 731 | 22.01 | 340 | 15.28 | 741 | 22.14 | 347 | 15.22 | 721 | |
| 30. | 4.59 | 333 | 10.52 | 713 | 5.48 | 343 | 11.40 | 710 | 8.26 | 352 | 1.45 | 730 | 9.38 | 347 | 2.34 ○ | 766 | 9.42 | 342 | 2.51 | 753 | 10.25 | 328 | 3.37 | 752 | 10.40 | 391 | 3.32 | 812 | 30. |
| | 17.35 | 336 | 23.17 | 734 | 18.32 | 349 | - | - | 20.53 | 335 | 14.03 | 731 | 21.57 | 326 | 15.00 | 749 | 21.58 | 333 | 15.07 | 763 | 22.36 | 324 | 15.56 | 737 | 22.56 | 399 | 15.26 | 812 | |
| 31. | | | | | 7.15 | 346 | 0.22 | 719 | 9.18 | 340 | 2.25 ○ | 742 | | | | | 10.18 | 327 | 3.23 | 741 | | | | | 11.11 | 397 | 3.45 | 808 | 31. |
| | | | | | 20.00 | 334 | 12.55 | 734 | 21.52 | 339 | 14.52 | 780 | | | | | 22.25 | 322 | 15.42 | 721 | | | | | 23.23 | 368 | 15.53 | 741 | |
| Mittel | | 329 | | 735 | | 337 | | 736 | | 332 | | 729 | | 344 | | 730 | | 340 | | 728 | | 339 | | 728 | | 335 | | 719 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 334 | 732 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei
e = ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.01 m

W Tide
cm

Pegel : Farge
Gewässer : Weser
Gebiet : Unterweser

Nr. 4950020

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.22 | 311 | 5.56 | 721 | 0.33 | 325 | 5.53 | 714 | 1.17 | 333 | 7.00 | 765 | 1.26 | 285 | 7.34 | 637 | 1.15 | 326 | 6.59 | 714 | 2.16 | 366 | 8.15 | 682 | 3.08 | 310 | 9.05 | 643 | 1. |
| | 12.42 | 301 | 18.33 | 713 | 12.47 | 286 | 18.47 | 677 | 13.53 | 362 | 19.11 | 722 | 13.52 | 300 | 19.39 | 620 | 13.33 | 338 | 19.14 | 711 | 14.30 | 372 | 21.07 | 742 | 15.27 | 318 | 21.54 | 697 | |
| 2. | 0.57 | 336 | 6.32 | 746 | 0.46 | 366 | 6.49 | 816 | 1.44 | 362 | 7.38 | 771 | 2.06 | 298 | 8.28 | 622 | 1.47 | 339 | 7.34 | 688 | 3.49 | 392 | 9.44 | 702 | 4.38 | 314 | 10.46 | 684 | 2. |
| | 13.25 | 333 | 19.04 | 697 | 13.47 | 359 | 19.20 | 711 | 14.38 | 386 | 20.06 | 739 | 14.23 | 325 | 20.56 | 636 | 14.10 | 334 | 19.47 | 659 | 16.17 | 360 | 22.24 | 702 | 17.08 | 326 | 23.11 | 703 | |
| 3. | 1.41 | 322 | 7.33 | 689 | 1.48 | 346 | 7.34 | 698 | 2.43 | 406 | 8.05 | 720 | 3.01 | 332 | 9.48 | 653 | 2.32 | 313 | 8.40 | 614 | 5.11 | 325 | 11.20 | 677 | 5.52 | 308 | - | - | 3. |
| | 14.08 | 317 | 20.08 | 670 | 13.55 | 375 | 20.33 | 763 | 14.58 | 355 | 20.13 | 760 | 16.06 | 327 | 22.32 | 661 | 14.51 | 318 | 21.23 | 656 | 17.49 | 319 | 23.44 | 686 | 18.25 | 325 | 12.00 | 700 | |
| 4. | 2.22 | 349 | 8.13 | 699 | 2.46 | 482 | 8.11 | 856 | 0.38 | 592 | 9.01 | 785 | 4.52 | 328 | 11.07 | 675 | 3.58 | 326 | 10.22 | 664 | 6.33 | 291 | - | - | 7.01 | 307 | 0.10 | 733 | 4. |
| | 14.56 | 342 | 21.06 | 683 | 15.46 | 416 | 21.01 | 744 | 16.34 | 520 | 21.22 | 817 | 17.40 | 311 | 23.36 | 672 | 16.44 | 360 | 22.59 | 718 | 18.50 | 310 | 12.35 | 668 | 19.26 | 323 | 12.53 | 724 | |
| 5. | 3.35 | 366 | 9.32 | 709 | 4.02 | 386 | 10.03 | 772 | 4.23 | 471 | 9.50 | 834 | 6.23 | 277 | - | - | 6.03 | 329 | - | - | 7.38 | 297 | 0.50 | 705 | 8.03 | 324 | 1.12 | 754 | 5. |
| | 16.35 | 346 | 22.44 | 673 | 16.36 | 403 | 22.01 | 737 | 14.16 | 612 | 23.18 | 900 | 18.43 | 309 | 12.19 | 635 | 18.22 | 336 | 12.02 | 674 | 20.04 | 302 | 13.31 | 699 | 20.26 | 325 | 13.46 | 747 | |
| 6. | 4.48 | 368 | 10.59 | 714 | 4.56 | 380 | 10.48 | 728 | 6.44 | 551 | 11.25 | 813 | 7.30 | 299 | 0.35 | 700 | 7.14 | 316 | 0.24 | 719 | 8.34 | 297 | 1.46 ○ | 728 | 8.53 | 308 | 2.02 ○ | 752 | 6. |
| | 17.45 | 351 | 23.45 | 672 | 17.17 | 400 | 23.27 | 778 | 18.54 | 421 | - | - | 19.59 | 307 | 13.21 | 687 | 19.40 | 309 | 13.03 | 696 | 21.02 | 314 | 14.22 | 741 | 21.21 | 307 | 14.36 | 739 | |
| 7. | 6.09 | 344 | - | - | 6.36 | 383 | - | - | 7.15 | 358 | 0.27 | 729 | 8.31 T | 289 | 1.44 ○ | 694 | 8.14 | 289 | 1.26 | 708 | 9.37 | 322 | 2.28 | 795 | 9.47 | 306 | 2.54 | 751 | 7. |
| | 18.42 | 320 | 12.11 | 697 | 18.31 | 406 | 12.16 | 732 | 19.44 | 426 | 13.01 | 777 | 20.53 T | 284 | 14.13 T | 679 | 20.28 | 306 | 13.53 | 675 | 21.48 | 315 | 15.10 | 767 | 22.18 | 287 | 15.21 | 740 | |
| 8. | 7.03 | 322 | 0.41 | 659 | 7.29 | 395 | 0.03 | 833 | 8.14 | 446 | 1.00 | 857 | 9.34 T | 264 | 2.35 T | 683 | 9.10 | 358 | 2.31 ○ | 767 | 10.14 | 295 | 3.25 | 769 | 10.39 | 276 | 3.47 | 711 | 8. |
| | 19.34 | 307 | 12.58 | 689 | 19.43 | 313 | 12.35 | 757 | 20.42 | 387 | 13.16 | 824 | 21.42 T | 276 | 15.17 T | 662 | 21.27 | 334 | 14.28 | 783 | 22.33 | 292 | 15.45 | 743 | 23.05 | 285 | 16.15 | 722 | |
| 9. | 7.52 | 312 | 1.24 | 670 | 6.24 | 474 | 1.49 | 740 | 9.02 | 338 | 1.53 ○ | 774 | 10.05 T | 293 | 3.30 T | 707 | 9.54 | 297 | 2.57 | 765 | 10.54 | 297 | 4.04 | 735 | 11.21 | 303 | 4.38 | 736 | 9. |
| | 20.16 | 306 | 13.35 | 690 | 20.13 | 477 | 12.58 | 862 | 21.13 | 376 | 14.35 | 764 | 22.28 T | 281 | 15.47 T | 700 | 22.08 | 307 | 15.31 | 721 | 23.17 | 306 | 16.25 | 762 | 23.51 | 301 | 16.54 | 750 | |
| 10. | 8.41 | 304 | 1.59 ○ | 689 | 8.35 | 397 | 1.17 ○ | 887 | 9.58 | 363 | 2.22 | 838 | 10.57 T | 267 | 4.02 T | 715 | 10.38 | 312 | 3.39 | 773 | 11.35 | 314 | 4.43 | 751 | - | - | 5.22 | 724 | 10. |
| | 21.00 | 298 | 14.19 | 691 | 21.04 | 381 | 13.59 | 827 | 21.58 | 349 | 15.02 | 765 | 23.11 T | 258 | 16.33 T | 679 | 22.54 | 319 | 16.11 | 769 | 23.56 | 310 | 17.09 | 765 | 12.08 | 300 | 17.42 | 753 | |
| 11. | 9.22 | 286 | 2.43 | 674 | 9.22 | 333 | 2.17 | 773 | 10.27 | 357 | 3.18 | 795 | 11.37 | 264 | 4.52 | 695 | 11.19 | 315 | 4.19 | 796 | - | - | 5.36 | 767 | 0.36 | 312 | 6.14 | 732 | 11. |
| | 21.35 | 270 | 14.59 | 646 | 21.31 | 317 | 14.45 | 735 | 22.42 | 344 | 15.39 | 777 | 23.49 | 283 | 17.20 | 696 | 23.37 | 308 | 16.53 | 752 | 12.15 | 326 | 17.58 | 779 | 12.43 | 335 | 18.26 | 775 | |
| 12. | 9.46 | 273 | 3.16 | 626 | 10.00 | 321 | 3.00 | 747 | 11.04 | 365 | 3.53 | 793 | - | - | 5.30 | 739 | 11.57 | 320 | 5.15 | 777 | 0.40 | 318 | 6.16 | 745 | 1.17 | 343 | 7.02 | 755 | 12. |
| | 22.03 | 290 | 15.39 | 653 | 22.16 | 361 | 15.33 | 775 | 23.32 | 425 | 16.54 | 898 | 12.15 | 296 | 17.57 | 717 | - | - | 17.31 | 761 | 12.55 | 331 | 18.35 | 756 | 13.33 | 375 | 19.14 | 780 | |
| 13. | 10.26 | 315 | 3.44 | 714 | 10.25 | 308 | 3.27 | 757 | 11.58 | 427 | 4.38 | 905 | 0.26 | 294 | 6.06 | 741 | 0.17 | 308 | 5.53 | 756 | 1.23 | 322 | 7.10 | 736 | 2.06 | 328 | 7.51 | 682 | 13. |
| | 22.36 | 311 | 16.01 | 724 | 22.31 | 371 | 16.22 | 702 | - | - | 16.56 | 874 | 12.51 | 297 | 18.39 | 725 | 12.38 | 308 | 18.10 | 732 | 13.40 | 342 | 19.20 | 748 | 14.07 | 324 | 20.09 | 720 | |
| 14. | 10.48 | 303 | 4.09 | 697 | 11.16 | 365 | 3.58 | 797 | 0.12 | 391 | 5.11 | 813 | 1.03 | 318 | 6.57 | 773 | 0.52 | 300 | 6.35 | 731 | 2.11 | 330 | 8.03 | 718 | 2.53 | 313 | 8.55 | 682 | 14. |
| | 23.03 | 305 | 16.34 | 678 | 23.00 | 380 | 16.36 | 738 | 12.27 | 327 | 17.58 | 752 | 13.32 | 337 | 19.07 | 750 | 13.15 | 307 | 18.49 | 721 | 14.26 | 354 | 20.22 | 740 | 15.08 | 358 | 21.04 | 759 | |
| 15. | 11.27 | 307 | 4.47 | 705 | 12.02 | 349 | 4.29 | 815 | 0.42 | 324 | 6.03 | 783 | 1.21 | 349 | 7.01 | 847 | 1.32 | 301 | 7.21 | 711 | 3.14 | 341 | 9.15 | 694 | 3.57 | 358 | 9.38 | 693 | 15. |
| | 23.39 | 303 | 17.10 | 672 | 23.58 | 344 | 17.23 | 732 | 13.07 | 319 | 18.32 | 741 | 13.59 | 394 | 19.34 | 788 | 13.48 | 318 | 19.35 | 719 | 15.30 | 366 | 21.51 | 740 | 16.10 | 358 | 22.34 | 763 | |
| 16. | - | - | 5.22 | 678 | - | - | 5.27 | 762 | 1.18 | 317 | 6.51 | 764 | 2.38 | 330 | 8.23 | 724 | 2.14 | 313 | 8.14 | 702 | 4.32 | 348 | 10.40 | 702 | 4.59 | 396 | 11.17 | 763 | 16. |
| | 12.01 | 298 | 17.49 | 659 | 12.32 | 316 | 18.36 | 759 | 13.43 | 324 | 19.18 | 727 | 14.47 | 317 | 20.58 | 725 | 14.31 | 354 | 20.28 | 717 | 17.07 | 368 | 23.12 | 733 | 17.48 | 409 | 23.30 | 766 | |
| 17. | 0.06 | 310 | 6.00 | 696 | 0.48 | 383 | 6.15 | 829 | 1.57 | 327 | 7.36 | 757 | 3.34 | 332 | 9.36 | 719 | 3.22 | 322 | 9.33 | 688 | 6.01 | 321 | 11.50 | 681 | 6.10 | 361 | 11.48 | 710 | 17. |
| | 12.34 | 317 | 18.24 | 676 | 13.28 | 391 | 18.41 | 782 | 14.33 | 325 | 20.07 | 730 | 16.08 | 338 | 22.17 | 720 | 15.45 | 367 | 21.53 | 724 | 18.22 | 311 | 23.51 | 687 | 18.31 | 332 | - | - | |
| 18. | 0.47 | 325 | 6.28 | 702 | 1.31 | 367 | 7.02 | 813 | 2.48 | 340 | 8.21 | 742 | 4.58 | 315 | 11.09 | 694 | 4.52 | 331 | 10.57 | 688 | 6.48 | 301 | - | - | 7.05 | 314 | 0.22 | 716 | 18. |
| | 13.18 | 322 | 19.10 | 664 | 14.09 | 377 | 19.34 | 755 | 15.17 | 343 | 21.22 | 753 | 17.32 | 341 | 23.45 | 753 | 17.24 | 351 | 23.17 | 755 | 19.22 | 326 | 12.45 | 697 | 19.25 | 311 | 12.57 | 678 | |
| 19. | 1.25 | 339 | 7.28 | 710 | 2.22 | 360 | 7.52 | 771 | 3.51 | 372 | 9.41 | 790 | 6.16 | 372 | - | - | 6.23 | 344 | - | - | 7.53 | 303 | 0.49 | 726 | 7.53 | 318 | 1.17 | 719 | 19. |
| | 14.13 | 339 | 20.14 | 676 | 14.54 | 349 | 20.27 | 709 | 16.32 | 388 | 21.48 | 824 | 19.10 | 400 | 12.18 | 810 | 18.58 | 342 | 12.27 | 722 | 20.15 | 313 | 13.35 | 702 | 20.20 | 323 | 13.37 | 723 | |
| 20. | 2.31 | 346 | 8.35 | 693 | 3.17 | 335 | 8.56 | 703 | 4.30 | 411 | 10.40 | 816 | 7.51 | 315 | 0.36 | 784 | 7.28 | 315 | 0.37 | 729 | 8.38 | 313 | 1.54 | 730 | 8.39 | 324 | 1.59 | 732 | 20. |
| | 15.19 | 332 | 21.35 | 670 | 15.39 | 370 | 21.39 | 781 | 18.03 | 407 | 23.30 | 787 | 20.04 | 313 | 13.42 | 706 | 19.55 | 336 | 13.24 | 715 | 20.56 | 313 | 14.24 | 724 | 20.58 | 320 | 14.16 | 725 | |
| 21. | 3.54 | 342 | 9.55 | 688 | 4.38 | 409 | 10.09 | 757 | 6.44 | 349 | - | - | 8.53 | 329 | 1.48 ● | 737 | 8.33 | 316 | 1.32 | 746 | 9.16 | 312 | 2.31 ● | 737 | 9.17 | 323 | 2.42 ● | 726 | 21. |
| | 16.44 | 321 | 22.52 | 670 | 17.15 | 338 | 23.01 | 722 | 19.31 | 403 | 12.57 | 736 | 21.10 | 326 | 14.21 ● | 743 | 20.47 | 318 | 14.09 | 721 | 21.33 | 315 | 14.49 ● | 727 | 21.39 | 324 | 14.56 ● | 737 | |
| 22. | 5.14 | 330 | 11.15 | 701 | 5.49 | 323 | 11.43 | 742 | 8.16 | 483 | 0.55 | 895 | 9.37 | 302 | 2.31 | 747 | 9.16 | 306 | 2.24 ● | 740 | 9.53 | 316 | 3.04 | 744 | 9.54 | 326 | 3.19 | 736 | 22. |
| | 17.57 | 315 | - | - | 18.35 | 342 | - | - | 20.14 | 406 | 12.46 | 864 | 21.42 | 331 | 15.08 | 716 | 21.32 | 303 | 14.58 ● | 716 | 22.10 | 318 | 15.26 | 737 | 22.17 | 316 | 15.27 | 743 | |
| 23. | 6.28 | 322 | 0.01 | 686 | 7.02 | 338 | 0.11 | 769 | 9.00 | 357 | 1.44 ● | 776 | 10.30 | 321 | 3.01 | 790 | 9.55 | 298 | 3.05 | 736 | 10.22 | 312 | 3.35 | 730 | 10.30 | 320 | 3.55 | 727 | 23. |
| | 19.04 | 316 | 12.17 | 715 | 19.34 | 346 | 12.50 e | 755 | 21.19 | 357 | 14.21 ● | 769 | 22.24 | 326 | 15.39 | 751 | 22.08 | 294 | 15.31 | 715 | 22.42 | 306 | 15.53 | 725 | 22.54 | 306 | 16.02 | 736 | |
| 24. | 7.39 | 335 | 0.58 | 717 | 8.26 | 375 | 1.13 ● | 783 | 9.57 | 354 | 2.39 | 812 | 10.51 | 334 | 3.53 | 790 | 10.29 | 296 | 3.39 | 735 | 10.47 | 313 | 4.11 | 721 | 11.00 | 309 | 4.30 | 703 | 24. |
| | 20.16 | 324 | 13.16 | 745 | 20.44 | 366 | 13.40 ● | 833 | 22.10 | 343 | 15.08 | 770 | 23.09 | 346 | 16.18 | 786 | 22.39 | 298 | 16.01 | 724 | 23.08 | 311 | 16.22 | 731 | 23.22 | 304 | 16.39 | 721 | |
| 25. | 8.45 | 306 | 1.45 ● | 712 | 9.03 | 337 | 2.08 | 766 | 10.48 | 319 | 3.25 | 776 | 11.25 | 344 | 4.28 | 811 | 10.58 | 304 | 4.15 | 738 | 11.21 | 314 | 4.42 | 726 | 11.32 | 313 | 5.05 | 699 | 25. |
| | 20.57 | 364 | 14.26 | 738 | 21.25 | 365 | 14.39 | 765 | 23.08 | 287 | 15.49 | 695 | 23.33 | 322 | 16.41 | 778 | 23.10 | 300 | 16.29 | 730 | 23.37 | 289 | 16.45 | 714 | - | - | 17.13 | 727 | |
| 26. | 9.33 | 372 | 2.17 | 894 | 10.04 | 345 | 2.48 | 787 | 11.40 | 267 | 4.00 | 684 | 11.56 | 317 | 5.04 | 777 | 11.23 | 305 | 4.40 | 730 | 11.39 | 313 | 5.11 | 689 | 0.00 | 303 | 5.40 | 684 | 26. |
| | 21.24 | 357 | 14.44 | 796 | 22.24 | 356 | 15.22 | 810 | 23.19 | 284 | 16.27 | 625 | - | - | 17.18 | 737 | 23.37 | 298 | 16.55 | 719 | - | - | 17.08 | 722 | 12.02 | 311 | 17.48 | 721 | |
| 27. | 10.09 | 335 | 3.14 | 773 | 10.48 | 348 | 3.53 | 770 | 11.47 | 331 | 4.44 | 745 | 0.03 | 304 | 5.34 | 736 | 11.49 | 311 | 5.14 | 724 | 0.08 | 312 | 5.34 | 693 | 0.33 | 306 | 6.18 | 692 | 27. |
| | 22.42 | 464 | 16.48 | 857 | 23.08 | 344 | 16.07 | 779 | 23.52 | 333 | 16.54 | 733 | 12.16 | 306 | 17.47 | 732 | - | - | 17.25 | 726 | 12.05 | 331 | 17.40 | 726 | 12.39 | 319 | 18.24 | 726 | |
| 28. | 11.14 | 345 | 3.50 | 900 | 11.30 | 310 | 4.24 | 777 | - | - | 5.13 | 764 | 0.27 | 318 | 5.52 | 746 | 0.04 | 305 | 5.43 | 715 | 0.40 | 323 | 6.10 | 691 | 1.11 | 317 | 6.59 | 697 | 28. |
| | 23.24 | 290 | 16.32 | 747 | 23.32 | 333 | 17.07 | 694 | 12.19 | 327 | 17.37 | 712 | 12.38 | 336 | 18.03 | 746 | 12.12 | 317 | 17.56 | 734 | 12.44 | 321 | 18.20 | 682 | 13.21 | 334 | 19.12 | 733 | |
| 29. | 11.48 | 275 | 4.57 | 720 | - | - | 5.32 | 846 | 0.26 | 309 | 5.56 | 726 | 0.49 | 337 | 6.26 | 736 | 0.26 | 335 | 6.11 | 744 | 1.02 | 310 | 6.37 | 624 | 1.52 | 338 | 8.00 | 726 | 29. |
| | 23.56 | 305 | 17.36 | 698 | 12.21 | 437 | 17.15 | 863 | 12.46 | 314 | 18.08 | 688 | 13.03 | 331 | 18.32 | 716 | 12.35 | 367 | 18.22 | 779 | 12.45 | 317 | 19.32 | 662 | 14.17 | 356 | 20.07 | 731 | |
| 30. | - | - | 5.58 | 797 | 0.27 | 390 | 5.20 | 839 | 0.55 | 300 | 6.21 | 680 | | | | | 0.47 | 378 | 6.40 | 764 | 1.33 | 336 | 7.54 | 670 | 2.49 | 337 | 9.03 | 710 | 30. |
| | 12.29 | 355 | 17.35 | 749 | 12.43 | 378 | 18.08 | 798 | 13.13 | 292 | 18.34 | 642 | | | | | 12.56 | 404 | 18.39 | 749 | 14.19 | 334 | 20.16 | 702 | 15.20 | 349 | 21.08 | 719 | |
| 31. | | | | | 1.08 | 338 | 6.26 | 739 | 1.14 | 282 | 6.58 | 638 | | | | | 1.18 | 377 | 7.36 | 752 | | | | | 3.55 | 325 | 10.00 | 692 | 31. |
| | | | | | 13.27 | 303 | 18.54 | 685 | 13.27 | 288 | 18.59 | 616 | | | | | 14.21 | 409 | 19.37 | 741 | | | | | 16.27 | 334 | 22.26 | 727 | |
| Mittel | | 324 | | 708 | | 364 | | 769 | | 371 | | 769 | | 315 | | 721 | | 324 | | 726 | | 321 | | 720 | | 324 | | 724 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 337 | 736 |

Winterhalbjahr: 1.11. bis 30.4.
4 Tage Treibeis

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.01 m

W Tide
cm

Pegel : Farge
Gewässer : Weser
Gebiet : Unterweser

Nr. 4950020

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.10 | 342 | 11.16 | 750 | 5.46 | 342 | 11.47 | 726 | 8.05 | 334 | 1.19 | 715 | 9.44 | 325 | 3.02 | 727 | 9.51 | 325 | 3.14 | 691 | 10.27 | 309 | 3.42 | 688 | 10.40 | 332 | 3.50 | 744 | 1. |
| | 17.55 | 371 | 23.41 | 763 | 18.31 | 346 | - | - | 20.44 | 308 | 13.46 | 728 | 22.08 | 315 | 15.14 | 749 | 22.15 | 327 | 15.19 | 740 | 22.27 | 337 | 16.04 | 690 | 22.53 | 328 | 16.12 | 723 | |
| 2. | 6.31 | 344 | - | - | 7.09 | 335 | 0.12 | 725 | 9.01 | 325 | 2.24 | ○ 706 | 10.18 | 323 | 3.42 | 718 | 10.25 | 330 | 3.42 | 726 | 10.53 | 358 | 4.04 | 745 | 11.05 | 330 | 4.25 | 717 | 2. |
| | 19.01 | 343 | 12.18 | 741 | 19.44 | 319 | 12.50 | 713 | 21.42 | 331 | 14.50 | 765 | 22.46 | 329 | 15.51 | 752 | 22.40 | 324 | 15.50 | 731 | 23.09 | 350 | 16.19 | 725 | 23.15 | 335 | 16.48 | 710 | |
| 3. | 7.32 | 323 | 0.36 | 742 | 8.12 | 315 | 1.22 | 712 | 9.56 | 330 | 3.09 | 735 | 10.56 | 326 | 4.09 | 733 | 10.54 | 320 | 4.11 | 709 | 11.25 | 349 | 4.43 | 728 | 11.35 | 327 | 4.51 | 730 | 3. |
| | 19.57 | 327 | 13.18 | 731 | 20.49 | 304 | 13.56 | ○ 730 | 22.30 | 319 | 15.28 | 754 | 23.21 | 324 | 16.31 | 752 | 23.09 | 337 | 16.24 | 729 | 23.21 | 353 | 17.00 | 713 | 23.46 | 321 | 17.20 | 690 | |
| 4. | 8.35 | 335 | 1.49 | 762 | 9.16 | 311 | 2.29 | 725 | 10.38 | 324 | 4.00 | 720 | 11.26 | 323 | 4.44 | 722 | 11.23 | 341 | 4.39 | 726 | 11.59 | 351 | 5.10 | 755 | - | - | 5.29 | 748 | 4. |
| | 21.01 | 334 | 14.19 | ○ 758 | 21.48 | 296 | 14.50 | 739 | 23.12 | 317 | 16.10 | 760 | 23.47 | 343 | 17.05 | 755 | 23.41 | 359 | 17.06 | 747 | 23.52 | 342 | 17.23 | 706 | 12.21 | 352 | 17.50 | 705 | |
| 5. | 9.30 | 341 | 2.43 | 779 | 10.09 | 307 | 3.27 | 720 | 11.17 | 322 | 4.38 | 723 | 11.57 | 358 | 5.13 | 761 | - | - | 5.01 | 722 | - | - | 5.33 | 732 | 0.14 | 369 | 5.53 | 724 | 5. |
| | 22.02 | 309 | 15.08 | 764 | 22.38 | 300 | 15.43 | 741 | 23.46 | 316 | 16.51 | 752 | - | - | 17.33 | 767 | 12.01 | 329 | 18.08 | 748 | 12.21 | 356 | 18.05 | 729 | 12.44 | 336 | 18.41 | 694 | |
| 6. | 10.22 | 297 | 3.28 | 726 | 10.57 | 308 | 4.17 | 729 | 11.54 | 324 | 5.23 | 725 | 0.15 | 351 | 5.36 | 723 | 0.13 | 398 | 5.14 | 726 | 0.31 | 366 | 6.12 | 722 | 0.43 | 374 | 6.56 | 745 | 6. |
| | 22.46 | 294 | 15.53 | 730 | 23.27 | 310 | 16.32 | 750 | - | - | 17.25 | 753 | 12.23 | 332 | 18.01 | 714 | 12.04 | 361 | 17.49 | 731 | 12.53 | 363 | 19.16 | 725 | 13.37 | 358 | 19.14 | 675 | |
| 7. | 11.08 | 314 | 4.24 | 735 | 11.38 | 314 | 5.03 | 715 | 0.19 | 331 | 5.51 | 729 | 0.23 | 344 | 6.03 | 724 | 0.23 | 376 | 6.03 | 736 | 0.54 | 422 | 7.20 | 759 | 1.38 | 334 | 7.24 | 664 | 7. |
| | 23.43 | 302 | 16.46 | 763 | - | - | 17.14 | 754 | 12.25 | 341 | 18.07 | 776 | 12.38 | 361 | 18.13 | 734 | 12.35 | 396 | 18.33 | 756 | 13.56 | 398 | 19.31 | 707 | 14.01 | 326 | 20.27 | 642 | |
| 8. | 11.57 | 320 | 5.17 | 724 | 0.10 | 306 | 5.39 | 713 | 0.51 | 346 | 6.13 | 716 | 0.59 | 352 | 6.33 | 713 | 1.06 | 397 | 6.34 | 716 | 1.55 | 399 | 7.46 | 724 | 2.21 | 357 | 8.17 | 695 | 8. |
| | - | - | 17.31 | 759 | 12.16 | 313 | 17.53 | 737 | 12.52 | 336 | 18.32 | 740 | 13.08 | 352 | 18.52 | 698 | 13.12 | 361 | 19.06 | 674 | 14.43 | 407 | 20.36 | 709 | 15.08 | 327 | 21.18 | 663 | |
| 9. | 0.19 | 331 | 5.46 | 711 | 0.39 | 314 | 6.27 | 711 | 1.15 | 338 | 6.51 | 712 | 1.25 | 345 | 7.15 | 687 | 1.13 | 374 | 7.14 | 733 | 3.14 | 397 | 9.05 | 714 | 3.29 | 343 | 9.59 | 714 | 9. |
| | 12.25 | 337 | 18.09 | 753 | 12.41 | 350 | 18.30 | 761 | 13.24 | 346 | 19.08 | 723 | 13.44 | 346 | 19.43 | 673 | 13.55 | 421 | 19.45 | 697 | 16.06 | 353 | 22.06 | 669 | 16.30 | 393 | 22.20 | 757 | |
| 10. | 1.04 | 334 | 6.38 | 718 | 1.18 | 347 | 6.39 | 723 | 1.45 | 344 | 7.25 | 695 | 2.02 | 352 | 8.13 | 698 | 2.33 | 383 | 8.35 | 692 | 4.45 | 352 | 10.37 | 709 | 5.10 | 399 | 10.41 | 744 | 10. |
| | 13.14 | 340 | 18.46 | 752 | 13.24 | 340 | 18.58 | 743 | 13.49 | 351 | 19.45 | 703 | 14.37 | 380 | 20.39 | 688 | 15.17 | 374 | 21.35 | 664 | 17.28 | 357 | 23.16 | 721 | 17.40 | 362 | 23.36 | 703 | |
| 11. | 1.47 | 321 | 7.26 | 703 | 1.50 | 336 | 7.24 | 698 | 2.18 | 345 | 8.05 | 679 | 3.10 | 385 | 9.33 | 702 | 4.01 | 363 | 10.05 | 684 | 5.58 | 363 | 11.48 | 754 | 6.19 | 338 | - | - | 11. |
| | 13.54 | 332 | 19.43 | 740 | 13.59 | 332 | 19.50 | 738 | 14.30 | 346 | 20.34 | 671 | 16.03 | 409 | 22.19 | 706 | 17.03 | 333 | 23.01 | 647 | 18.41 | 351 | - | - | 18.57 | 325 | 12.16 | 710 | |
| 12. | 2.30 | 331 | 8.17 | 702 | 2.30 | 346 | 8.03 | 701 | 3.05 | 333 | 9.12 | 656 | 4.57 | 400 | 11.07 | 713 | 5.26 | 325 | 11.17 | 635 | 7.05 | 354 | 0.19 | 728 | 7.30 | 320 | 0.47 | 720 | 12. |
| | 14.35 | 349 | 20.36 | 750 | 14.29 | 370 | 20.33 | 744 | 15.34 | 345 | 21.56 | 655 | 17.53 | 386 | 23.45 | 698 | 17.58 | 308 | - | - | 19.38 | 326 | 12.41 | 723 | 19.59 | 317 | 13.11 | 727 | |
| 13. | 3.15 | 353 | 9.15 | 706 | 3.16 | 361 | 8.56 | 685 | 4.16 | 341 | 10.28 | 659 | 6.25 | 370 | - | - | 7.02 | 362 | 0.32 | 699 | 8.04 | 318 | 1.21 | ● 708 | 8.33 | 315 | 1.40 | ● 729 | 13. |
| | 15.36 | 361 | 21.31 | 730 | 15.22 | 357 | 21.25 | 695 | 17.01 | 334 | 23.17 | 656 | 19.12 | 350 | 12.14 | 717 | 19.22 | 320 | 12.25 | 688 | 20.32 | 313 | 13.45 | | 21.02 | 312 | 14.07 | 735 | |
| 14. | 4.14 | 346 | 10.09 | 691 | 3.58 | 359 | 10.03 | 695 | 5.46 | 325 | 11.55 | 667 | 7.19 | 366 | 1.01 | 699 | 7.39 | 325 | 1.07 | 671 | 9.02 | 313 | 2.13 | 727 | 9.31 | 300 | 2.34 | 730 | 14. |
| | 16.37 | 342 | 22.36 | 702 | 16.29 | 389 | 22.31 | 723 | 18.28 | 331 | - | - | 19.46 | 417 | 13.16 | 715 | 20.16 | 318 | 13.23 | 705 | 21.24 | 313 | 14.33 | 735 | 22.25 | 244 | 15.02 | 690 | |
| 15. | 5.17 | 322 | 11.05 | 658 | 5.20 | 366 | 11.15 | 718 | 7.01 | 331 | 0.27 | 679 | 8.31 | 396 | 1.23 | 793 | 8.33 | 330 | 1.58 | ● 696 | 9.48 | 314 | 2.58 | 739 | 10.15 | 295 | 4.04 | 636 | 15. |
| | 17.34 | 321 | 23.39 | 706 | 18.05 | 364 | 23.58 | 708 | 19.44 | 313 | 12.55 | 694 | 21.00 | 337 | 13.57 | 767 | 21.16 | 331 | 14.32 | | 22.14 | 317 | 15.22 | 750 | 22.34 | 313 | 15.46 | 701 | |
| 16. | 6.16 | 331 | - | - | 6.24 | 368 | - | - | 7.49 | 339 | 1.32 | 667 | 9.11 | 330 | 2.29 | ● 726 | 9.25 | 310 | 2.39 | 711 | 10.37 | 306 | 3.44 | 742 | 11.07 | 317 | 3.59 | 758 | 16. |
| | 18.40 | 349 | 12.08 | 696 | 19.13 | 366 | 12.23 | 724 | 20.37 | 328 | 13.41 | 723 | 21.39 | 329 | 14.44 | 744 | 21.39 | 326 | 15.06 | 705 | 23.00 | 316 | 16.16 | 735 | 23.32 | 334 | 16.40 | 754 | |
| 17. | 7.12 | 344 | 0.27 | 717 | 7.27 | 363 | 0.44 | 707 | 8.50 | 330 | 2.08 | ● 709 | 9.55 | 352 | 3.12 | 736 | 10.21 | 320 | 3.08 | 779 | 11.28 | 300 | 4.29 | 739 | - | - | 5.01 | 778 | 17. |
| | 19.57 | 343 | 13.09 | 715 | 20.10 | 362 | 13.18 | 745 | 21.24 | 322 | 14.28 | | 22.24 | 333 | 15.30 | 771 | 22.29 | 316 | 15.34 | 729 | 23.42 | 329 | 17.12 | 722 | 12.00 | 315 | 17.30 | 739 | |
| 18. | 8.03 | 326 | 1.20 | 702 | 8.26 | 347 | 1.38 | 731 | 9.37 | 318 | 2.59 | 714 | 10.35 | 337 | 3.47 | 729 | 10.56 | 301 | 4.02 | 728 | - | - | 5.25 | 754 | 0.11 | 325 | 5.51 | 776 | 18. |
| | 20.43 | 333 | 13.56 | 715 | 20.53 | 352 | 14.03 | 727 | 22.02 | 314 | 15.11 | 732 | 22.49 | 359 | 16.15 | 759 | 23.16 | 312 | 16.30 | 740 | 12.06 | 330 | 17.47 | 740 | 12.47 | 327 | 18.12 | 732 | |
| 19. | 8.51 | 327 | 2.14 | ● 724 | 9.09 | 358 | 2.22 | ● 720 | 10.20 | 325 | 3.38 | 738 | 11.16 | 364 | 4.28 | 776 | 11.37 | 304 | 4.44 | 735 | 0.27 | 344 | 5.58 | 748 | 0.50 | 321 | 6.25 | 744 | 19. |
| | 21.18 | 317 | 14.29 | 721 | 21.50 | 417 | 14.51 | 788 | 22.45 | 317 | 15.50 | 753 | 23.40 | 339 | 16.44 | 790 | 23.56 | 308 | 17.09 | 732 | 12.59 | 319 | 18.33 | 669 | 13.25 | 311 | 18.58 | 682 | |
| 20. | 9.31 | 320 | 2.58 | 713 | 9.55 | 370 | 3.09 | 772 | 11.00 | 333 | 4.21 | 736 | 11.52 | 332 | 5.11 | 745 | - | - | 5.28 | 730 | 0.59 | 306 | 6.53 | 696 | 1.33 | 298 | 7.10 | 683 | 20. |
| | 22.00 | 316 | 15.09 | 735 | 22.23 | 347 | 15.35 | 770 | 23.25 | 328 | 16.42 | 769 | - | - | 17.30 | 746 | 12.13 | 311 | 17.53 | 731 | 13.38 | 312 | 19.29 | 699 | 14.15 | 279 | 19.22 | 593 | |
| 21. | 10.12 | 313 | 3.34 | 714 | 10.34 | 351 | 3.55 | 748 | 11.36 | 321 | 4.52 | 736 | 0.19 | 323 | 5.54 | 718 | 0.38 | 322 | 6.11 | 729 | 1.53 | 352 | 7.23 | 706 | 2.04 | 262 | 7.55 | 615 | 21. |
| | 22.43 | 294 | 15.49 | 724 | 23.03 | 332 | 16.00 | 764 | 23.59 | 318 | 17.08 | 750 | 12.31 | 326 | 18.09 | 725 | 13.04 | 314 | 18.51 | 698 | 14.34 | 309 | 20.32 | 659 | 14.39 | 274 | 20.22 | 597 | |
| 22. | 10.30 | 338 | 4.16 | 695 | 11.13 | 329 | 4.32 | 733 | - | - | 5.43 | 738 | 0.51 | 328 | 6.29 | 728 | 1.14 | 320 | 7.09 | 697 | 2.31 | 369 | 8.37 | 779 | 2.41 | 298 | 8.51 | 649 | 22. |
| | 23.01 | 319 | 16.11 | 726 | 23.40 | 315 | 16.42 | 751 | 12.05 | 345 | 17.45 | 785 | 13.09 | 348 | 18.54 | 730 | 13.43 | 314 | 19.41 | 677 | 15.44 | 356 | 21.08 | 657 | 15.33 | 307 | 21.01 | 604 | |
| 23. | 11.18 | 329 | 4.37 | 696 | 11.43 | 325 | 5.09 | 708 | 0.39 | 341 | 6.03 | 739 | 1.33 | 351 | 7.19 | 714 | 2.00 | 330 | 7.59 | 702 | 3.45 | 335 | 9.39 | 653 | 3.59 | 284 | 9.31 | 596 | 23. |
| | 23.50 | 325 | 16.54 | 740 | - | - | 17.16 | 751 | 12.48 | 345 | 18.33 | 764 | 13.58 | 335 | 19.50 | 681 | 14.49 | 318 | 20.48 | 658 | 16.30 | 351 | 22.31 | 700 | 15.25 | 343 | 21.51 | 673 | |
| 24. | - | - | 5.19 | 709 | 0.12 | 322 | 5.45 | 731 | 1.17 | 332 | 6.49 | 722 | 2.18 | 326 | 7.58 | 624 | 3.01 | 339 | 9.16 | 702 | 5.05 | 371 | 10.53 | 731 | 5.04 | 391 | 10.46 | 739 | 24. |
| | 12.02 | 328 | 17.37 | 735 | 12.22 | 332 | 17.58 | 751 | 13.23 | 335 | 19.07 | 728 | 14.27 | 299 | 20.58 | 594 | 16.04 | 328 | 22.11 | 668 | 17.52 | 347 | 23.36 | 682 | 17.54 | 369 | 23.46 | 716 | |
| 25. | 0.23 | 358 | 6.01 | 743 | 0.49 | 322 | 6.28 | 725 | 1.51 | 332 | 7.38 | 713 | 1.26 | 411 | 8.09 | 655 | 4.24 | 347 | 10.48 | 725 | 6.27 | 306 | 12.28 | 636 | 7.21 | 402 | - | - | 25. |
| | 12.28 | 377 | 18.02 | 795 | 13.03 | 333 | 18.41 | 754 | 14.09 | 345 | 19.54 | 728 | 15.45 | 363 | 21.58 | 658 | 17.34 | 370 | 23.53 | 751 | 17.59 | 429 | 23.46 | 761 | 18.54 | 384 | 12.26 | 730 | |
| 26. | 1.08 | 365 | 6.39 | 744 | 1.31 | 331 | 7.09 | 725 | 2.32 | 365 | 8.19 | 700 | 5.04 | 344 | 10.49 | 679 | 6.30 | 354 | 11.53 | 722 | 7.13 | 372 | - | - | 7.39 | 415 | 0.36 | 749 | 26. |
| | 13.15 | 357 | 18.50 | 750 | 13.43 | 336 | 19.23 | 732 | 14.56 | 378 | 21.06 | 744 | 17.42 | 327 | 23.47 | 671 | 18.34 | 330 | - | - | 19.40 | 338 | 12.36 | 728 | 19.41 | 410 | 12.58 | 763 | |
| 27. | 1.48 | 326 | 7.29 | 700 | 2.12 | 321 | 8.01 | 689 | 3.54 | 381 | 9.39 | 709 | 6.26 | 339 | - | - | 6.54 | 342 | 0.31 | 689 | 8.05 | 338 | 1.18 | 729 | 7.44 | 424 | 0.56 | 749 | 27. |
| | 13.55 | 326 | 19.49 | 730 | 14.24 | 327 | 20.23 | 724 | 16.32 | 336 | 22.31 | 666 | 19.07 | 333 | 12.19 | 710 | 19.25 | 346 | 12.49 | 726 | 20.23 | 326 | 13.43 | 719 | 20.40 | 372 | 13.15 | 771 | |
| 28. | 2.32 | 329 | 8.23 | 701 | 3.01 | 339 | 9.03 | 732 | 5.19 | 312 | 11.22 | 683 | 7.39 | 349 | 1.01 | 720 | 7.51 | 332 | 1.09 | 709 | 8.44 | 327 | 2.08 | ○ 716 | 9.13 | 360 | 2.02 | ○ 777 | 28. |
| | 14.51 | 330 | 20.38 | 707 | 15.30 | 363 | 21.17 | 717 | 17.56 | 347 | - | - | 20.06 | 334 | 13.14 | 723 | 20.18 | 322 | 13.36 | 728 | 20.59 | 336 | 14.31 | 722 | 21.19 | 308 | 14.16 | 713 | |
| 29. | 3.23 | 311 | 9.30 | 712 | 3.59 | 343 | 10.04 | 700 | 6.50 | 366 | 0.02 | 735 | 8.29 | 347 | 1.53 | 699 | 8.34 | 320 | 1.54 | ○ 691 | 9.24 | 338 | 2.45 | 738 | 9.33 | 331 | 2.44 | 694 | 29. |
| | 16.00 | 337 | 21.56 | 723 | 16.32 | 353 | 22.40 | 716 | 19.30 | 337 | 12.27 | 730 | 20.55 | 370 | 14.15 | 769 | 20.54 | 343 | 14.15 | 720 | 21.40 | 346 | 15.11 | 734 | 21.51 | 345 | 15.02 | 719 | |
| 30. | 4.35 | 336 | 10.35 | 705 | 5.25 | 343 | 11.24 | 703 | 8.04 | 356 | 1.31 | 721 | 9.17 | 346 | 2.31 | ○ 748 | 9.22 | 341 | 2.33 | 739 | 10.03 | 331 | 3.18 | 744 | 10.15 | 391 | 3.16 | 802 | 30. |
| | 17.10 | 341 | 22.57 | 727 | 18.08 | 352 | - | - | 20.29 | 339 | 13.39 | 726 | 21.36 | 325 | 14.44 | 735 | 21.37 | 332 | 14.48 | 749 | 22.16 | 328 | 15.37 | 729 | 22.33 | 401 | 15.22 | 803 | |
| 31. | | | | | 6.50 | 349 | 0.09 | 713 | 8.54 | 345 | 2.05 | ○ 734 | | | | | 9.57 | 325 | 3.05 | 726 | | | | | 10.48 | 401 | 3.37 | 800 | 31. |
| | | | | | 19.35 | 337 | 12.37 | 728 | 21.30 | 344 | 14.43 | 771 | | | | | 22.04 | 320 | 15.21 | 707 | | | | | 22.59 | 369 | 15.53 | 739 | |
| Mittel | | 332 | | 727 | | 339 | | 728 | | 335 | | 721 | | 348 | | 721 | | 338 | | 714 | | 344 | | 719 | | 339 | | 713 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 336 | 722 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

# W Tide

PNP : NN - 5.01 m

cm

Pegel : Farge
Gewässer : Weser
Gebiet : Unterweser

Nr. 4950020

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 1. | 1. | 26. | 31. | 10. | 1. | 7. | 3. | 25. | 29. | 8. | 1. | 6.+ | 15. | 4. | 13. | 1. | 12. | 24. | 24. | 18. | 12. | 17. | 25. | 14. | 20. |
| N | 270 | 626 | 286 | 677 | 267 | 616 | 258 | 620 | 289 | 614 | 289 | 624 | 276 | 643 | 294 | 658 | 296 | 685 | 308 | 655 | 299 | 594 | 301 | 635 | 300 | 636 | 244 | 593 |
| M | 324 | 708 | 364 | 769 | 371 | 769 | 315 | 721 | 324 | 726 | 321 | 720 | 324 | 724 | 332 | 727 | 339 | 728 | 335 | 721 | 348 | 721 | 338 | 714 | 344 | 719 | 339 | 713 |
| H | 464 | 900 | 482 | 887 | 612 | 905 | 400 | 847 | 409 | 796 | 392 | 795 | 409 | 780 | 377 | 795 | 417 | 788 | 381 | 785 | 417 | 793 | 421 | 779 | 429 | 779 | 424 | 803 |
| Tag | 27. | 28. | 4. | 10. | 5. | 13. | 19. | 15. | 31. | 11. | 2. | 7. | 16. | 12. | 25. | 25. | 19. | 19. | 27. | 22. | 14. | 15. | 9. | 17. | 25. | 22. | 27. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2002 | 2002 | 2008 | 2010 | 2010 | 2004 | 2011 | 2007 | 2006 | 2012 | 2004 | 2004 | 2012 | 2011 | 2012+ | 2012 | 2004 | 2004 | 2009 | 2005 | 2010 | 2012 | 2011 | 2011 | 2011 | 2005 | 2008 | 2010 |
| N | 252 | 562 | 232 | 564 | 229 | 568 | 251 | 574 | 267 | 614 | 271 | 617 | 276 | 627 | 294 | 658 | 288 | 641 | 290 | 642 | 271 | 594 | 240 | 571 | 270 | 592 | 232 | 564 |
| MN | 292 | 625 | 279 | 628 | 280 | 631 | 276 | 624 | 286 | 637 | 287 | 646 | 294 | 649 | 302 | 671 | 301 | 673 | 308 | 664 | 298 | 641 | 285 | 622 | 297 | 633 | 280 | 630 |
| M | 353 | 730 | 347 | 728 | 357 | 740 | 335 | 726 | 336 | 732 | 325 | 725 | 330 | 725 | 336 | 730 | 341 | 728 | 346 | 727 | 348 | 724 | 345 | 720 | 352 | 729 | 349 | 731 |
| MH | 487 | 876 | 459 | 850 | 476 | 857 | 443 | 859 | 436 | 853 | 391 | 804 | 383 | 793 | 400 | 809 | 400 | 804 | 406 | 806 | 439 | 808 | 442 | 829 | 486 | 871 | 462 | 854 |
| H | 581 | 1000 | 548 | 911 | 612 | 947 | 550 | 932 | 632 | 949 | 425 | 870 | 423 | 822 | 509 | 867 | 426 | 850 | 438 | 833 | 500 | 853 | 490 | 901 | 581 | 1000 | 548 | 911 |
| Jahr | 2006 | 2007 | 2003 | 2005 | 2012 | 2007 | 2008 | 2004 | 2008 | 2008 | 2011 | 2003 | 2007 | 2006 | 2007 | 2007 | 2005 | 2005 | 2009 | 2008 | 2004 | 2004 | 2005 | 2009 | 2006 | 2007 | 2003 | 2005 |
| HThw ab 1950 | 1000 | | 964 | | 1030 | | 1020 | | 949 | | 930 | | 822 | | 867 | | 850 | | 871 | | 902 | | 935 | | 1000 | | 964 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 258 | 10.02.2012 | 258 | 276 | 244 | 14.12.2012 |
| NThw | 594 | 24.09.2012 | 614 | 594 | 593 | 20.12.2012 |
| M | 337 729 | | 337 736 | 336 722 | 336 725 | |
| HTnw | 612 | 05.01.2012 | 612 | 421 | 612 | 05.01.2012 |
| HThw | 905 | 13.01.2012 | 905 | 795 | 905 | 13.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 229 | 16.01.2010 | 229 | 240 | 229 | 16.01.2010 |
| NThw | 562 | 03.11.2002 | 562 | 571 | 564 | 01.12.2010 |
| MN | 251 582 | | 254 585 | 275 615 | 253 585 | |
| M | 342 728 | | 342 730 | 341 726 | 342 728 | |
| MH | 540 919 | | 540 915 | 467 850 | 548 928 | |
| HTnw | 632 | 01.03.2008 | 632 | 509 | 632 | 01.03.2008 |
| HThw | 1000 | 09.11.2007 | 1000 | 901 | 1000 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | 158 | 15.03.1964 | 399 | 16.01.1905 | 816 | 23.12.1894 | 1030 | 03.01.1976 |
| 2 | 170 | 02.03.1987 | 415 | 07.12.1959 | 735 | 17.02.1962 | 1020 | 17.02.1962 |
| 3 | 187 | 08.12.1959 | 415 | 18.01.1912 | 688 | 14.01.1916 | 1016 | 28.01.1994 |
| 4 | 188 | 15.02.1994 | 418 | 18.11.1916 | 687 | 16.02.1962 | 1000 | 09.11.2007 |
| 5 | 191 | 14.03.1964 | 429 | 18.01.1912 | 686 | 10.10.1926 | 994 | 21.01.1976 |
| 6 | 192 | 15.02.1994 | 438 | 19.11.1916 | 682 | 10.02.1949 | 992 | 10.01.1995 |
| 7 | 195 | 10.02.1996 | 441 | 11.11.1941 | 677 | 07.01.1905 | 984 | 28.02.1990 |
| 8 | 195 | 17.01.1972 | 441 | 17.01.1912 | 674 | 23.12.1954 | 980 | 01.11.2006 |
| 9 | 196 | 25.01.1937 | 442 | 25.01.1937 | 669 | 06.11.1985 | 975 | 23.01.1993 |
| 10 | 198 | 17.12.1997 | 449 | 01.02.1950 | 658 | 03.12.1917 | 974 | 27.02.1990 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | | | | | | | | | | | | | | | | | 705.9 |
| 620 | | | 60 | | | | | | | | | | | | 352 | | 708 | 708 | 705.8 |
| 600 | | | 59 | | | | | | | | | | | | 351 | | 707 | 707 | 705.7 |
| 580 | | | 58 | | | | | | | | | | | | 350 | | 706 | 706 | 705.5 |
| 560 | | | 58 | | | | | | | | | | | | 350 | | 706 | 706 | 705.4 |
| 540 | | | 57 | | | | | | | | | | | | 349 | | 705 | 705 | 704.9 |
| 520 | | | 56 | | | | | | | | | | | | 348 | | 704 | 704 | 704.3 |
| 500 | | 60 | 56 | | | | | | | | | | | | 348 | | 704 | 704 | 703.4 |
| 480 | 58 | 59 | 55 | | | | | | | | | | | | 346 | | 702 | 703 | 702.0 |
| 460 | 57 | 57 | 54 | | | | | | | | | | | | 342 | | 698 | 702 | 699.1 |
| 440 | 57 | 57 | 53 | | | | | | | | | 60 | 58 | 60 | 341 | 356 | 697 | 701 | 695.4 |
| 420 | 57 | 56 | 49 | 56 | 60 | | 60 | | 60 | | 58 | 59 | 56 | 59 | 336 | 355 | 691 | 693 | 685.9 |
| 400 | 57 | 51 | 44 | 55 | 58 | 58 | 59 | | 59 | 60 | 54 | 59 | 55 | 54 | 323 | 349 | 672 | 673 | 664.2 |
| 380 | 57 | 41 | 40 | 54 | 58 | 57 | 58 | 58 | 58 | 59 | 50 | 55 | 52 | 49 | 307 | 338 | 645 | 648 | 625.8 |
| 360 | 53 | 28 | 34 | 53 | 53 | 52 | 56 | 54 | 48 | 56 | 44 | 47 | 46 | 42 | 273 | 305 | 578 | 585 | 542.1 |
| 340 | 43 | 17 | 22 | 49 | 48 | 48 | 50 | 39 | 30 | 39 | 26 | 39 | 28 | 36 | 227 | 223 | 450 | 454 | 384.6 |
| 320 | 27 | 7 | 12 | 31 | 35 | 35 | 29 | 11 | 14 | 10 | 2 | 12 | 15 | 18 | 147 | 78 | 225 | 224 | 165.3 |
| 300 | 8 | 1 | 6 | 17 | 7 | 7 | 3 | 3 | 1 | | 1 | | | 8 | 46 | 8 | 54 | 53 | 41.3 |
| 280 | 3 | | 1 | 6 | | | 1 | | | | | | | 4 | 10 | 1 | 11 | 12 | 7.2 |
| 260 | | | | 1 | | | | | | | | | | 1 | 1 | | 1 | 2 | 1.9 |
| 240 | | | | | | | | | | | | | | | | | | | 0.2 |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | 705.9 |
| 1000 | | | | | | | | | | | | | | | | | | | 705.8 |
| 980 | | | | | | | | | | | | | | | | | | | 705.7 |
| 960 | | | | | | | | | | | | | | | | | | | 705.7 |
| 940 | | | | | | | | | | | | | | | | | | | 705.4 |
| 920 | 58 | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.3 |
| 900 | 57 | 60 | 58 | | | | | | | | | | | | 349 | | 704 | 705 | 704.2 |
| 880 | 56 | 59 | 56 | | | | | | | | | | | | 345 | | 700 | 703 | 702.7 |
| 860 | 56 | 57 | 54 | 56 | | | | | | | | | | | 341 | | 696 | 701 | 700.3 |
| 840 | 55 | 55 | 53 | 55 | | | | | | | | | | | 336 | | 691 | 699 | 696.1 |
| 820 | 55 | 50 | 49 | 55 | | | | | | | | | | 60 | 327 | | 682 | 695 | 688.4 |
| 800 | 55 | 46 | 44 | 53 | 60 | 58 | 60 | 58 | 59 | 60 | 58 | | | 57 | 316 | 355 | 671 | 685 | 673.7 |
| 780 | 53 | 40 | 38 | 48 | 58 | 57 | 59 | 57 | 58 | 59 | 56 | 60 | 58 | 57 | 294 | 349 | 643 | 665 | 640.7 |
| 760 | 52 | 27 | 24 | 45 | 50 | 51 | 55 | 52 | 54 | 53 | 50 | 58 | 56 | 52 | 249 | 322 | 571 | 600 | 581.8 |
| 740 | 48 | 17 | 18 | 37 | 41 | 41 | 45 | 39 | 43 | 46 | 41 | 51 | 46 | 42 | 202 | 265 | 467 | 490 | 455.5 |
| 720 | 44 | 9 | 9 | 27 | 24 | 24 | 21 | 24 | 20 | 23 | 26 | 28 | 23 | 29 | 137 | 142 | 279 | 278 | 285.1 |
| 700 | 33 | 4 | 8 | 18 | 10 | 16 | 12 | 5 | 5 | 13 | 15 | 19 | 11 | 19 | 89 | 69 | 158 | 151 | 152.7 |
| 680 | 18 | 1 | 4 | 12 | 6 | 5 | 2 | 1 | | 10 | 7 | 8 | 6 | 12 | 46 | 28 | 74 | 73 | 72.5 |
| 660 | 5 | | 4 | 6 | 3 | 1 | 1 | 1 | | 4 | 4 | 3 | 4 | 8 | 19 | 13 | 32 | 39 | 29.3 |
| 640 | 1 | | 3 | 5 | 1 | 1 | | | | | 2 | 1 | 1 | 6 | 11 | 3 | 14 | 20 | 13.2 |
| 620 | | | 1 | | 1 | | | | | | 1 | | | 5 | 2 | 1 | 3 | 8 | 4.3 |
| 600 | | | | | | | | | | | 1 | | | 3 | | 1 | 1 | 4 | 2.4 |
| 580 | | | | | | | | | | | | | | | | | | | 0.9 |
| 560 | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
**)Extremwerte ab 1894

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide

cm

Pegel : Brake

Gewässer : Weser

Gebiet : Unterweser

Nr. 4970020

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 31. | 1. | 26. | 31. | 10. | 2. | 7. | 3. | 4.+ | 29. | 8. | 1. | 6. | 15. | 4. | 13. | 1. | 12. | 24. | 24. | 18. | 12. | 17. | 25. | 14. | 20. |
| N | 251 | 616 | 269 | 669 | 228 | 605 | 242 | 600 | 261 | 597 | 260 | 603 | 242 | 626 | 255 | 640 | 264 | 671 | 275 | 643 | 277 | 585 | 276 | 629 | 270 | 625 | 209 | 573 |
| M | 312 | 700 | 352 | 756 | 349 | 754 | 300 | 706 | 299 | 706 | 296 | 702 | 295 | 708 | 303 | 710 | 312 | 714 | 309 | 708 | 328 | 709 | 321 | 707 | 325 | 706 | 313 | 696 |
| H | 476 | 887 | 496 | 873 | 613 | 892 | 395 | 826 | 394 | 769 | 377 | 769 | 393 | 757 | 352 | 770 | 402 | 767 | 366 | 764 | 406 | 772 | 418 | 767 | 430 | 759 | 404 | 777 |
| Tag | 27. | 28. | 4. | 10. | 5. | 5. | 19. | 15. | 31. | 11. | 2. | 7. | 16. | 12. | 25. | 25. | 19. | 19. | 27. | 22. | 14. | 15. | 9. | 17. | 25. | 22. | 27. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2002 | 2002 | 2002+ | 2010 | 2010 | 2004 | 2011 | 2007 | 2006 | 2012 | 2004 | 2004+ | 2012 | 2011 | 2012 | 2012 | 2004 | 2004 | 2009 | 2005 | 2010+ | 2012 | 2011 | 2011 | 2010 | 2005 | 2008+ | 2010 |
| N | 222 | 543 | 209 | 551 | 202 | 555 | 224 | 562 | 234 | 597 | 247 | 603 | 242 | 614 | 255 | 640 | 253 | 628 | 258 | 629 | 246 | 585 | 220 | 561 | 246 | 578 | 209 | 551 |
| MN | 267 | 613 | 255 | 614 | 251 | 616 | 251 | 609 | 256 | 621 | 259 | 630 | 264 | 635 | 270 | 656 | 269 | 660 | 276 | 651 | 269 | 629 | 259 | 611 | 272 | 621 | 255 | 615 |
| M | 333 | 715 | 327 | 713 | 334 | 722 | 315 | 709 | 314 | 714 | 302 | 708 | 305 | 710 | 310 | 715 | 316 | 715 | 321 | 714 | 326 | 711 | 326 | 708 | 333 | 715 | 329 | 715 |
| MH | 488 | 858 | 455 | 831 | 470 | 835 | 435 | 836 | 425 | 828 | 380 | 781 | 367 | 772 | 386 | 787 | 386 | 786 | 394 | 787 | 434 | 789 | 440 | 811 | 488 | 854 | 458 | 834 |
| H | 588 | 987 | 552 | 891 | 613 | 925 | 545 | 906 | 631 | 923 | 418 | 848 | 415 | 798 | 504 | 848 | 419 | 834 | 436 | 809 | 505 | 835 | 494 | 882 | 588 | 987 | 552 | 891 |
| Jahr | 2006 | 2007 | 2003 | 2003 | 2012 | 2007 | 2008 | 2004 | 2008 | 2008 | 2011 | 2003 | 2007 | 2006 | 2007 | 2007 | 2005 | 2005 | 2009 | 2008 | 2004 | 2004 | 2005 | 2009 | 2006 | 2007 | 2003 | 2003 |
| HThw ab 1901 | 987 | | 948 | | 1012 | | 1029 | | 923 | | 907 | | 805 | | 848 | | 834 | | 854 | | 888 | | 911 | | 987 | | 948 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 228 | 26.01.2012 | 228 | 242 | 209 | 14.12.2012 |
| NThw | 585 | 24.09.2012 | 597 | 585 | 573 | 20.12.2012 |
| M | 315 | 715 | 318 | 721 | 311 | 709 | 312 | 711 |
| HTnw | 613 | 05.01.2012 | 613 | 418 | 613 | 05.01.2012 |
| HThw | 892 | 05.01.2012 | 892 | 772 | 892 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 202 | 16.01.2010 | 202 | 220 | 202 | 16.01.2010 |
| NThw | 543 | 03.11.2002 | 543 | 561 | 551 | 01.12.2010 |
| MN | 226 | 568 | 227 | 570 | 247 | 603 | 227 | 571 |
| M | 319 | 713 | 321 | 714 | 317 | 712 | 319 | 713 |
| MH | 542 | 900 | 542 | 895 | 466 | 831 | 552 | 910 |
| HTnw | 631 | 01.03.2008 | 631 | 505 | 631 | 01.03.2008 |
| HThw | 987 | 09.11.2007 | 987 | 882 | 987 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | 125 | 15.03.1964 | 377 | 16.01.1905 | 795 | 23.12.1894 | 1029 | 17.02.1962 |
| 2 | 131 | 02.03.1987 | 411 | 18.11.1916 | 717 | 17.02.1962 | 1012 | 03.01.1976 |
| 3 | 137 | 25.01.1937 | 413 | 07.12.1959 | 695 | 10.02.1949 | 1004 | 28.01.1994 |
| 4 | 144 | 09.01.1970 | 420 | 18.01.1912 | 690 | 10.10.1926 | 987 | 09.11.2007 |
| 5 | 155 | 17.01.1972 | 424 | 11.11.1941 | 680 | 16.02.1962 | 987 | 21.01.1976 |
| 6 | 155 | 14.03.1964 | 430 | 25.01.1937 | 679 | 06.11.1985 | 975 | 10.01.1995 |
| 7 | 170 | 17.12.1997 | 431 | 19.11.1916 | 678 | 16.02.1962 | 970 | 01.11.2006 |
| 8 | 170 | 14.02.1994 | 439 | 17.01.1905 | 665 | 23.12.1954 | 970 | 13.03.1906 |
| 9 | 170 | 14.02.1994 | 444 | 20.11.1927 | 656 | 26.02.1990 | 965 | 28.02.1990 |
| 10 | 172 | 25.01.1937 | 445 | 01.02.1950 | 654 | 21.01.1956 | 961 | 05.02.1999 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | | | | | | | | | | | | | | | | | 705.9 |
| 620 | | | 60 | | | | | | | | | | | | 351 | | 707 | 708 | 705.8 |
| 600 | | | 58 | | | | | | | | | | | | 349 | | 705 | 706 | 705.6 |
| 580 | | | 58 | | | | | | | | | | | | 349 | | 705 | 706 | 705.5 |
| 560 | | | 58 | | | | | | | | | | | | 349 | | 705 | 706 | 705.5 |
| 540 | | | 57 | | | | | | | | | | | | 348 | | 704 | 705 | 704.9 |
| 520 | | | 56 | | | | | | | | | | | | 347 | | 703 | 704 | 704.4 |
| 500 | | 59 | 56 | | | | | | | | | | | | 347 | | 703 | 704 | 703.7 |
| 480 | 58 | 58 | 55 | | | | | | | | | | | | 345 | | 701 | 703 | 702.1 |
| 460 | 57 | 56 | 54 | | | | | | | | | | | | 341 | | 697 | 702 | 700.2 |
| 440 | 57 | 56 | 54 | | | | | | | | | | 58 | | 341 | | 697 | 702 | 696.7 |
| 420 | 57 | 54 | 53 | | | | | | 60 | | 58 | 60 | 57 | 60 | 338 | 356 | 694 | 700 | 692.0 |
| 400 | 57 | 50 | 47 | 56 | 60 | | 60 | | 59 | | 57 | 59 | 56 | 59 | 328 | 353 | 681 | 689 | 679.4 |
| 380 | 57 | 45 | 43 | 54 | 58 | 58 | 59 | | 59 | 60 | 53 | 56 | 52 | 55 | 315 | 345 | 660 | 665 | 658.8 |
| 360 | 55 | 34 | 40 | 53 | 58 | 57 | 58 | 58 | 58 | 58 | 50 | 51 | 51 | 50 | 297 | 333 | 630 | 642 | 620.3 |
| 340 | 50 | 26 | 35 | 52 | 53 | 52 | 56 | 56 | 52 | 56 | 44 | 46 | 44 | 45 | 268 | 310 | 578 | 591 | 543.7 |
| 320 | 37 | 16 | 25 | 45 | 49 | 50 | 51 | 49 | 36 | 46 | 25 | 36 | 26 | 37 | 222 | 243 | 465 | 475 | 412.2 |
| 300 | 21 | 8 | 17 | 28 | 37 | 39 | 43 | 25 | 22 | 20 | 8 | 11 | 16 | 24 | 150 | 129 | 279 | 290 | 228.4 |
| 280 | 8 | 3 | 9 | 14 | 20 | 12 | 16 | 6 | 7 | 1 | 1 | 1 | 2 | 12 | 66 | 32 | 98 | 101 | 67.4 |
| 260 | 2 | | 3 | 4 | | | 3 | 1 | | | | | | 4 | 9 | 4 | 13 | 15 | 11.5 |
| 240 | | | 1 | | | | | | | | | | | 2 | 1 | | 1 | 3 | 1.9 |
| 220 | | | | | | | | | | | | | | 1 | | | | 1 | 0.3 |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | 705.9 |
| 980 | | | | | | | | | | | | | | | | | | | 705.8 |
| 960 | | | | | | | | | | | | | | | | | | | 705.7 |
| 940 | | | | | | | | | | | | | | | | | | | 705.7 |
| 920 | | | | | | | | | | | | | | | | | | | 705.5 |
| 900 | 58 | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.3 |
| 880 | 56 | 60 | 56 | | | | | | | | | | | | 346 | | 701 | 703 | 703.9 |
| 860 | 56 | 59 | 56 | | | | | | | | | | | | 345 | | 700 | 703 | 703.0 |
| 840 | 55 | 56 | 53 | 56 | | | | | | | | | | | 338 | | 693 | 700 | 700.2 |
| 820 | 55 | 53 | 53 | 55 | | | | | | | | | | | 334 | | 689 | 699 | 696.5 |
| 800 | 55 | 50 | 48 | 55 | | | | | | | | | | | 326 | | 681 | 694 | 689.4 |
| 780 | 54 | 44 | 44 | 53 | 60 | 58 | | 58 | 59 | 60 | 58 | 60 | | 60 | 313 | 355 | 668 | 688 | 676.8 |
| 760 | 53 | 38 | 37 | 48 | 59 | 57 | 60 | 57 | 58 | 59 | 56 | 59 | 58 | 57 | 292 | 349 | 641 | 665 | 642.3 |
| 740 | 52 | 22 | 23 | 44 | 50 | 51 | 54 | 50 | 51 | 49 | 45 | 54 | 53 | 52 | 242 | 303 | 545 | 576 | 560.6 |
| 720 | 47 | 10 | 16 | 31 | 41 | 41 | 41 | 39 | 40 | 36 | 37 | 34 | 38 | 43 | 186 | 227 | 413 | 437 | 405.1 |
| 700 | 36 | 7 | 8 | 22 | 21 | 24 | 19 | 22 | 14 | 19 | 17 | 23 | 18 | 26 | 118 | 114 | 232 | 233 | 240.6 |
| 680 | 23 | 2 | 7 | 16 | 10 | 14 | 9 | 4 | 2 | 11 | 10 | 9 | 7 | 17 | 72 | 45 | 117 | 116 | 123.5 |
| 660 | 6 | | 4 | 10 | 6 | 5 | 1 | 1 | | 8 | 4 | 4 | 6 | 11 | 31 | 18 | 49 | 60 | 54.3 |
| 640 | 2 | | 4 | 5 | 2 | 1 | 1 | | | | 2 | 1 | 1 | 8 | 14 | 4 | 18 | 25 | 22.4 |
| 620 | 1 | | 2 | 2 | 1 | 1 | | | | | 2 | | | 5 | 7 | 2 | 9 | 13 | 9.6 |
| 600 | | | | | 1 | | | | | | 1 | | | 5 | 1 | 1 | 2 | 7 | 3.7 |
| 580 | | | | | | | | | | | | | | 2 | | | | 2 | 1.8 |
| 560 | | | | | | | | | | | | | | | | | | | 0.4 |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

**) Extremwerte ab 1901

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide
cm

Pegel : Brake
Gewässer : Weser
Gebiet : Unterweser

Nr. 4970020

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 5.24 | 711 | - | - | 5.26 | 705 | 0.36 | 312 | 6.32 | 751 | 0.33 | 270 | 7.21 | 626 | 0.32 | 301 | 6.37 | 697 | 1.35 | 347 | 7.51 | 664 | 2.27 | 281 | 8.48 | 626 | 1. |
| | 12.01 | 282 | 18.06 | 702 | 12.05 | 279 | 18.28 | 669 | 13.13 | 344 | 18.47 | 711 | 13.09 | 287 | 19.24 | 607 | 12.54 | 313 | 18.53 | 692 | 13.39 | 357 | 20.41 | 726 | 14.46 | 294 | 21.26 | 681 | |
| 2. | 0.20 | 324 | 5.58 | 737 | 0.10 | 368 | 6.33 | 797 | 1.03 | 341 | 7.19 | 756 | 1.21 | 290 | 8.17 | 600 | 1.04 | 315 | 7.15 | 670 | 3.05 | 377 | 9.23 | 685 | 3.55 | 285 | 10.21 | 667 | 2. |
| | 12.45 | 318 | 18.40 | 687 | 13.09 | 358 | 18.58 | 703 | 13.54 | 371 | 19.42 | 729 | 13.42 | 319 | 20.39 | 628 | 13.30 | 312 | 19.33 | 640 | 15.36 | 341 | 22.00 | 684 | 16.27 | 300 | 22.44 | 686 | |
| 3. | 0.59 | 305 | 7.08 | 679 | 1.08 | 346 | 7.14 | 693 | 2.03 | 394 | 7.42 | 711 | 2.20 | 330 | 9.26 | 643 | 1.48 | 289 | 8.27 | 597 | 4.27 | 301 | 11.00 | 659 | 5.12 | 277 | 11.35 | 683 | 3. |
| | 13.24 | 300 | 19.45 | 662 | 13.05 | 379 | 20.11 | 751 | 14.14 | 333 | 19.37 | 750 | 15.26 | 319 | 22.13 | 645 | 14.10 | 297 | 21.04 | 639 | 17.01 | 292 | 23.19 | 667 | 17.41 | 299 | 23.38 | 717 | |
| 4. | 1.41 | 336 | 7.47 | 690 | 2.18 | 496 | 7.40 | 842 | 23.59 | * 602 | 8.47 | 776 | 4.12 T | 320 | 10.43 T | 658 | 3.18 | 305 | 10.04 | 646 | 5.43 | 260 | - | - | 6.21 | 276 | - | - | 4. |
| | 14.12 | 328 | 20.45 | 674 | 15.08 | 423 | 20.40 | 730 | 16.04 | 525 | 21.02 | 799 | 17.00 T | 302 | 23.18 T | 654 | 16.03 | 344 | 22.38 | 698 | 18.08 | 283 | 12.07 | 650 | 18.48 | 296 | 12.26 | 708 | |
| 5. | 2.54 | 357 | 9.05 | 701 | 3.28 | 395 | 9.58 | 758 | 3.41 | 469 | 9.23 | 816 | 5.46 T | 261 | - | - | 5.23 | 307 | 11.42 | 655 | 6.55 | 266 | 0.23 | 687 | 7.22 | 295 | 0.39 | 737 | 5. |
| | 15.52 | 335 | 22.19 | 664 | 15.50 | 405 | 21.37 | 728 | 13.39 | 613 | 23.01 | 892 | 18.07 T | 299 | 12.03 T | 621 | 17.37 | 314 | - | - | 19.19 | 275 | 13.07 | 681 | 19.46 | 296 | 13.15 | 730 | |
| 6. | 4.08 | 356 | 10.29 | 707 | 4.20 | 380 | 10.26 | 720 | 6.09 | 548 | 11.14 | 794 | 6.59 T | 279 | 0.30 T | 674 | 6.32 | 289 | 0.03 | 700 | 7.53 | 268 | 1.21 | ○ 710 | 8.10 | 276 | 1.28 | ○ 736 | 6. |
| | 17.06 | 338 | 23.21 | 664 | 16.44 | 400 | 23.01 | 764 | 18.03 | 405 | - | - | 19.19 T | 299 | 13.01 T | 671 | 18.56 | 282 | 12.40 | 676 | 20.24 | 289 | 13.53 | 723 | 20.42 | 276 | 14.05 | 723 | |
| 7. | 5.26 | 331 | 11.42 | 687 | 5.54 | 380 | 11.55 | 724 | 6.21 | 329 | 0.06 | 716 | 7.50 T | 279 | 1.31 | ○ 679 | 7.30 | 261 | 1.02 | 688 | 8.59 | 296 | 1.51 | 769 | 9.06 | 274 | 2.23 | 735 | 7. |
| | 17.59 | 303 | - | - | 17.47 | 406 | 23.39 | 821 | 19.06 | 410 | 12.40 | 759 | 20.12 T | 273 | 13.59 T | 664 | 19.43 | 285 | 13.32 | 657 | 21.08 | 286 | 14.31 | 744 | 21.36 | 254 | 14.51 | 723 | |
| 8. | 6.19 | 306 | 0.12 | 650 | 6.53 | 389 | 11.57 | 743 | 7.37 | 430 | 0.48 | 840 | 8.54 T | 253 | 2.14 T | 669 | 8.33 | 337 | 1.54 | ○ 742 | 9.33 | 264 | 2.45 | 749 | 9.57 | 242 | 3.19 | 694 | 8. |
| | 18.49 | 287 | 12.31 | 679 | 19.01 | 295 | - | - | 19.55 | 356 | 13.03 | 803 | 20.54 T | 264 | 14.58 T | 647 | 20.48 | 308 | 14.09 | 756 | 21.53 | 262 | 15.15 | 726 | 22.24 | 253 | 15.44 | 706 | |
| 9. | 7.10 | 294 | 0.56 | 661 | 5.33 | 474 | 1.24 | 731 | 8.13 | 292 | 1.40 | ○ 757 | 9.24 T | 280 | 3.08 T | 693 | 9.11 | 264 | 2.19 | 743 | 10.15 | 266 | 3.35 | 718 | 10.41 | 274 | 4.07 | 719 | 9. |
| | 19.36 | 286 | 13.10 | 681 | 19.41 | 478 | 12.25 | 850 | 20.31 | 346 | 14.12 | 748 | 21.48 T | 266 | 15.17 T | 686 | 21.30 | 279 | 15.03 | 702 | 22.37 | 278 | 15.54 | 743 | 23.09 | 269 | 16.18 | 733 | |
| 10. | 8.00 | 284 | 1.31 | ○ 679 | 8.02 | 386 | 0.47 | ○ 873 | 9.14 | 326 | 2.17 | 817 | 10.17 T | 252 | 3.38 T | 701 | 10.01 | 284 | 3.02 | 748 | 10.57 | 287 | 4.10 | 734 | 11.27 | 271 | 4.54 | 707 | 10. |
| | 20.17 | 278 | 13.51 | 682 | 20.24 | 372 | 13.41 | 813 | 21.15 | 313 | 14.38 | 748 | 22.33 T | 242 | 16.08 T | 666 | 22.15 | 290 | 15.33 | 745 | 23.17 | 283 | 16.26 | 747 | 23.54 | 285 | 17.07 | 737 | |
| 11. | 8.39 | 264 | 2.14 | 664 | 8.43 | 315 | 1.49 | 759 | 9.45 | 325 | 3.00 | 776 | 10.55 T | 246 | 4.29 T | 680 | 10.40 | 284 | 3.53 | 769 | 11.39 | 302 | 4.53 | 747 | - | - | 5.44 | 715 | 11. |
| | 20.53 | 251 | 14.31 | 638 | 20.53 | 297 | 14.16 | 726 | 22.01 | 310 | 15.24 | 759 | 23.07 T | 269 | 16.57 T | 682 | 22.56 | 276 | 16.22 | 732 | - | - | 17.25 | 758 | 12.05 | 313 | 17.44 | 755 | |
| 12. | 9.01 | 255 | 2.52 | 616 | 9.20 | 303 | 2.33 | 737 | 10.20 | 342 | 3.37 | 774 | 11.35 T | 284 | 5.08 T | 724 | 11.18 | 290 | 4.42 | 752 | 0.02 | 290 | 5.44 | 727 | 0.39 | 317 | 6.36 | 736 | 12. |
| | 21.23 | 272 | 15.16 | 647 | 21.35 | 349 | 15.06 | 758 | 22.57 | 405 | 16.33 | 882 | 23.47 T | 280 | 17.31 T | 703 | 23.36 | 276 | 16.59 | 740 | 12.10 | 302 | 18.02 | 737 | 12.53 | 355 | 18.37 | 757 | |
| 13. | 9.47 | 300 | 3.13 | 707 | 9.46 | 289 | 2.50 | 744 | 11.18 | 412 | 4.17 | 890 | - | - | 5.41 | 726 | 11.58 | 278 | 5.19 | 737 | 0.44 | 294 | 6.41 | 718 | 1.23 | 296 | 7.33 | 665 | 13. |
| | 21.57 | 295 | 15.28 | 716 | 21.55 | 365 | 16.03 | 692 | 23.30 | 370 | 16.39 | 855 | 12.14 | 284 | 18.10 | 711 | - | - | 17.48 | 713 | 13.01 | 318 | 18.50 | 731 | 13.24 | 295 | 19.39 | 704 | |
| 14. | 10.04 | 287 | 3.42 | 690 | 10.38 | 354 | 3.47 | 781 | 11.48 | 293 | 4.59 | 792 | 0.23 | 307 | 6.15 | 753 | 0.11 | 266 | 6.07 | 712 | 1.30 | 304 | 7.37 | 699 | 2.10 | 283 | 8.35 | 666 | 14. |
| | 22.25 | 289 | 16.03 | 671 | 22.19 | 371 | 16.15 | 728 | 23.59 | 291 | 17.36 | 738 | 12.56 | 327 | 18.38 | 734 | 12.33 | 279 | 18.26 | 702 | 13.50 | 336 | 19.55 | 722 | 14.24 | 341 | 20.26 | 741 | |
| 15. | 10.51 | 291 | 4.18 | 698 | 11.23 | 332 | 4.08 | 799 | - | - | 5.43 | 765 | 0.45 | 341 | 6.34 | 826 | 0.49 | 271 | 6.56 | 693 | 2.32 | 316 | 8.58 | 676 | 3.17 | 335 | 9.14 | 676 | 15. |
| | 22.58 | 287 | 16.49 | 664 | 23.18 | 328 | 16.57 | 723 | 12.27 | 288 | 18.14 | 727 | 13.23 | 386 | 19.13 | 766 | 13.07 | 292 | 19.10 | 700 | 14.54 | 348 | 21.19 | 721 | 15.27 | 336 | 22.03 | 746 | |
| 16. | 11.18 | 279 | 4.54 | 671 | 11.50 | 291 | 5.03 | 748 | 0.36 | 288 | 6.27 | 748 | 1.59 | 317 | 7.58 | 709 | 1.33 | 286 | 7.53 | 685 | 3.51 | 324 | 10.21 | 683 | 4.17 | 376 | 10.44 | 746 | 16. |
| | 23.26 | 297 | 17.25 | 652 | - | - | 18.14 | 743 | 13.02 | 298 | 19.02 | 714 | 14.14 | 301 | 20.39 | 711 | 13.47 | 336 | 20.04 | 698 | 16.27 | 352 | 22.46 | 714 | 17.03 | 393 | 22.44 | 748 | |
| 17. | 11.55 | 304 | 5.31 | 690 | 0.10 | 370 | 5.47 | 811 | 1.17 | 305 | 7.11 | 742 | 2.56 | 319 | 9.08 | 704 | 2.38 | 295 | 9.09 | 670 | 5.21 | 292 | 11.24 | 664 | 5.28 | 334 | 11.19 | 694 | 17. |
| | - | - | 18.02 | 669 | 12.40 | 378 | 18.15 | 766 | 13.53 | 306 | 19.51 | 717 | 15.31 | 326 | 21.48 | 705 | 15.05 | 352 | 21.26 | 706 | 17.44 | 288 | 23.17 | 671 | 17.46 | 304 | 23.52 | 699 | |
| 18. | 0.08 | 312 | 6.01 | 694 | 0.50 | 344 | 6.41 | 795 | 2.06 | 327 | 8.05 | 729 | 4.18 | 301 | 10.43 | 682 | 4.11 | 307 | 10.38 | 671 | 6.06 | 276 | - | - | 6.21 | 280 | - | - | 18. |
| | 12.37 | 307 | 18.48 | 657 | 13.25 | 361 | 19.17 | 742 | 14.36 | 330 | 20.57 | 739 | 16.54 | 330 | 23.25 | 741 | 16.45 | 336 | 22.51 | 735 | 18.44 | 306 | 12.22 | 680 | 18.37 | 281 | 12.27 | 662 | |
| 19. | 0.43 | 329 | 6.58 | 702 | 1.38 | 336 | 7.28 | 755 | 3.13 | 364 | 9.27 | 774 | 5.37 | 364 | 11.57 | 790 | 5.40 | 320 | - | - | 7.10 | 276 | 0.20 | 709 | 7.13 | 285 | 0.46 | 703 | 19. |
| | 13.31 | 329 | 19.49 | 669 | 14.10 | 325 | 20.07 | 698 | 15.54 | 382 | 21.30 | 807 | 18.33 | 395 | - | - | 18.14 | 319 | 12.02 | 704 | 19.35 | 289 | 13.12 | 682 | 19.39 | 294 | 13.05 | 707 | |
| 20. | 1.51 | 336 | 8.06 | 687 | 2.31 | 311 | 8.36 | 693 | 3.48 | 403 | 10.25 | 802 | 7.06 | 292 | 0.11 | 762 | 6.45 | 289 | 0.08 | 711 | 7.59 | 287 | 1.25 | 713 | 7.59 | 294 | 1.26 | 717 | 20. |
| | 14.37 | 319 | 21.10 | 664 | 14.58 | 357 | 21.19 | 763 | 17.25 | 402 | 23.15 | 770 | 19.24 | 295 | 13.17 | 692 | 19.18 | 314 | 13.02 | 697 | 20.18 | 286 | 13.53 | 704 | 20.17 | 289 | 13.48 | 708 | |
| 21. | 3.12 | 332 | 9.30 | 682 | 4.00 | 405 | 9.48 | 742 | 6.01 | 331 | - | - | 8.17 | 316 | 1.27 | ● 724 | 7.50 | 289 | 1.01 | 728 | 8.35 | 286 | 2.02 | ● 719 | 8.35 | 292 | 2.12 | ● 711 | 21. |
| | 16.00 | 309 | 22.26 | 663 | 16.29 | 312 | 22.40 | 710 | 18.48 | 391 | 12.33 | 728 | 20.32 | 307 | 13.52 | 730 | 20.05 | 292 | 13.41 | 702 | 20.52 | 289 | 14.20 | 710 | 20.59 | 293 | 14.26 | 721 | |
| 22. | 4.34 | 319 | 10.44 | 695 | 5.05 | 297 | 11.25 | 730 | 7.42 | 481 | 0.44 | 880 | 8.58 | 282 | 2.02 | 734 | 8.33 | 275 | 1.52 | ● 723 | 9.15 | 292 | 2.33 | 726 | 9.14 | 294 | 2.47 | 720 | 22. |
| | 17.19 | 300 | 23.36 | 679 | 17.53 | 322 | 23.45 | 753 | 19.37 | 392 | 12.40 | 841 | 21.02 | 318 | 14.46 | 705 | 20.51 | 273 | 14.29 | 698 | 21.32 | 292 | 14.57 | 719 | 21.36 | 285 | 14.51 | 728 | |
| 23. | 5.46 | 308 | 11.42 | 708 | 6.22 | 316 | - | - | 8.20 | 332 | 1.29 | ● 765 | 9.54 | 301 | 2.38 | 771 | 9.12 | 266 | 2.36 | 718 | 9.44 | 284 | 3.06 | 712 | 9.49 | 289 | 3.24 | 712 | 23. |
| | 18.23 | 303 | - | - | 18.52 | 328 | 12.18 | 734 | 20.39 | 331 | 13.58 | 751 | 21.46 | 308 | 15.09 | 738 | 21.28 | 263 | 15.04 | 698 | 22.03 | 279 | 15.25 | 708 | 22.13 | 273 | 15.28 | 721 | |
| 24. | 7.00 | 326 | 0.31 | 711 | 7.46 | 364 | 0.50 | ● 768 | 9.16 | 321 | 2.26 | 791 | 10.15 | 315 | 3.27 | 772 | 9.48 | 266 | 3.10 | 717 | 10.07 | 286 | 3.43 | 702 | 10.20 | 275 | 4.04 | 686 | 24. |
| | 19.36 | 313 | 12.42 | 738 | 20.02 | 346 | 13.21 | 812 | 21.30 | 306 | 14.47 | 751 | 22.33 | 329 | 15.55 | 768 | 21.58 | 267 | 15.34 | 705 | 22.29 | 284 | 15.56 | 714 | 22.40 | 271 | 16.11 | 705 | |
| 25. | 8.06 | 291 | 1.17 | ● 706 | 8.21 | 313 | 1.43 | 751 | 10.06 | 277 | 3.09 | 756 | 10.47 | 325 | 4.11 | 790 | 10.18 | 273 | 3.47 | 719 | 10.41 | 285 | 4.15 | 708 | 10.48 | 282 | 4.38 | 682 | 25. |
| | 20.21 | 360 | 13.50 | 733 | 20.48 | 349 | 14.09 | 750 | 22.23 | 247 | 15.39 | 681 | 22.52 | 299 | 16.16 | 759 | 22.29 | 269 | 16.02 | 710 | 22.58 | 260 | 16.17 | 697 | 23.17 | 271 | 16.40 | 711 | |
| 26. | 8.59 | 373 | 1.47 | 882 | 9.22 | 320 | 2.19 | 769 | 10.50 | 228 | 3.48 | 672 | 11.15 | 288 | 4.36 | 758 | 10.42 | 275 | 4.13 | 711 | 11.00 | 288 | 4.45 | 671 | 11.20 | 281 | 5.17 | 668 | 26. |
| | 20.48 | 358 | 14.12 | 779 | 21.45 | 336 | 15.01 | 792 | 22.34 | 256 | 16.21 | 615 | 23.22 | 273 | 16.52 | 725 | 22.56 | 268 | 16.25 | 701 | 23.30 | 285 | 16.40 | 706 | 23.49 | 273 | 17.18 | 705 | |
| 27. | 9.34 | 334 | 2.42 | 758 | 10.06 | 326 | 3.31 | 756 | 11.08 | 300 | 4.29 | 730 | 11.37 | 275 | 5.07 | 726 | 11.08 | 282 | 4.46 | 705 | 11.25 | 310 | 5.11 | 674 | 11.58 | 290 | 5.52 | 676 | 27. |
| | 22.14 | 476 | 16.21 | 842 | 22.29 | 322 | 15.44 | 762 | 23.11 | 307 | 16.40 | 718 | 23.48 | 293 | 17.23 | 720 | 23.24 | 276 | 16.59 | 707 | - | - | 17.11 | 709 | - | - | 17.51 | 711 | |
| 28. | 10.37 | 344 | 3.11 | 887 | 10.42 | 276 | 3.57 | 759 | 11.36 | 297 | 4.51 | 747 | 11.59 | 314 | 5.23 | 735 | 11.32 | 291 | 5.19 | 697 | 0.00 | 300 | 5.45 | 672 | 0.30 | 286 | 6.31 | 681 | 28. |
| | 22.45 | 278 | 16.02 | 735 | 22.52 | 312 | 16.48 | 686 | 23.43 | 279 | 17.16 | 700 | - | - | 17.36 | 734 | 23.48 | 311 | 17.30 | 716 | 12.02 | 296 | 17.53 | 663 | 12.40 | 307 | 18.41 | 718 | |
| 29. | 11.10 | 264 | 4.29 | 711 | 11.48 | 436 | 4.59 | 831 | - | - | 5.37 | 713 | 0.10 | 314 | 6.02 | 726 | 11.50 | 347 | 5.48 | 725 | 0.19 | 284 | 6.06 | 603 | 1.12 | 311 | 7.29 | 710 | 29. |
| | 23.20 | 296 | 17.07 | 689 | 23.52 | 378 | 16.39 | 845 | 12.04 | 288 | 17.54 | 676 | 12.24 | 304 | 18.15 | 705 | - | - | 17.51 | 754 | 12.02 | 288 | 19.02 | 643 | 13.39 | 329 | 19.35 | 715 | |
| 30. | 11.57 | 355 | 5.24 | 780 | - | - | 4.52 | 821 | 0.11 | 275 | 6.06 | 668 | | | | | 0.06 | 357 | 6.12 | 741 | 0.52 | 314 | 7.31 | 653 | 2.06 | 308 | 8.34 | 694 | 30. |
| | 23.53 | 325 | 17.02 | 737 | 12.00 | 364 | 17.43 | 782 | 12.27 | 266 | 18.22 | 630 | | | | | 12.15 | 389 | 18.07 | 731 | 13.37 | 310 | 19.50 | 686 | 14.41 | 323 | 20.39 | 704 | |
| 31. | | | | | 0.29 | 309 | 5.59 | 730 | 0.23 | 260 | 6.42 | 629 | | | | | 0.35 | 358 | 7.10 | 734 | | | | | 3.14 | 294 | 9.35 | 676 | 31. |
| | | | | | 12.43 | 269 | 18.36 | 676 | 12.40 | 271 | 18.45 | 605 | | | | | 13.44 | 394 | 19.09 | 723 | | | | | 15.44 | 305 | 21.50 | 713 | |
| Mittel | | 312 | | 700 | | 352 | | 756 | | 349 | | 754 | | 300 | | 706 | | 299 | | 706 | | 296 | | 702 | | 295 | | 708 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 318 | 721 |

* 5. Wert am 03.01.2012

Winterhalbjahr: 1.11. bis 30.4.
9 Tage Treibeis

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide
cm

Pegel : Brake
Gewässer : Weser
Gebiet : Unterweser

Nr. 4970020

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.29 | 315 | 10.41 | 734 | 5.02 | 320 | 11.15 | 714 | 7.23 | 306 | 0.48 | 702 | 9.02 | 297 | 2.31 | 714 | 9.12 | 306 | 2.45 | 685 | 9.48 | 287 | 3.17 | 682 | 9.59 | 308 | 3.18 | 731 | 1. |
| | 17.08 | 348 | 22.59 | 743 | 17.51 | 324 | 23.41 | 712 | 20.02 | 275 | 13.13 | 715 | 21.28 | 285 | 14.38 | 739 | 21.35 | 309 | 14.41 | 736 | 21.49 | 323 | 15.32 | 683 | 22.14 | 307 | 15.43 | 710 | |
| 2. | 5.49 | 316 | 11.46 | 726 | 6.28 | 309 | - | - | 8.37 e | 292 | 1.56 ○ | 692 | 9.37 | 296 | 3.11 | 705 | 9.48 | 311 | 3.12 | 718 | 10.17 | 346 | 3.26 | 739 | 10.27 | 310 | 3.53 | 704 | 2. |
| | 18.21 | 315 | - | - | 18.59 | 292 | 12.20 | 701 | 21.02 | 302 | 14.01 | 750 | 22.08 | 303 | 15.14 | 742 | 22.01 | 304 | 15.18 | 725 | 22.31 | 339 | 15.49 | 718 | 22.33 | 316 | 16.17 | 697 | |
| 3. | 6.48 | 289 | 0.03 | 728 | 7.29 | 287 | 0.52 | 699 | 9.16 | 299 | 2.37 | 722 | 10.16 | 298 | 3.36 | 721 | 10.17 | 300 | 3.38 | 703 | 10.46 | 339 | 4.15 | 721 | 10.56 | 307 | 4.19 | 718 | 3. |
| | 19.15 | 297 | 12.48 | 715 | 20.08 | 272 | 13.24 ○ | 719 | 21.50 | 287 | 14.47 | 742 | 22.42 | 295 | 15.53 | 741 | 22.35 | 325 | 15.48 | 722 | 22.42 | 338 | 16.35 | 707 | 23.07 | 294 | 16.54 | 678 | |
| 4. | 7.53 | 305 | 1.07 | 743 | 8.35 | 280 | 1.57 | 712 | 9.58 | 293 | 3.28 | 707 | 10.46 | 296 | 4.13 | 710 | 10.45 | 322 | 4.06 | 719 | 11.21 | 336 | 4.28 | 744 | 11.44 | 338 | 4.58 | 735 | 4. |
| | 20.20 | 304 | 13.34 ○ | 743 | 21.06 | 264 | 14.15 | 727 | 22.33 | 285 | 15.37 | 749 | 23.08 | 320 | 16.26 | 745 | 23.00 | 345 | 16.30 | 738 | 23.11 | 325 | 16.53 | 700 | 23.39 | 359 | 17.25 | 690 | |
| 5. | 8.49 | 313 | 1.59 | 758 | 9.28 | 276 | 2.57 | 705 | 10.38 | 291 | 4.09 | 709 | 11.19 | 337 | 4.38 | 747 | 11.17 | 312 | 4.29 | 715 | 11.40 | 340 | 4.57 | 726 | - | - | 5.19 | 711 | 5. |
| | 21.18 | 274 | 14.24 | 748 | 21.57 | 267 | 15.08 | 730 | 23.07 | 283 | 16.12 | 742 | 23.36 | 328 | 16.46 | 755 | 23.40 | 386 | 17.35 | 740 | 23.52 | 351 | 17.32 | 721 | 12.04 | 315 | 18.19 | 681 | |
| 6. | 9.39 | 261 | 2.57 | 710 | 10.17 | 277 | 3.47 | 714 | 11.13 | 292 | 4.52 | 712 | 11.41 | 305 | 5.09 | 710 | 11.23 | 344 | 4.43 | 718 | - | - | 5.43 | 714 | 0.10 | 358 | 6.23 | 731 | 6. |
| | 22.04 | 255 | 15.22 | 715 | 22.46 | 280 | 15.55 | 740 | 23.41 | 303 | 16.48 | 742 | 23.43 | 320 | 17.31 | 702 | 23.41 | 362 | 17.17 | 723 | 12.13 | 347 | 18.49 | 716 | 12.53 | 339 | 18.53 | 661 | |
| 7. | 10.26 | 279 | 3.53 | 719 | 10.55 | 284 | 4.30 | 703 | 11.47 | 316 | 5.16 | 715 | 11.58 | 342 | 5.32 | 711 | 11.55 | 384 | 5.33 | 729 | 0.10 | 414 | 6.33 | 748 | 0.55 | 313 | 6.58 | 650 | 7. |
| | 23.02 | 264 | 16.03 | 745 | 23.27 | 274 | 16.36 | 743 | - | - | 17.22 | 756 | - | - | 17.37 | 722 | - | - | 17.54 | 748 | 13.17 | 380 | 19.04 | 693 | 13.22 | 304 | 20.06 | 630 | |
| 8. | 11.17 | 289 | 4.50 | 707 | 11.35 | 282 | 5.08 | 700 | 0.12 | 320 | 5.45 | 703 | 0.21 | 330 | 6.03 | 700 | 0.25 | 384 | 6.03 | 710 | 1.15 | 385 | 7.17 | 710 | 1.40 | 340 | 7.54 | 680 | 8. |
| | 23.42 | 299 | 16.54 | 742 | 23.58 | 284 | 17.16 | 730 | 12.11 | 310 | 17.59 | 727 | 12.30 | 331 | 18.23 | 686 | 12.29 | 345 | 18.42 | 666 | 14.01 | 395 | 20.16 | 693 | 14.26 | 302 | 20.50 | 650 | |
| 9. | 11.46 | 310 | 5.19 | 693 | - | - | 5.58 | 697 | 0.34 | 310 | 6.23 | 698 | 0.42 | 322 | 6.41 | 674 | 0.32 | 361 | 6.39 | 726 | 2.35 | 383 | 8.34 | 700 | 2.41 | 323 | 9.33 | 701 | 9. |
| | - | - | 17.35 | 736 | 12.00 | 329 | 17.46 | 745 | 12.42 | 317 | 18.38 | 709 | 13.01 | 324 | 19.19 | 660 | 13.14 | 418 | 19.18 | 691 | 15.24 | 329 | 21.37 | 655 | 15.37 | 372 | 21.47 | 742 | |
| 10. | 0.26 | 304 | 6.13 | 699 | 0.39 | 322 | 6.09 | 709 | 1.06 | 315 | 6.51 | 681 | 1.22 | 332 | 7.43 | 687 | 1.47 | 374 | 8.06 | 687 | 3.58 | 336 | 10.07 | 696 | 4.31 | 384 | 10.05 | 730 | 10. |
| | 12.34 | 314 | 18.11 | 735 | 12.41 | 317 | 18.24 | 730 | 13.09 | 324 | 19.04 | 692 | 13.56 | 364 | 20.10 | 676 | 14.30 | 368 | 21.06 | 658 | 16.46 | 337 | 22.48 | 707 | 16.58 | 338 | 23.12 | 687 | |
| 11. | 1.04 | 287 | 6.58 | 685 | 1.10 | 307 | 6.55 | 684 | 1.38 | 319 | 7.40 | 666 | 2.31 | 372 | 9.04 | 692 | 3.17 | 353 | 9.36 | 678 | 5.17 | 340 | 11.00 | 738 | 5.36 | 315 | 11.51 | 697 | 11. |
| | 13.09 | 301 | 19.11 | 723 | 13.15 | 306 | 19.21 | 724 | 13.46 | 321 | 20.06 | 659 | 15.04 | 399 | 21.41 | 695 | 16.12 | 320 | 22.37 | 640 | 18.01 | 330 | 23.46 | 714 | 18.16 | 300 | - | - | |
| 12. | 1.46 | 300 | 7.48 | 684 | 1.50 | 321 | 7.33 | 687 | 2.22 | 306 | 8.47 | 644 | 4.14 | 388 | 10.37 | 700 | 4.42 | 306 | 10.58 | 629 | 6.26 | 332 | - | - | 6.51 | 293 | 0.17 | 708 | 12. |
| | 13.52 | 320 | 20.02 | 733 | 13.50 | 352 | 19.51 | 730 | 14.49 | 324 | 21.25 | 643 | 17.12 | 371 | 23.13 | 687 | 17.10 | 289 | - | - | 18.54 | 301 | 12.16 | 711 | 19.23 | 288 | 12.45 | 712 | |
| 13. | 2.37 | 326 | 8.48 | 689 | 2.36 | 337 | 8.30 | 671 | 3.34 | 317 | 10.01 | 646 | 5.45 | 353 | 11.43 | 705 | 6.22 | 349 | 0.06 | 692 | 7.25 | 289 | 0.55 | 694 | 7.52 | 289 | 1.12 | 714 | 13. |
| | 14.56 | 338 | 21.03 | 713 | 14.40 | 336 | 21.00 | 681 | 16.17 | 312 | 22.46 | 644 | 18.25 | 332 | - | - | 18.36 | 300 | 12.02 | 680 | 19.51 | 285 | 13.13 | 694 | 20.23 | 283 | 13.36 | 719 | |
| 14. | 3.34 | 319 | 9.38 | 673 | 3.17 | 337 | 9.28 | 683 | 5.04 | 299 | 11.32 | 656 | 6.38 | 347 | 0.29 | 687 | 6.57 | 308 | 0.41 | 664 | 8.20 | 284 | 1.42 | 712 | 8.52 | 267 | 2.05 | 713 | 14. |
| | 15.55 | 316 | 22.08 | 685 | 15.47 | 375 | 22.04 | 711 | 17.46 | 308 | 23.59 | 666 | 18.55 | 406 | 12.44 | 702 | 19.34 | 298 | 12.55 | 699 | 20.45 | 286 | 14.03 | 722 | 21.36 | 209 | 14.37 | 674 | |
| 15. | 4.34 | 291 | 10.36 | 640 | 4.40 | 345 | 10.47 | 705 | 6.18 | 304 | - | - | 7.53 | 380 | 0.55 | 772 | 7.52 | 311 | 1.31 | 688 | 9.09 | 289 | 2.25 | 726 | 9.39 | 268 | 3.41 | 621 | 15. |
| | 16.46 | 295 | 23.09 | 690 | 17.22 | 343 | 23.22 | 697 | 19.01 | 285 | 12.23 | 683 | 20.20 | 314 | 13.11 | 749 | 20.38 | 310 | 13.56 | 755 | 21.36 | 292 | 14.49 | 736 | 21.56 | 289 | 15.21 | 683 | |
| 16. | 5.37 | 304 | 11.40 | 680 | 5.42 | 346 | 11.51 | 712 | 7.09 | 316 | 1.03 | 654 | 8.30 | 305 | 1.59 | 713 | 8.46 | 288 | 2.09 | 703 | 9.58 | 278 | 3.11 | 727 | 10.29 | 284 | 3.27 | 739 | 16. |
| | 18.01 | 326 | 23.55 | 701 | 18.29 | 346 | - | - | 19.57 | 299 | 13.09 | 711 | 21.00 | 304 | 14.08 | 733 | 21.01 | 306 | 14.36 | 698 | 22.21 | 291 | 15.47 | 720 | 22.54 | 308 | 16.10 | 736 | |
| 17. | 6.31 | 319 | - | - | 6.47 | 338 | 0.26 | 695 | 8.10 | 305 | 1.43 | 698 | 9.18 | 332 | 2.40 | 723 | 9.44 | 300 | 2.24 | 767 | 10.49 | 270 | 3.56 | 724 | 11.21 | 286 | 4.25 | 755 | 17. |
| | 19.16 | 318 | 12.43 | 698 | 19.29 | 333 | 12.44 | 730 | 20.44 | 293 | 13.53 | 729 | 21.46 | 308 | 14.47 | 754 | 21.51 | 302 | 15.02 | 726 | 23.04 | 309 | 16.45 | 707 | 23.33 | 296 | 17.04 | 716 | |
| 18. | 7.19 | 297 | 0.50 | 684 | 7.45 | 315 | 1.08 | 716 | 8.58 | 290 | 2.30 | 702 | 9.56 | 314 | 3.16 | 717 | 10.15 | 276 | 3.31 | 722 | 11.30 | 308 | 4.40 | 740 | - | - | 5.13 | 751 | 18. |
| | 20.00 | 304 | 13.26 | 700 | 20.13 | 321 | 13.35 | 713 | 21.22 | 285 | 14.39 | 721 | 22.12 | 339 | 15.34 | 748 | 22.37 | 291 | 15.57 | 736 | 23.48 | 327 | 17.13 | 728 | 12.08 | 296 | 17.57 | 709 | |
| 19. | 8.11 | 294 | 1.47 | 709 | 8.23 | 330 | 1.58 | 704 | 9.42 | 298 | 3.06 | 726 | 10.40 | 348 | 3.47 | 759 | 10.55 | 281 | 4.12 | 729 | - | - | 5.25 | 735 | 0.12 | 289 | 6.06 | 719 | 19. |
| | 20.38 | 286 | 13.54 | 706 | 21.11 | 402 | 14.09 | 767 | 22.07 | 289 | 15.13 | 742 | 23.00 | 317 | 16.13 | 771 | 23.17 | 286 | 16.39 | 727 | 12.17 | 296 | 18.10 | 652 | 12.43 | 276 | 18.40 | 660 | |
| 20. | 8.52 | 289 | 2.26 | 695 | 9.16 | 340 | 2.31 | 752 | 10.23 | 308 | 3.53 | 724 | 11.10 | 307 | 4.43 | 732 | 11.33 | 288 | 4.55 | 723 | 0.17 | 283 | 6.25 | 682 | 0.50 | 262 | 6.48 | 663 | 20. |
| | 21.19 | 284 | 14.36 | 719 | 21.36 | 312 | 14.44 | 751 | 22.48 | 300 | 15.56 | 752 | 23.40 | 299 | 16.49 | 736 | 23.59 | 304 | 17.23 | 724 | 12.57 | 288 | 19.04 | 685 | 13.31 | 242 | 19.09 | 573 | |
| 21. | 9.32 | 280 | 3.07 | 697 | 9.54 | 318 | 3.24 | 733 | 10.57 | 292 | 4.18 | 724 | 11.53 | 300 | 5.25 | 706 | - | - | 5.40 | 723 | 1.15 | 336 | 6.55 | 691 | 1.12 | 232 | 7.46 | 597 | 21. |
| | 22.00 | 260 | 15.13 | 708 | 22.19 | 295 | 15.30 | 749 | 23.20 | 288 | 16.35 | 739 | - | - | 17.34 | 713 | 12.24 | 295 | 18.23 | 691 | 13.52 | 285 | 20.12 | 646 | 13.55 | 241 | 20.15 | 581 | |
| 22. | 9.53 | 312 | 3.47 | 679 | 10.32 | 294 | 4.04 | 719 | 11.27 | 321 | 5.11 | 728 | 0.10 | 306 | 6.00 | 715 | 0.33 | 302 | 6.38 | 692 | 1.51 | 361 | 8.00 | 759 | 1.50 | 271 | 8.34 | 631 | 22. |
| | 22.20 | 288 | 15.46 | 712 | 22.58 | 277 | 16.09 | 738 | - | - | 17.14 | 764 | 12.31 | 330 | 18.23 | 719 | 13.01 | 296 | 19.16 | 671 | 15.06 | 336 | 20.43 | 643 | 14.49 | 278 | 20.59 | 585 | |
| 23. | 10.37 | 303 | 4.10 | 677 | 11.02 | 293 | 4.43 | 693 | 0.03 | 318 | 5.29 | 727 | 0.53 | 332 | 6.46 | 703 | 1.20 | 315 | 7.31 | 697 | 3.04 | 323 | 9.13 | 642 | 3.11 | 261 | 9.17 | 577 | 23. |
| | 23.10 | 293 | 16.22 | 722 | 23.31 | 290 | 16.41 | 738 | 12.08 | 322 | 17.45 | 747 | 13.17 | 314 | 19.21 | 670 | 14.06 | 300 | 20.22 | 651 | 15.44 | 339 | 22.07 | 688 | 14.35 | 321 | 21.45 | 658 | |
| 24. | 11.23 | 300 | 4.51 | 690 | 11.44 | 300 | 5.15 | 717 | 0.37 | 306 | 6.19 | 709 | 1.34 | 305 | 7.32 | 610 | 2.20 | 327 | 8.43 | 698 | 4.25 | 357 | 10.23 | 718 | 4.18 | 374 | 10.22 | 718 | 24. |
| | 23.46 | 337 | 17.04 | 719 | - | - | 17.21 | 737 | 12.44 | 309 | 18.33 | 715 | 13.34 | 277 | 20.39 | 585 | 15.21 | 312 | 21.45 | 663 | 17.12 | 327 | 23.09 | 667 | 17.12 | 341 | 23.24 | 698 | |
| 25. | 11.45 | 352 | 5.30 | 725 | 0.10 | 289 | 6.00 | 710 | 1.11 | 306 | 7.09 | 702 | 0.50 | 398 | 7.50 | 648 | 3.41 | 337 | 10.16 | 721 | 5.45 | 282 | 12.10 | 625 | 6.42 | 375 | - | - | 25. |
| | - | - | 17.36 | 770 | 12.22 | 302 | 18.03 | 740 | 13.28 | 323 | 19.21 | 715 | 14.59 | 353 | 21.34 | 648 | 16.54 | 362 | 23.22 | 745 | 17.22 | 430 | 23.08 | 743 | 18.10 | 352 | 12.03 | 708 | |
| 26. | 0.28 | 338 | 6.08 | 726 | 0.52 | 299 | 6.40 | 710 | 1.54 | 346 | 7.51 | 687 | 4.14 | 332 | 10.16 | 669 | 5.50 | 333 | 11.19 | 717 | 6.32 | 355 | - | - | 7.02 | 391 | 0.15 | 729 | 26. |
| | 12.34 | 330 | 18.21 | 731 | 13.02 | 304 | 18.53 | 718 | 14.16 | 363 | 20.36 | 731 | 17.01 | 307 | 23.14 | 662 | 17.49 | 312 | - | - | 19.01 | 315 | 12.08 | 712 | 18.54 | 383 | 12.30 | 738 | |
| 27. | 1.04 | 292 | 7.00 | 682 | 1.30 | 289 | 7.33 | 675 | 3.15 | 366 | 9.10 | 696 | 5.47 | 322 | 11.48 | 701 | 6.14 | 329 | 0.04 | 682 | 7.25 | 315 | 0.44 | 713 | 6.50 | 404 | 0.39 | 728 | 27. |
| | 13.15 | 294 | 19.18 | 713 | 13.40 | 297 | 19.50 | 712 | 15.46 | 312 | 22.04 | 654 | 18.25 | 312 | - | - | 18.46 | 328 | 12.19 | 720 | 19.40 | 299 | 13.14 | 705 | 19.58 | 335 | 13.01 | 744 | |
| 28. | 1.52 | 295 | 7.52 | 687 | 2.19 | 310 | 8.38 | 718 | 4.33 | 288 | 10.56 | 670 | 7.00 | 332 | 0.30 | 711 | 7.07 | 316 | 0.39 | 700 | 8.04 | 303 | 1.38 ○ | 703 | 8.27 | 323 | 1.43 ○ | 751 | 28. |
| | 14.07 | 305 | 20.05 | 694 | 14.49 | 337 | 20.48 | 703 | 17.15 | 328 | 23.32 | 724 | 19.27 | 315 | 12.40 | 716 | 19.36 | 299 | 13.02 | 721 | 20.19 | 310 | 14.00 | 708 | 20.34 | 264 | 13.57 | 692 | |
| 29. | 2.37 | 280 | 8.58 | 699 | 3.17 | 313 | 9.38 | 685 | 6.11 | 347 | 11.58 | 719 | 7.48 | 333 | 1.23 | 692 | 7.55 | 300 | 1.23 | 683 | 8.45 | 313 | 2.12 | 723 | 8.51 | 296 | 2.30 | 672 | 29. |
| | 15.22 | 311 | 21.29 | 711 | 15.53 | 330 | 22.11 | 705 | 18.48 | 312 | - | - | 20.18 | 359 | 13.39 | 759 | 20.16 | 327 | 13.40 ○ | 712 | 21.01 | 323 | 14.43 | 718 | 21.13 | 310 | 14.43 | 700 | |
| 30. | 3.55 | 310 | 10.08 | 692 | 4.44 | 314 | 10.52 | 690 | 7.28 | 335 | 0.53 | 709 | 8.37 | 331 | 1.46 ○ | 740 | 8.42 | 322 | 1.59 | 733 | 9.24 | 307 | 2.44 | 730 | 9.38 | 365 | 2.57 | 775 | 30. |
| | 16.29 | 318 | 22.27 | 714 | 17.26 | 329 | 23.44 | 699 | 19.50 | 314 | 13.08 | 714 | 20.58 | 306 | 14.07 | 730 | 20.57 | 312 | 14.13 | 742 | 21.36 | 305 | 15.08 | 715 | 21.53 | 375 | 15.05 | 777 | |
| 31. | | | | | 6.05 | 325 | - | - | 8.12 | 322 | 1.33 ○ | 723 | | | | | 9.15 | 307 | 2.33 | 721 | | | | | 10.08 | 383 | 3.24 | 774 | 31. |
| | | | | | 18.52 | 312 | 12.06 | 714 | 20.50 | 319 | 13.55 | 754 | | | | | 21.24 | 301 | 14.50 | 702 | | | | | 22.19 | 338 | 15.38 | 719 | |
| Mittel | | 303 | | 710 | | 312 | | 714 | | 309 | | 708 | | 328 | | 709 | | 321 | | 707 | | 325 | | 706 | | 313 | | 696 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 311 | 709 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 4.98 m

W Tide
cm

Pegel : Bremerhaven, Alter LT Nr. 4990010
Gewässer : Aussenweser
Gebiet : Wesermündung

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 10.57 | 279 | 4.38 | 680 | 11.02 | 280 | 4.35 | 678 | - | - | 5.48 | 718 | 11.57 | 263 | 6.29 | 591 | 11.49 | 309 | 5.52 | 665 | 0.32 | 347 | 7.06 | 640 | 1.23 | 273 | 8.02 | 601 | 1. |
| | 23.24 | 330 | 17.17 | 670 | 23.24 | 381 | 17.34 | 640 | 12.11 | 340 | 18.09 | 677 | - | - | 18.41 | 574 | - | - | 18.11 | 662 | 12.43 | 360 | 19.57 | 703 | 13.44 | 291 | 20.39 | 655 | |
| 2. | 11.45 | 321 | 5.15 | 706 | - | - | 5.20 | 765 | 0.03 | 333 | 6.25 | 723 | 0.12 | 274 | 7.32 | 579 | 0.01 | 310 | 6.31 | 640 | 2.10 | 380 | 8.36 | 660 | 2.51 | 277 | 9.35 | 641 | 2. |
| | 23.59 | 307 | 17.56 | 656 | 12.12 | 366 | 18.12 | 673 | 12.55 | 367 | 19.02 | 696 | 12.34 | 306 | 19.51 | 598 | 12.27 | 307 | 18.51 | 612 | 14.39 | 339 | 21.12 | 659 | 15.24 | 294 | 21.55 | 660 | |
| 3. | - | - | 6.19 | 649 | 0.12 | 353 | 6.27 | 670 | 1.06 | 393 | 7.05 | 679 | 1.17 | 324 | 8.43 | 611 | 0.44 | 285 | 7.45 | 571 | 3.25 | 294 | 10.10 | 631 | 4.05 | 266 | 10.47 | 658 | 3. |
| | 12.22 | 300 | 18.59 | 633 | 12.31 | 394 | 19.24 | 726 | 13.11 | 330 | 18.46 | 718 | 14.21 | 309 | 21.31 | 614 | 13.07 | 296 | 20.23 | 612 | 15.59 | 285 | 22.34 | 639 | 16.37 | 293 | 22.50 | 692 | |
| 4. | 0.48 | 343 | 7.00 | 661 | 1.31 | 510 | 6.45 | 806 | 23.37 * | 615 | 7.57 | 753 | 3.08 | 311 | 10.03 | 625 | 2.18 | 304 | 9.22 | 618 | 4.36 | 245 | 11.21 | 621 | 5.11 | 264 | 11.35 | 683 | 4. |
| | 13.17 | 332 | 19.59 | 646 | 14.28 | 441 | 19.53 | 702 | 15.14 | 538 | 20.14 | 761 | 15.53 | 290 | 22.30 | 622 | 15.05 | 347 | 21.53 | 668 | 17.07 | 273 | 23.35 | 658 | 17.45 | 290 | 23.51 | 713 | |
| 5. | 2.02 | 364 | 8.16 | 672 | 2.45 | 406 | 8.56 | 729 | 2.59 | 482 | 8.39 | 774 | 4.30 | 243 | 11.23 | 589 | 4.23 | 302 | 11.03 | 627 | 5.45 | 251 | - | - | 6.16 | 282 | - | - | 5. |
| | 14.59 | 339 | 21.31 | 637 | 15.07 | 424 | 20.49 | 701 | 13.15 | 627 | 22.08 | 860 | 16.55 | 298 | 23.33 | 647 | 16.40 | 310 | 23.14 | 668 | 18.12 | 265 | 12.18 | 652 | 18.42 | 282 | 12.27 | 702 | |
| 6. | 3.14 | 361 | 9.43 | 677 | 3.26 | 392 | 9.38 | 692 | 5.12 | 549 | 10.17 | 751 | 5.45 | 278 | - | - | 5.26 | 278 | 11.53 | 646 | 6.38 | 253 | 0.30 | 683 | 6.59 | 258 | 0.41 | 710 | 6. |
| | 16.10 | 339 | 22.33 | 634 | 15.54 | 416 | 22.07 | 738 | 17.07 | 398 | 23.27 | 675 | 18.06 | 287 | 12.18 | 636 | 17.50 | 270 | - | - | 19.18 | 281 | 13.05 | 696 | 19.31 | 263 | 13.15 | 695 | |
| 7. | 4.30 | 332 | 10.53 | 656 | 4.59 | 392 | 11.07 | 698 | 5.13 | 309 | 11.56 | 718 | 6.36 R | 262 | 0.39 R | 643 | 6.21 | 243 | 0.17 | 659 | 7.54 | 288 | 0.59 | 744 | 7.59 | 257 | 1.32 | 710 | 7. |
| | 16.56 | 298 | 23.30 | 619 | 16.49 | 420 | 22.28 | 790 | 18.10 | 405 | 23.48 | 792 | 18.59 R | 253 | 13.10 R | 628 | 18.40 | 281 | 12.47 | 631 | 20.01 | 274 | 13.44 | 712 | 20.26 | 236 | 14.03 | 694 | |
| 8. | 5.17 | 304 | 11.43 | 650 | 6.00 | 402 | 11.02 | 715 | 6.40 | 426 | - | - | 7.45 T | 234 | 1.24 T | 631 | 7.35 | 339 | 1.02 | 713 | 8.23 | 247 | 1.54 | 721 | 8.46 | 224 | 2.30 | 666 | 8. |
| | 17.48 | 282 | - | - | 17.59 | 293 | - | - | 18.47 | 331 | 12.06 | 757 | 19.44 T | 241 | 14.04 T | 614 | 19.40 | 298 | 13.16 | 725 | 20.43 | 247 | 14.27 | 696 | 21.11 | 237 | 14.57 | 680 | |
| 9. | 6.09 | 293 | 0.11 | 631 | 4.52 | 492 | 0.35 | 704 | 7.02 | 247 | 0.49 | 714 | 8.15 T | 259 | 2.16 T | 658 | 7.57 | 242 | 1.28 | 715 | 9.08 | 254 | 2.48 | 692 | 9.32 | 263 | 3.18 | 692 | 9. |
| | 18.33 | 284 | 12.24 | 652 | 18.55 | 495 | 11.28 | 817 | 19.25 | 321 | 13.28 | 706 | 20.38 T | 243 | 14.38 T | 649 | 20.21 | 268 | 14.19 | 672 | 21.30 | 269 | 15.03 | 719 | 21.58 | 254 | 15.28 | 707 | |
| 10. | 6.59 | 280 | 0.43 | 649 | 7.05 | 390 | 23.44 * | 839 | 8.06 | 290 | 1.10 | 771 | 9.02 T | 227 | 2.48 T | 666 | 8.53 | 273 | 2.10 | 721 | 9.52 | 281 | 3.25 | 709 | 10.16 | 260 | 4.08 | 680 | 10. |
| | 19.12 | 274 | 13.06 | 651 | 19.25 | 375 | 12.38 | 780 | 20.04 | 277 | 13.58 | 707 | 21.16 T | 216 | 15.20 T | 632 | 21.10 | 279 | 14.43 | 715 | 22.11 | 273 | 15.39 | 719 | 22.46 | 276 | 16.21 | 713 | |
| 11. | 7.32 | 257 | 1.30 | 633 | 7.40 | 309 | 0.56 | 730 | 8.33 | 293 | 2.03 | 735 | 9.39 T | 221 | 3.38 T | 647 | 9.32 | 266 | 2.56 | 742 | 10.32 | 299 | 4.06 | 719 | 11.04 | 315 | 4.58 | 689 | 11. |
| | 19.46 | 245 | 13.47 | 609 | 19.49 | 293 | 13.31 | 695 | 20.53 | 275 | 14.33 | 717 | 21.56 T | 247 | 16.07 T | 648 | 21.46 | 256 | 15.36 | 700 | 22.56 | 280 | 16.36 | 728 | 23.36 | 316 | 16.58 | 731 | |
| 12. | 7.57 | 250 | 2.07 | 588 | 8.16 | 301 | 1.48 | 704 | 9.15 e | 323 | 2.41 | 736 | 10.27 T | 266 | 4.16 T | 692 | 10.09 | 272 | 3.50 | 722 | 11.12 | 301 | 5.00 | 698 | 11.54 | 356 | 5.48 | 710 | 12. |
| | 20.21 | 269 | 14.30 | 617 | 20.38 | 356 | 14.18 | 728 | 21.51 | 384 | 15.41 | 837 | 22.39 T | 260 | 16.42 T | 672 | 22.24 | 254 | 16.14 | 708 | 23.37 | 283 | 17.17 | 708 | - | - | 17.44 | 732 | |
| 13. | 8.46 | 301 | 2.24 | 675 | 8.41 | 288 | 2.01 | 716 | 10.15 | 395 | 3.24 | 849 | 11.03 T | 264 | 4.51 T | 694 | 10.49 | 261 | 4.34 | 707 | - | - | 5.55 | 690 | 0.14 | 285 | 6.43 | 640 | 13. |
| | 20.54 | 294 | 14.38 | 683 | 21.01 | 378 | 15.13 | 664 | 22.24 | 344 | 15.42 | 805 | 23.16 T | 291 | 17.23 T | 679 | 23.01 | 247 | 17.00 | 680 | 12.00 | 315 | 18.03 | 703 | 12.16 | 287 | 18.49 | 679 | |
| 14. | 9.03 | 281 | 2.56 | 658 | 9.45 | 365 | 2.29 | 755 | 10.35 | 247 | 3.52 | 751 | 11.52 R | 316 | 5.26 T | 725 | 11.24 | 265 | 5.22 | 682 | 0.26 | 297 | 6.49 | 671 | 1.02 | 274 | 7.45 | 643 | 14. |
| | 21.20 | 286 | 15.24 | 638 | 21.25 | 381 | 15.34 | 698 | 22.47 | 247 | 16.51 | 697 | 23.40 R | 333 | 17.53 T | 702 | 23.40 | 254 | 17.42 | 670 | 12.46 | 335 | 19.09 | 694 | 13.27 | 344 | 19.37 | 716 | |
| 15. | 9.48 | 288 | 3.29 | 666 | 10.26 | 336 | 3.01 | 767 | 11.15 | 245 | 4.48 | 727 | - | - | 5.31 R | 793 | - | - | 6.11 | 664 | 1.31 | 311 | 8.07 | 648 | 2.17 | 334 | 8.31 | 653 | 15. |
| | 21.55 | 284 | 16.00 | 632 | 22.19 | 330 | 16.15 | 691 | 23.25 | 251 | 17.26 | 687 | 12.25 R | 382 | 18.19 R | 731 | 12.01 | 282 | 18.23 | 670 | 13.53 | 347 | 20.33 | 691 | 14.28 | 336 | 21.14 | 722 | |
| 16. | 10.17 | 277 | 4.09 | 639 | 10.46 | 280 | 4.14 | 714 | 11.53 | 262 | 5.35 | 709 | 0.51 R | 303 | 7.11 R | 675 | 0.28 | 275 | 7.07 | 656 | 2.51 | 317 | 9.35 | 655 | 3.16 | 379 | 9.55 | 721 | 16. |
| | 22.24 | 296 | 16.40 | 621 | 23.10 | 369 | 17.21 | 703 | - | - | 18.15 | 676 | 13.07 R | 285 | 19.51 R | 677 | 12.50 | 337 | 19.22 | 670 | 15.26 | 352 | 21.55 | 691 | 16.06 | 396 | 21.56 | 726 | |
| 17. | 10.55 | 303 | 4.44 | 659 | 11.39 | 380 | 5.00 | 770 | 0.08 | 278 | 6.19 | 705 | 1.46 R | 308 | 8.22 R | 671 | 1.38 | 290 | 8.29 | 643 | 4.16 | 283 | 10.39 | 640 | 4.25 | 330 | 10.35 | 670 | 17. |
| | 23.09 | 315 | 17.14 | 639 | 23.48 | 342 | 17.28 | 731 | 12.45 | 282 | 19.00 | 681 | 14.28 R | 321 | 21.01 R | 672 | 14.08 | 356 | 20.40 | 678 | 16.38 | 286 | 22.31 | 645 | 16.41 | 297 | 23.03 | 675 | |
| 18. | 11.39 | 309 | 5.16 | 664 | - | - | 5.45 | 758 | 0.59 | 308 | 7.19 | 693 | 3.12 | 290 | 9.57 | 651 | 3.11 | 303 | 9.54 | 644 | 5.02 | 272 | 11.37 | 654 | 5.13 | 267 | 11.49 | 640 | 18. |
| | 23.47 | 334 | 18.02 | 628 | 12.24 | 360 | 18.24 | 707 | 13.30 | 317 | 20.13 | 708 | 15.52 | 328 | 22.37 | 709 | 15.45 | 342 | 22.01 | 708 | 17.44 | 305 | 23.33 | 682 | 17.32 | 273 | 23.58 | 678 | |
| 19. | - | - | 6.10 | 672 | 0.34 | 330 | 6.35 | 719 | 2.10 | 355 | 8.28 | 742 | 4.42 | 365 | 10.55 | 755 | 4.43 | 317 | 11.14 | 678 | 6.04 | 265 | - | - | 6.11 | 275 | - | - | 19. |
| | 12.37 | 333 | 19.00 | 639 | 13.07 | 319 | 19.27 | 666 | 14.55 | 378 | 20.19 | 769 | 17.36 | 398 | 23.10 | 731 | 17.10 | 315 | 23.21 | 684 | 18.29 | 284 | 12.29 | 656 | 18.33 | 288 | 12.20 | 681 | |
| 20. | 0.56 | 340 | 7.19 | 657 | 1.27 | 304 | 8.01 | 660 | 2.49 | 399 | 9.34 | 764 | 5.57 | 268 | - | - | 5.38 | 279 | - | - | 6.51 | 277 | 0.36 | 685 | 6.55 | 285 | 0.37 | 692 | 20. |
| | 13.40 | 320 | 20.22 | 635 | 14.04 | 359 | 20.28 | 724 | 16.29 | 400 | 22.01 | 734 | 18.16 | 278 | 12.30 | 658 | 18.13 | 311 | 12.14 | 670 | 19.11 | 278 | 13.03 | 677 | 19.09 | 279 | 13.01 | 680 | |
| 21. | 2.15 | 333 | 8.40 | 652 | 3.08 | 408 | 8.52 | 707 | 4.53 | 309 | 12.12 | 697 | 7.14 | 310 | 0.38 | 693 | 6.44 | 278 | 0.14 | 702 | 7.31 | 276 | 1.15 | 694 | 7.30 | 281 | 1.18 | 685 | 21. |
| | 14.57 | 308 | 21.37 | 634 | 15.28 | 300 | 21.56 | 676 | 17.41 | 378 | 23.58 | 835 | 19.27 | 295 | 13.05 | 694 | 19.00 | 283 | 12.56 | 674 | 19.49 | 282 | 13.36 | 683 | 19.52 | 282 | 13.39 | 695 | |
| 22. | 3.36 | 320 | 9.55 | 664 | 3.59 | 284 | 10.31 | 695 | 6.45 | 488 | 11.35 | 797 | 7.49 | 266 | 1.14 | 698 | 7.25 | 260 | 1.04 | 695 | 8.06 | 283 | 1.46 | 699 | 8.06 | 285 | 1.58 | 694 | 22. |
| | 16.16 | 298 | 22.48 | 649 | 16.52 | 316 | 22.56 | 717 | 18.36 | 378 | - | - | 19.59 | 315 | 14.02 | 671 | 19.43 | 259 | 13.44 | 667 | 20.27 | 283 | 14.11 | 692 | 20.31 | 273 | 14.04 | 702 | |
| 23. | 4.45 | 307 | 10.55 | 678 | 5.16 | 306 | 11.33 | 701 | 7.10 | 301 | 0.46 | 724 | 8.50 | 289 | 1.33 | 743 | 8.02 | 249 | 1.48 | 689 | 8.37 | 275 | 2.19 | 684 | 8.42 | 278 | 2.37 | 685 | 23. |
| | 17.22 | 303 | 23.40 | 680 | 17.52 | 323 | 23.53 | 736 | 19.30 | 299 | 13.18 | 711 | 20.39 | 299 | 14.16 | 700 | 20.18 | 247 | 14.18 | 667 | 20.58 | 271 | 14.39 | 681 | 21.04 | 258 | 14.42 | 695 | |
| 24. | 6.03 | 331 | 11.57 | 710 | 6.47 | 361 | - | - | 8.08 | 282 | 1.23 | 747 | 9.08 | 305 | 2.36 | 738 | 8.39 | 251 | 2.22 | 687 | 9.02 | 277 | 2.57 | 673 | 9.13 | 262 | 3.15 | 660 | 24. |
| | 18.35 | 316 | - | - | 18.58 | 339 | 12.23 | 773 | 20.19 | 262 | 14.03 | 708 | 21.28 | 321 | 15.03 | 733 | 20.50 | 252 | 14.47 | 673 | 21.22 | 274 | 15.08 | 687 | 21.31 | 256 | 15.21 | 677 | |
| 25. | 7.03 | 295 | 0.30 | 676 | 7.16 | 303 | 0.52 | 716 | 8.51 | 223 | 2.16 | 712 | 9.39 | 316 | 2.54 | 756 | 9.11 | 260 | 3.01 | 690 | 9.36 | 276 | 3.27 | 680 | 9.44 | 270 | 3.52 | 656 | 25. |
| | 19.25 | 375 | 13.00 | 707 | 19.47 | 349 | 13.25 | 718 | 21.00 e | 191 | 15.04 | 638 | 21.45 | 281 | 15.21 | 722 | 21.21 | 254 | 15.17 | 680 | 21.52 | 251 | 15.34 | 670 | 22.07 | 257 | 15.53 | 684 | |
| 26. | 8.04 | 391 | 0.49 | 858 | 8.18 | 308 | 1.24 | 738 | 9.22 | 176 | 3.10 | 627 | 10.08 | 266 | 3.43 | 721 | 9.32 | 262 | 3.25 | 680 | 9.56 | 287 | 4.07 | 647 | 10.14 | 273 | 4.28 | 643 | 26. |
| | 19.53 | 374 | 13.16 | 755 | 20.46 | 331 | 13.50 | 758 | 21.09 | 221 | 15.48 | 576 | 22.12 | 249 | 16.06 | 683 | 21.49 | 256 | 15.39 | 671 | 22.26 | 280 | 15.53 | 683 | 22.42 | 260 | 16.28 | 678 | |
| 27. | 8.36 | 352 | 1.48 | 734 | 9.04 | 319 | 2.39 | 723 | 9.58 | 262 | 3.43 | 685 | 10.28 | 253 | 4.21 | 686 | 10.03 | 271 | 4.01 | 675 | 10.26 | 314 | 4.29 | 649 | 10.52 | 283 | 5.05 | 652 | 27. |
| | 21.29 | 498 | 15.34 | 804 | 21.22 | 314 | 14.43 | 730 | 22.03 | 274 | 15.55 | 674 | 22.42 | 281 | 16.36 | 680 | 22.15 | 265 | 16.13 | 676 | 22.58 | 299 | 16.27 | 682 | 23.24 | 277 | 17.03 | 687 | |
| 28. | 9.34 | 350 | 2.05 | 861 | 9.31 | 250 | 3.03 | 727 | 10.25 | 257 | 4.03 | 704 | 10.54 | 306 | 4.40 | 695 | 10.27 | 283 | 4.32 | 667 | 10.57 | 288 | 5.03 | 645 | 11.36 | 302 | 5.43 | 657 | 28. |
| | 21.41 | 277 | 15.13 | 704 | 21.49 | 306 | 16.10 | 654 | 22.28 | 235 | 16.38 | 658 | 23.05 | 304 | 16.50 | 694 | 22.44 | 306 | 16.43 | 687 | 23.14 | 277 | 17.12 | 633 | - | - | 17.53 | 693 | |
| 29. | 10.06 | 264 | 3.38 | 682 | 10.56 | 451 | 4.10 | 796 | 10.50 | 250 | 4.51 | 669 | 11.19 | 293 | 5.17 | 686 | 10.49 | 343 | 4.58 | 697 | 10.55 | 283 | 5.26 | 577 | 0.10 | 305 | 6.41 | 684 | 29. |
| | 22.17 | 303 | 16.17 | 658 | 22.55 | 385 | 15.35 | 813 | 22.59 | 237 | 17.12 | 637 | 23.28 | 292 | 17.28 | 665 | 23.06 | 354 | 17.00 | 727 | 23.54 | 311 | 18.23 | 621 | 12.35 | 319 | 18.49 | 692 | |
| 30. | 10.59 | 368 | 4.24 | 756 | 11.04 | 365 | 3.46 | 784 | 11.12 | 237 | 5.19 | 629 | | | | | 11.19 | 389 | 5.24 | 711 | - | - | 6.46 | 627 | 1.00 | 300 | 7.42 | 670 | 30. |
| | 22.57 | 335 | 16.06 | 708 | 23.23 | 294 | 16.47 | 746 | 23.08 | 225 | 17.40 | 593 | | | | | 23.40 | 358 | 17.24 | 704 | 12.36 | 308 | 19.01 | 659 | 13.39 | 316 | 19.48 | 680 | |
| 31. | | | | | 11.31 | 241 | 5.16 | 695 | 11.26 | 242 | 5.58 | 593 | | | | | - | - | 6.24 | 706 | | | | | 2.11 | 284 | 8.43 | 654 | 31. |
| | | | | | 23.33 | 300 | 17.54 | 640 | 23.20 | 243 | 17.58 | 569 | | | | | 12.46 | 395 | 18.24 | 694 | | | | | 14.40 | 298 | 21.02 | 688 | |
| Mittel | | 315 | | 670 | | 353 | | 723 | | 326 | | 714 | | 287 | | 672 | | 290 | | 677 | | 289 | | 675 | | 286 | | 682 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 310 | 689 |

* 5. Wert am 09.12.2011 03.01.2012

Winterhalbjahr: 1.11. bis 30.4.
5 Tage Randeis
7 Tage Treibeis

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 4.98 m

W Tide
cm

Pegel : Bremerhaven, Alter LT Nr. 4990010
Gewässer : Aussenweser
Gebiet : Wesermündung

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 3.23 | 308 | 9.49 | 708 | 3.58 | 312 | 10.28 | 689 | 6.17 | 295 | 0.00 | 677 | 7.54 | 281 | 1.41 | 690 | 8.10 | 302 | 1.54 | 661 | 8.43 | 280 | 2.30 | 656 | 8.57 | 304 | 2.24 | 706 | 1. |
| | 16.06 | 341 | 22.13 | 723 | 16.49 | 319 | 22.53 | 689 | 18.53 | 256 | 12.24 | 691 | 20.20 | 267 | 13.46 | 716 | 20.35 | 306 | 13.49 | 716 | 20.51 | 325 | 14.48 | 656 | 21.10 | 305 | 14.51 | 686 | |
| 2. | 4.41 | 307 | 10.59 | 702 | 5.25 | 299 | 11.31 | 676 | 7.12 | 283 | 1.07 ○ | 667 | 8.29 | 283 | 2.23 | 680 | 8.44 | 308 | 2.19 | 696 | 9.21 | 354 | 2.36 | 719 | 9.26 | 307 | 3.01 | 680 | 2. |
| | 17.11 | 305 | 23.07 | 706 | 17.55 | 281 | - | - | 19.56 | 287 | 13.12 | 727 | 21.04 | 294 | 14.19 | 721 | 20.59 | 301 | 14.28 | 703 | 21.28 | 343 | 15.01 | 696 | 21.31 | 311 | 15.27 | 668 | |
| 3. | 5.42 | 276 | 11.58 | 690 | 6.23 | 273 | 0.03 ○ | 674 | 8.08 | 283 | 1.50 | 696 | 9.09 | 283 | 2.46 | 696 | 9.12 | 297 | 2.51 | 680 | 9.49 | 343 | 3.25 | 698 | 9.51 | 303 | 3.29 | 692 | 3. |
| | 18.07 | 286 | - | - | 18.59 | 255 | 12.34 | 693 | 20.44 | 271 | 13.58 | 720 | 21.35 | 279 | 15.05 | 718 | 21.36 | 329 | 15.01 | 700 | 21.43 | 338 | 15.45 | 682 | 22.02 | 288 | 16.05 | 652 | |
| 4. | 6.47 | 296 | 0.18 ○ | 720 | 7.26 | 264 | 1.08 | 686 | 8.51 | 278 | 2.42 | 682 | 9.38 | 283 | 3.27 | 685 | 9.43 | 319 | 3.17 | 695 | 10.19 | 337 | 3.41 | 721 | 10.47 | 343 | 4.05 | 714 | 4. |
| | 19.13 | 290 | 12.40 | 720 | 19.56 | 243 | 13.28 | 701 | 21.25 | 266 | 14.42 | 727 | 22.05 | 314 | 15.34 | 723 | 22.01 | 346 | 15.37 | 715 | 22.09 | 322 | 16.06 | 674 | 22.42 | 359 | 16.41 | 659 | |
| 5. | 7.40 | 303 | 1.07 | 739 | 8.20 | 260 | 2.08 | 677 | 9.31 | 274 | 3.21 | 683 | 10.19 | 336 | 3.49 | 723 | 10.13 | 305 | 3.41 | 691 | 10.41 | 339 | 4.05 | 703 | 11.01 | 310 | 4.33 | 685 | 5. |
| | 20.08 | 257 | 13.33 | 724 | 20.48 | 247 | 14.20 | 704 | 22.00 | 263 | 15.19 | 720 | 22.35 | 324 | 15.57 | 733 | 22.42 | 394 | 16.44 | 717 | 22.54 | 352 | 16.39 | 695 | 23.13 | 362 | 17.30 | 657 | |
| 6. | 8.28 | 244 | 2.09 | 684 | 9.08 | 260 | 3.00 | 686 | 10.06 | 275 | 4.03 | 686 | 10.35 | 296 | 4.21 | 684 | 10.20 | 341 | 3.47 | 696 | 11.13 | 348 | 4.54 | 689 | 11.48 | 335 | 5.32 | 702 | 6. |
| | 20.53 | 238 | 14.33 | 690 | 21.38 | 264 | 15.05 | 718 | 22.35 | 291 | 16.01 | 723 | 22.37 | 315 | 16.41 | 678 | 22.41 | 361 | 16.30 | 698 | 23.19 | 420 | 18.03 | 693 | 23.53 | 311 | 18.07 | 636 | |
| 7. | 9.18 | 266 | 3.07 | 692 | 9.48 | 267 | 3.43 | 676 | 10.43 | 309 | 4.28 | 693 | 10.55 | 341 | 4.40 | 689 | 10.58 | 387 | 4.42 | 704 | - | - | 5.41 | 723 | - | - | 6.16 | 625 | 7. |
| | 21.53 | 245 | 15.11 | 720 | 22.20 | 254 | 15.48 | 719 | 23.04 | 309 | 16.37 | 737 | 23.20 | 329 | 16.50 | 698 | 23.25 | 384 | 17.02 | 724 | 12.20 | 382 | 18.16 | 670 | 12.20 | 303 | 19.24 | 604 | |
| 8. | 10.11 | 282 | 4.03 | 681 | 10.26 | 266 | 4.24 | 671 | 11.06 | 297 | 4.58 | 677 | 11.25 | 328 | 5.16 | 676 | 11.26 | 340 | 5.16 | 685 | 0.23 | 393 | 6.32 | 689 | 0.45 | 342 | 7.03 | 654 | 8. |
| | 22.33 | 294 | 16.08 | 720 | 22.48 | 267 | 16.32 | 709 | 23.29 | 298 | 17.10 | 702 | 23.40 | 317 | 17.35 | 661 | 23.34 | 360 | 17.57 | 642 | 13.18 | 405 | 19.24 | 670 | 13.25 | 299 | 20.03 | 625 | |
| 9. | 10.43 | 312 | 4.37 | 671 | 10.51 | 326 | 5.12 | 673 | 11.36 | 305 | 5.36 | 672 | 11.58 | 318 | 5.56 | 650 | - | - | 5.54 | 702 | 1.43 | 390 | 7.46 | 677 | 1.40 | 324 | 8.48 | 679 | 9. |
| | 23.22 | 303 | 16.44 | 717 | 23.37 | 316 | 16.53 | 723 | - | - | 17.51 | 683 | - | - | 18.30 | 637 | 12.33 | 425 | 18.34 | 665 | 14.25 | 327 | 20.53 | 631 | 14.41 | 379 | 21.00 | 719 | |
| 10. | 11.32 | 314 | 5.25 | 679 | 11.36 | 311 | 5.20 | 683 | 0.00 | 303 | 6.12 | 656 | 0.20 | 330 | 6.53 | 664 | 0.55 | 376 | 7.17 | 662 | 3.04 | 338 | 9.16 | 673 | 3.41 | 391 | 9.11 | 701 | 10. |
| | 23.57 | 277 | 17.27 | 712 | - | - | 17.36 | 706 | 12.05 | 316 | 18.23 | 666 | 13.00 | 366 | 19.26 | 654 | 13.38 | 369 | 20.24 | 634 | 15.49 | 337 | 21.54 | 683 | 15.56 | 327 | 22.22 | 657 | |
| 11. | - | - | 6.11 | 660 | 0.02 | 298 | 6.11 | 659 | 0.34 | 311 | 6.49 | 641 | 1.37 | 377 | 8.15 | 668 | 2.22 | 352 | 8.47 | 654 | 4.19 | 342 | 10.12 | 717 | 4.25 | 306 | 10.59 | 667 | 11. |
| | 12.05 | 294 | 18.22 | 700 | 12.13 | 300 | 18.28 | 700 | 12.44 | 313 | 19.17 | 635 | 14.35 | 411 | 21.04 | 671 | 15.13 | 315 | 21.49 | 616 | 17.03 | 331 | 23.00 | 691 | 17.10 | 293 | 23.29 | 681 | |
| 12. | 0.43 | 290 | 7.03 | 660 | 0.46 | 317 | 6.53 | 663 | 1.19 | 298 | 7.58 | 619 | 3.29 | 399 | 9.49 | 677 | 3.43 | 300 | 10.08 | 605 | 5.26 | 332 | 11.24 | 688 | 5.42 | 284 | 11.52 | 684 | 12. |
| | 12.51 | 315 | 19.11 | 710 | 12.53 | 356 | 19.13 | 705 | 13.50 | 319 | 20.43 | 620 | 16.16 | 375 | 22.26 | 667 | 16.07 | 284 | 23.13 | 670 | 17.50 | 296 | - | - | 18.18 | 279 | - | - | |
| 13. | 1.31 | 321 | 8.00 | 666 | 1.39 | 335 | 7.44 | 647 | 2.37 | 309 | 9.14 | 621 | 4.48 | 356 | 10.51 | 681 | 5.26 | 351 | 11.12 | 658 | 6.19 | 284 | 0.03 ● | 670 | 6.47 | 284 | 0.23 ● | 686 | 13. |
| | 13.53 | 337 | 20.11 | 692 | 13.39 | 335 | 20.10 | 657 | 15.16 | 306 | 22.01 | 620 | 17.27 | 330 | 23.42 | 665 | 17.34 | 292 | 23.50 | 643 | 18.48 | 279 | 12.25 | 670 | 19.17 | 276 | 12.46 | 690 | |
| 14. | 2.29 | 315 | 8.52 | 652 | 2.20 | 337 | 8.44 | 660 | 3.58 | 288 | 10.37 | 632 | 5.41 | 348 | 11.52 | 685 | 5.54 | 305 | - | - | 7.14 | 274 | 0.50 | 688 | 7.40 | 254 | 1.16 | 684 | 14. |
| | 14.53 | 312 | 21.21 | 662 | 14.56 | 382 | 21.14 | 685 | 16.44 | 301 | 23.07 | 643 | 18.21 | 420 | 23.56 | 753 | 18.31 | 291 | 12.01 | 678 | 19.38 | 278 | 13.12 | 697 | 20.21 | 190 | 13.52 | 643 | |
| 15. | 3.28 | 281 | 9.55 | 619 | 3.41 | 344 | 9.57 | 680 | 5.15 | 293 | 11.37 | 658 | 6.59 | 389 | - | - | 6.50 | 305 | 0.43 ● | 663 | 8.01 | 281 | 1.37 | 700 | 8.36 | 268 | 2.55 | 596 | 15. |
| | 15.43 | 291 | 22.18 | 670 | 16.23 | 341 | 22.35 | 673 | 17.53 | 271 | - | - | 19.17 | 310 | 12.17 | 730 | 19.28 | 299 | 13.05 | 732 | 20.28 | 285 | 13.58 | 711 | 20.57 | 290 | 14.36 | 655 | |
| 16. | 4.32 | 301 | 10.48 | 660 | 4.43 | 342 | 11.03 | 689 | 6.08 | 310 | 0.15 | 631 | 7.25 | 299 | 1.06 ● | 690 | 7.40 | 281 | 1.23 | 678 | 8.52 | 269 | 2.21 | 702 | 9.25 | 279 | 2.39 | 713 | 16. |
| | 17.02 | 327 | 23.06 | 682 | 17.30 | 345 | 23.38 | 670 | 18.52 | 284 | 12.16 | 687 | 19.57 | 300 | 13.16 | 711 | 20.00 | 302 | 13.48 | 676 | 21.17 | 287 | 14.51 | 694 | 21.50 | 306 | 15.22 | 709 | |
| 17. | 5.29 | 319 | 11.51 | 680 | 5.45 | 332 | 11.59 | 703 | 7.05 | 294 | 0.55 ● | 674 | 8.19 | 334 | 1.49 | 700 | 8.39 | 295 | 1.27 | 748 | 9.40 | 259 | 3.04 | 697 | 10.15 | 275 | 3.32 | 729 | 17. |
| | 18.17 | 319 | - | - | 18.27 | 325 | - | - | 19.37 | 277 | 13.05 | 705 | 20.42 | 304 | 13.53 | 734 | 20.50 | 304 | 14.07 | 702 | 22.04 | 310 | 15.56 | 680 | 22.29 | 292 | 16.21 | 683 | |
| 18. | 6.16 | 288 | 0.05 | 662 | 6.38 | 301 | 0.24 | 690 | 7.51 | 275 | 1.41 | 678 | 8.54 | 316 | 2.24 | 694 | 9.06 | 264 | 2.43 | 697 | 10.25 | 306 | 3.50 | 715 | 11.01 | 286 | 4.23 | 724 | 18. |
| | 18.57 | 298 | 12.42 | 681 | 19.10 | 310 | 12.53 | 688 | 20.14 | 268 | 13.48 | 698 | 21.12 | 343 | 14.46 | 729 | 21.33 | 285 | 15.07 | 712 | 22.46 | 328 | 16.27 | 702 | 23.06 | 283 | 17.06 | 674 | |
| 19. | 7.03 | 282 | 0.56 ● | 688 | 7.21 | 319 | 1.13 ● | 679 | 8.34 | 283 | 2.18 | 702 | 9.40 | 353 | 2.58 | 738 | 9.47 | 270 | 3.26 | 702 | 11.12 | 288 | 4.34 | 710 | 11.37 | 264 | 5.19 | 684 | 19. |
| | 19.32 | 275 | 13.09 | 684 | 20.19 | 409 | 13.24 | 746 | 21.00 | 274 | 14.24 | 720 | 21.56 | 314 | 15.05 | 752 | 22.11 | 278 | 15.49 | 701 | 23.12 | 280 | 17.22 | 625 | 23.43 | 250 | 17.59 | 625 | |
| 20. | 7.44 | 276 | 1.37 | 672 | 8.14 | 330 | 1.38 | 729 | 9.17 | 296 | 3.01 | 700 | 10.04 | 300 | 3.52 | 708 | 10.25 | 279 | 4.04 | 697 | 11.54 | 287 | 5.38 | 656 | - | - | 6.05 | 631 | 20. |
| | 20.11 | 274 | 13.49 | 696 | 20.32 | 294 | 13.53 | 725 | 21.41 | 286 | 15.08 | 731 | 22.36 | 295 | 16.00 | 714 | 22.53 | 300 | 16.35 | 696 | - | - | 18.15 | 658 | 12.20 | 224 | 18.26 | 543 | |
| 21. | 8.24 | 266 | 2.14 | 674 | 8.46 | 303 | 2.37 | 706 | 9.49 | 276 | 3.30 | 700 | 10.49 | 295 | 4.35 | 682 | 11.17 | 289 | 4.52 | 695 | 0.19 | 341 | 6.06 | 667 | 0.04 | 221 | 7.04 | 567 | 21. |
| | 20.48 | 246 | 14.25 | 686 | 21.10 | 274 | 14.42 | 720 | 22.10 | 270 | 15.44 | 717 | 23.07 | 303 | 16.44 | 689 | 23.28 | 296 | 17.39 | 661 | 12.48 | 281 | 19.26 | 621 | 12.53 | 229 | 19.35 | 552 | |
| 22. | 8.48 | 312 | 2.57 | 658 | 9.24 | 276 | 3.17 | 691 | 10.21 | 310 | 4.20 | 704 | 11.27 | 329 | 5.12 | 689 | 11.57 | 290 | 5.52 | 665 | 1.01 | 371 | 7.07 | 738 | 0.51 | 265 | 7.51 | 600 | 22. |
| | 21.13 | 281 | 14.55 | 692 | 21.51 | 255 | 15.22 | 710 | 22.59 | 312 | 16.19 | 744 | 23.53 | 331 | 17.35 | 695 | - | - | 18.27 | 644 | 14.08 | 341 | 19.59 | 619 | 13.47 | 274 | 20.13 | 557 | |
| 23. | 9.32 | 303 | 3.23 | 658 | 9.53 | 279 | 3.56 | 667 | 11.03 | 314 | 4.39 | 704 | - | - | 5.56 | 679 | 0.18 | 313 | 6.41 | 670 | 2.08 | 328 | 8.22 | 619 | 2.12 | 258 | 8.29 | 549 | 23. |
| | 22.05 | 287 | 15.37 | 702 | 22.24 | 273 | 15.47 | 714 | 23.31 | 295 | 16.55 | 724 | 12.11 | 307 | 18.33 | 644 | 13.00 | 295 | 19.35 | 625 | 14.52 | 344 | 21.14 | 663 | 13.38 | 321 | 21.21 | 634 | |
| 24. | 10.14 | 294 | 4.04 | 668 | 10.35 | 284 | 4.26 | 690 | 11.40 | 297 | 5.32 | 683 | 0.31 | 300 | 6.52 | 586 | 1.23 | 329 | 7.58 | 671 | 3.30 | 364 | 9.32 | 693 | 3.35 | 380 | 9.37 | 686 | 24. |
| | 22.46 | 342 | 16.18 | 702 | 22.59 | 270 | 16.33 | 711 | - | - | 17.48 | 691 | 12.31 | 269 | 19.53 | 568 | 14.22 | 308 | 20.55 | 638 | 16.13 | 326 | 22.20 | 642 | 16.14 | 339 | 22.50 | 673 | |
| 25. | 10.48 | 353 | 4.43 | 705 | 11.13 | 287 | 5.14 | 683 | 0.07 | 297 | 6.22 | 677 | 23.58 * | 420 | 7.15 | 626 | 2.41 | 340 | 9.27 | 696 | 4.43 | 277 | 11.31 | 603 | 5.49 | 381 | 11.22 | 673 | 25. |
| | 23.26 | 337 | 16.40 | 750 | 23.44 | 284 | 17.17 | 714 | 12.26 | 316 | 18.32 | 693 | 14.12 | 369 | 20.54 | 623 | 16.00 | 365 | 22.31 | 716 | 16.47 | 448 | 22.15 | 724 | 17.06 | 344 | 23.33 | 701 | |
| 26. | 11.29 | 328 | 5.21 | 704 | 11.56 | 288 | 5.53 | 682 | 0.53 | 347 | 7.07 | 667 | 3.31 | 342 | 9.34 | 644 | 4.47 | 324 | 10.31 | 689 | 5.45 | 369 | 11.13 | 689 | 6.05 | 393 | 11.47 | 706 | 26. |
| | 23.58 | 280 | 17.33 | 710 | - | - | 18.05 | 690 | 13.23 | 364 | 19.49 | 707 | 16.03 | 308 | 22.27 | 639 | 16.44 | 303 | 23.15 | 655 | 18.03 | 316 | 23.54 | 689 | 17.54 | 380 | 23.55 | 695 | |
| 27. | - | - | 6.14 | 659 | 0.22 | 271 | 6.47 | 648 | 2.22 | 369 | 8.20 | 673 | 4.51 | 326 | 10.54 | 680 | 5.15 | 327 | 11.26 | 692 | 6.22 | 313 | - | - | 5.52 | 405 | - | - | 27. |
| | 12.05 | 285 | 18.28 | 690 | 12.34 | 284 | 19.02 | 687 | 14.41 | 303 | 21.14 | 630 | 17.24 | 311 | 23.36 | 687 | 17.42 | 323 | 23.47 | 674 | 18.36 | 292 | 12.23 | 681 | 18.52 | 319 | 12.10 | 714 | |
| 28. | 0.42 | 284 | 7.04 | 661 | 1.13 | 298 | 7.46 | 690 | 3.30 | 279 | 10.07 | 646 | 6.01 | 333 | 11.51 | 695 | 6.02 | 310 | - | - | 6.59 | 296 | 0.48 ○ | 678 | 7.21 | 308 | 0.59 ○ | 715 | 28. |
| | 13.03 | 293 | 19.14 | 668 | 13.46 | 328 | 20.01 | 677 | 16.16 | 326 | 22.36 | 701 | 18.26 | 313 | - | - | 18.31 | 290 | 12.12 | 696 | 19.16 | 304 | 13.09 | 682 | 19.22 | 238 | 13.14 | 656 | |
| 29. | 1.30 | 265 | 8.10 | 674 | 2.12 | 301 | 8.50 | 660 | 5.11 | 346 | 11.11 | 697 | 6.48 | 334 | 0.37 | 670 | 6.50 | 297 | 0.38 ○ | 660 | 7.42 | 305 | 1.23 | 695 | 7.44 | 281 | 1.56 | 642 | 29. |
| | 14.16 | 303 | 20.37 | 685 | 14.49 | 323 | 21.23 | 679 | 17.42 | 303 | - | - | 19.18 | 364 | 12.50 | 739 | 19.18 | 332 | 12.52 | 691 | 19.57 | 317 | 13.49 | 689 | 20.11 | 299 | 14.06 | 668 | |
| 30. | 2.50 | 300 | 9.14 | 668 | 3.42 | 303 | 10.03 | 668 | 6.27 | 330 | 0.05 | 685 | 7.36 | 329 | 0.56 ○ | 720 | 7.38 | 321 | 1.09 | 708 | 8.19 | 300 | 1.58 | 704 | 8.41 | 367 | 2.05 | 744 | 30. |
| | 15.24 | 312 | 21.37 | 689 | 16.27 | 324 | 22.53 | 676 | 18.48 | 306 | 12.18 | 691 | 19.54 | 303 | 13.16 | 710 | 19.53 | 308 | 13.23 | 718 | 20.30 | 298 | 14.18 | 689 | 20.57 | 378 | 14.05 | 746 | |
| 31. | | | | | 5.01 | 317 | 11.19 | 691 | 7.07 | 313 | 0.43 ○ | 699 | | | | | 8.11 | 304 | 1.45 | 694 | | | | | 9.10 | 387 | 2.26 | 743 | 31. |
| | | | | | 17.48 | 303 | - | - | 19.45 | 308 | 13.05 | 732 | | | | | 20.20 | 297 | 14.01 | 678 | | | | | 21.18 | 337 | 15.04 | 692 | |
| Mittel | | 295 | | 688 | | 301 | | 689 | | 298 | | 684 | | 327 | | 686 | | 318 | | 682 | | 324 | | 682 | | 308 | | 667 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 304 | 685 |

* 5. Wert am 24.09.2012

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 4.98 m

W Tide
cm

Pegel : Bremerhaven, Alter LT Nr. 4990010
Gewässer : Aussenweser
Gebiet : Wesermündung

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 31. | 1.+ | 26. | 31. | 10. | 1. | 9. | 3. | 4. | 29. | 8. | 1. | 6. | 15. | 4. | 13. | 1. | 12. | 1. | 24. | 18. | 12. | 17. | 25. | 14. | 20. |
| N | 245 | 588 | 241 | 640 | 176 | 569 | 216 | 574 | 242 | 571 | 245 | 577 | 224 | 601 | 238 | 619 | 243 | 647 | 256 | 619 | 267 | 568 | 264 | 605 | 259 | 603 | 190 | 543 |
| M | 315 | 670 | 353 | 723 | 326 | 714 | 287 | 672 | 290 | 677 | 289 | 675 | 286 | 682 | 295 | 688 | 301 | 689 | 298 | 684 | 327 | 686 | 318 | 682 | 324 | 682 | 308 | 667 |
| H | 498 | 861 | 510 | 839 | 627 | 860 | 398 | 793 | 395 | 742 | 380 | 744 | 396 | 732 | 353 | 750 | 409 | 746 | 369 | 744 | 420 | 753 | 425 | 748 | 448 | 738 | 405 | 746 |
| Tag | 27. | 28. | 4. | 9. | 5. | 5. | 19. | 15. | 31. | 11. | 2. | 7. | 16. | 12. | 25. | 25. | 19. | 19. | 27. | 22. | 14.+ | 14. | 9. | 17. | 25. | 22. | 27. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2002 | 2002 | 2002 | 2010 | 2012 | 2004 | 2011 | 2007 | 2007 | 2012 | 2007 | 2004 | 2012 | 2008 | 2012 | 2012 | 2004 | 2004 | 2009 | 2005 | 2010 | 2012 | 2009 | 2011 | 2010 | 2005 | 2012 | 2010 |
| N | 187 | 511 | 180 | 521 | 176 | 525 | 192 | 531 | 200 | 571 | 220 | 574 | 224 | 585 | 238 | 619 | 224 | 597 | 236 | 603 | 225 | 568 | 207 | 535 | 219 | 554 | 190 | 521 |
| MN | 247 | 584 | 232 | 584 | 222 | 584 | 222 | 576 | 224 | 591 | 232 | 600 | 241 | 606 | 247 | 628 | 245 | 632 | 253 | 624 | 249 | 604 | 242 | 584 | 254 | 593 | 233 | 585 |
| M | 323 | 684 | 316 | 680 | 318 | 687 | 297 | 674 | 295 | 679 | 284 | 675 | 290 | 679 | 297 | 686 | 303 | 688 | 310 | 687 | 318 | 684 | 318 | 679 | 326 | 686 | 320 | 684 |
| MH | 499 | 831 | 460 | 796 | 478 | 799 | 436 | 799 | 426 | 796 | 379 | 749 | 365 | 743 | 387 | 758 | 388 | 760 | 399 | 762 | 442 | 763 | 448 | 782 | 501 | 829 | 464 | 799 |
| H | 602 | 973 | 550 | 856 | 627 | 897 | 553 | 875 | 634 | 896 | 424 | 814 | 423 | 765 | 514 | 813 | 430 | 803 | 448 | 783 | 508 | 800 | 510 | 850 | 602 | 973 | 550 | 856 |
| Jahr | 2006 | 2007 | 2003 | 2005 | 2012 | 2007 | 2008 | 2004 | 2008 | 2007 | 2011 | 2003 | 2007 | 2011 | 2007 | 2007 | 2005 | 2005 | 2009 | 2003+ | 2004 | 2004 | 2005 | 2009 | 2006 | 2007 | 2003 | 2005 |
| HThw ab 1901 | 973 | | 972 | | 1017 | | 1035 | | 984 | | 875 | | 811 | | 813 | | 814 | | 835 | | 898 | | 929 | | 973 | | 972 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 176 | 26.01.2012 | 176 | 224 | 176 | 26.01.2012 |
| NThw | 568 | 24.09.2012 | 569 | 568 | 543 | 20.12.2012 |
| M | 307 | 687 | 310 | 689 | 304 | 683 |
| HTnw | 627 | 05.01.2012 | 627 | 425 | 627 | 05.01.2012 |
| HThw | 861 | 28.11.2011 | 861 | 753 | 860 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 176 | 26.01.2012 | 176 | 207 | 176 | 26.01.2012 |
| NThw | 511 | 03.11.2002 | 511 | 535 | 521 | 01.12.2010 |
| MN | 198 | 540 | 198 | 540 | 225 | 576 |
| M | 306 | 682 | 306 | 680 | 306 | 684 |
| MH | 552 | 871 | 552 | 866 | 476 | 801 |
| HTnw | 634 | 01.03.2008 | 634 | 514 | 634 | 01.03.2008 |
| HThw | 973 | 09.11.2007 | 973 | 850 | 973 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | | Datum | NThw cm | Datum | HTnw cm | Datum | HThw cm | | Datum |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 81 | e | 15.03.1964 | 354 | 16.01.1905 | 708 | 17.02.1962 | 1035 | | 16.02.1962 |
| 2 | 86 | e | 02.03.1987 | 394 | 18.11.1916 | 706 | 10.02.1949 | 1017 | e | 03.01.1976 |
| 3 | 90 | e | 25.01.1937 | 396 | 07.12.1959 | 703 | 10.10.1926 | 988 | | 21.01.1976 |
| 4 | 119 | e | 09.01.1970 | 404 | 11.11.1941 | 687 | 06.11.1985 | 984 | | 13.03.1906 |
| 5 | 123 | e | 26.01.1937 | 413 | 18.01.1912 | 674 | 16.02.1962 | 975 | e | 28.01.1994 |
| 6 | 124 | | 14.03.1964 | 414 | 25.01.1937 | 671 | 26.02.1990 | 973 | | 09.11.2007 |
| 7 | 130 | | 17.03.1969 | 420 | 19.11.1916 | 668 | 02.11.1965 | 972 | | 10.01.1995 |
| 8 | 131 | | 25.01.1937 | 425 | 17.01.1905 | 668 | 21.01.1956 | 968 | | 06.12.1973 |
| 9 | 133 | | 19.01.1937 | 426 | 20.11.1927 | 665 | 14.02.1989 | 965 | | 23.01.1993 |
| 10 | 138 | | 09.01.1947 | 431 | 13.11.1941 | 664 | 23.12.1954 | 964 | | 01.11.2006 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | 60 | | | | | | | | | | | | 351 | | 707 | 707 | 705.9 |
| 620 | | | 59 | | | | | | | | | | | | 350 | | 706 | 706 | 705.7 |
| 600 | | | 58 | | | | | | | | | | | | 349 | | 705 | 705 | 705.5 |
| 580 | | | 58 | | | | | | | | | | | | 349 | | 705 | 705 | 705.5 |
| 560 | | | 58 | | | | | | | | | | | | 349 | | 705 | 705 | 705.3 |
| 540 | | | 57 | | | | | | | | | | | | 348 | | 704 | 704 | 704.7 |
| 520 | | 60 | 56 | | | | | | | | | | | | 347 | | 703 | 703 | 704.1 |
| 500 | 58 | 59 | 56 | | | | | | | | | | | | 346 | | 702 | 703 | 703.0 |
| 480 | 57 | 57 | 54 | | | | | | | | | | | | 341 | | 697 | 701 | 701.1 |
| 460 | 57 | 57 | 54 | | | | | | | | | | 58 | | 341 | | 697 | 701 | 698.7 |
| 440 | 57 | 55 | 54 | | | | | | | | 58 | 60 | 57 | | 339 | 356 | 695 | 700 | 694.9 |
| 420 | 57 | 53 | 53 | | | | | | 60 | | 56 | 59 | 56 | 60 | 336 | 353 | 689 | 695 | 689.0 |
| 400 | 57 | 49 | 51 | 56 | 59 | 58 | 60 | | 59 | | 55 | 59 | 55 | 59 | 330 | 351 | 681 | 689 | 676.6 |
| 380 | 56 | 41 | 46 | 54 | 57 | 57 | 59 | | 58 | 60 | 53 | 56 | 52 | 53 | 311 | 344 | 655 | 663 | 656.8 |
| 360 | 51 | 33 | 42 | 53 | 57 | 56 | 58 | 58 | 58 | 58 | 48 | 51 | 49 | 49 | 292 | 331 | 623 | 637 | 630.3 |
| 340 | 47 | 28 | 39 | 53 | 51 | 53 | 56 | 55 | 53 | 56 | 42 | 45 | 40 | 45 | 271 | 307 | 578 | 588 | 573.7 |
| 320 | 34 | 22 | 34 | 48 | 49 | 51 | 53 | 50 | 43 | 54 | 29 | 38 | 27 | 39 | 238 | 267 | 505 | 515 | 485.9 |
| 300 | 22 | 9 | 29 | 36 | 38 | 43 | 46 | 32 | 29 | 33 | 12 | 19 | 19 | 27 | 177 | 171 | 348 | 363 | 357.6 |
| 280 | 9 | 2 | 24 | 23 | 30 | 23 | 29 | 13 | 19 | 15 | 3 | 4 | 6 | 16 | 111 | 83 | 194 | 205 | 204.9 |
| 260 | 3 | 2 | 17 | 12 | 13 | 7 | 9 | 5 | 5 | 1 | | | 1 | 8 | 54 | 20 | 74 | 78 | 74.8 |
| 240 | | | 8 | 4 | | | 3 | 1 | | | | | | 5 | 12 | 4 | 16 | 21 | 17.6 |
| 220 | | | 2 | 1 | | | | | | | | | | 1 | 3 | | 3 | 4 | 3.1 |
| 200 | | | 2 | | | | | | | | | | | 1 | 2 | | 2 | 3 | 0.7 |
| 180 | | | 1 | | | | | | | | | | | | 1 | | 1 | 1 | 0.1 |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | 705.8 |
| 960 | | | | | | | | | | | | | | | | | | | 705.6 |
| 940 | | | | | | | | | | | | | | | | | | | 705.6 |
| 920 | | | | | | | | | | | | | | | | | | | 705.6 |
| 900 | | | | | | | | | | | | | | | | | | | 705.6 |
| 880 | 58 | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.3 |
| 860 | 57 | | 59 | | | | | | | | | | | | 350 | | 705 | 706 | 704.9 |
| 840 | 56 | 60 | 58 | | | | | | | | | | | | 348 | | 703 | 705 | 704.0 |
| 820 | 56 | 59 | 56 | | | | | | | | | | | | 345 | | 700 | 703 | 702.7 |
| 800 | 55 | 56 | 55 | 56 | | | | | | | | | | | 340 | | 695 | 702 | 699.7 |
| 780 | 55 | 52 | 53 | 55 | | | | | | | | | | | 333 | | 688 | 699 | 695.0 |
| 760 | 55 | 48 | 48 | 55 | 60 | 58 | | 58 | 59 | 60 | 58 | 60 | | 60 | 324 | 355 | 679 | 694 | 684.9 |
| 740 | 53 | 44 | 42 | 52 | 59 | 57 | 60 | 57 | 58 | 59 | 56 | 59 | 58 | 57 | 307 | 349 | 656 | 674 | 662.5 |
| 720 | 52 | 32 | 36 | 45 | 55 | 55 | 55 | 50 | 54 | 49 | 46 | 57 | 54 | 55 | 275 | 311 | 586 | 611 | 609.4 |
| 700 | 47 | 17 | 22 | 42 | 44 | 47 | 46 | 38 | 40 | 39 | 39 | 43 | 44 | 44 | 219 | 245 | 464 | 488 | 496.3 |
| 680 | 43 | 10 | 15 | 31 | 32 | 26 | 23 | 21 | 21 | 23 | 21 | 26 | 21 | 30 | 157 | 135 | 292 | 290 | 323.2 |
| 660 | 32 | 3 | 9 | 22 | 12 | 21 | 13 | 5 | 4 | 13 | 10 | 11 | 11 | 23 | 99 | 56 | 155 | 154 | 176.9 |
| 640 | 18 | | 8 | 14 | 6 | 7 | 1 | 1 | | 8 | 6 | 5 | 6 | 14 | 53 | 21 | 74 | 76 | 86.6 |
| 620 | 4 | | 4 | 8 | 4 | 1 | 1 | 1 | | 1 | 2 | 2 | 3 | 8 | 21 | 7 | 28 | 35 | 34.5 |
| 600 | 1 | | 4 | 5 | 1 | 1 | | | | | 2 | | | 6 | 12 | 2 | 14 | 19 | 15.3 |
| 580 | | | 2 | 2 | 1 | 1 | | | | | 1 | | | 5 | 6 | 1 | 7 | 12 | 5.5 |
| 560 | | | | | | | | | | | | | | 4 | | | | 4 | 2.6 |
| 540 | | | | | | | | | | | | | | | | | | | 0.9 |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
**) Extremwerte ab 1901 bis 1975 vom Pegel Bremerhaven-Doppelschleuse, ab Abflussjahr 1976 vom Pegel Bremerhaven Alter LT
e = Wert ist ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.01 m

W Tide
cm

Pegel : Oldenburg-Drielake Nr. 4960030
Gewässer : Hunte
Gebiet : Hunte

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 12. | 12. | 1. | 1. | 31. | 31. | 5. | 2. | 3. | 3. | 29. | 29. | 1. | 1. | 15. | 15. | 4. | 27. | 28. | 14. | 24. | 24. | 12. | 12. | 25. | 25. | 21. | 20. |
| N | 399 | 629 | 420 | 683 | 435 | 632 | 421 | 632 | 428 | 624 | 406 | 620 | 407 | 641 | 408 | 655 | 416 | 683 | 399 | 655 | 385 | 598 | 409 | 646 | 409 | 627 | 395 | 598 |
| M | 430 | 701 | 498 | 761 | 534 | 764 | 450 | 717 | 444 | 721 | 434 | 714 | 430 | 715 | 431 | 717 | 433 | 718 | 427 | 711 | 432 | 713 | 438 | 716 | 438 | 716 | 454 | 714 |
| H | 513 | 785 | 564 | 808 | 685 | 814 | 489 | 801 | 483 | 782 | 454 | 776 | 469 | 764 | 460 | 782 | 475 | 776 | 446 | 768 | 462 | 781 | 478 | 771 | 474 | 767 | 511 | 796 |
| Tag | 28. | 30. | 9. | 30. | 5. | 24. | 25. | 19. | 8. | 11. | 11. | 7. | 16. | 12. | 25. | 25. | 19. | 19. | 23. | 22. | 15. | 15. | 6. | 17. | 7. | 22. | 26. | 30.+ |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2002 | 2010 | 2010 | 2008 | 2008 | 2009 | 2009 | 2011 | 2012 | 2003+ | 2012 | 2009+ | 2011 | 2012 | 2012 | 2004+ | 2004 | 2012 | 2005 | 2011 | 2011 | 2004 | 2011 | 2003 | 2005 | 2010 | 2010 |
| N | 394 | 583 | 388 | 572 | 387 | 575 | 399 | 585 | 393 | 624 | 405 | 620 | 407 | 627 | 408 | 655 | 406 | 635 | 399 | 640 | 383 | 421 | 373 | 575 | 394 | 606 | 388 | 572 |
| MN | 421 | 633 | 419 | 634 | 433 | 636 | 427 | 635 | 431 | 647 | 416 | 651 | 414 | 650 | 418 | 671 | 416 | 670 | 416 | 664 | 405 | 618 | 402 | 626 | 416 | 638 | 417 | 636 |
| M | 466 | 726 | 470 | 727 | 492 | 738 | 476 | 727 | 469 | 730 | 446 | 720 | 441 | 719 | 438 | 721 | 437 | 719 | 439 | 719 | 442 | 711 | 445 | 716 | 459 | 724 | 469 | 729 |
| MH | 538 | 800 | 542 | 793 | 572 | 804 | 548 | 802 | 529 | 797 | 481 | 780 | 473 | 779 | 476 | 780 | 471 | 778 | 471 | 778 | 486 | 785 | 495 | 790 | 528 | 796 | 536 | 795 |
| H | 587 | 813 | 607 | 808 | 685 | 821 | 606 | 813 | 649 | 811 | 511 | 807 | 488 | 799 | 526 | 787 | 496 | 801 | 510 | 797 | 515 | 805 | 519 | 805 | 587 | 810 | 607 | 808 |
| Jahr | 2006 | 2002 | 2007 | 2007+ | 2012 | 2008 | 2004 | 2004 | 2008 | 2008 | 2006 | 2003 | 2005 | 2003+ | 2007 | 2007 | 2008 | 2008 | 2006 | 2007 | 2004 | 2010 | 2003 | 2006 | 2006 | 2007 | 2007 | 2007+ |
| HThw ab 1901 | 831 | | 835 | | 841 | | 843 | | 820 | | 822 | | 812 | | 813 | | 817 | | 812 | | 820 | | 820 | | 831 | | 835 | |

| | Abflussjahr (*) 2012 Jahr | | Datum | | Winter | | Sommer | | Kalenderjahr 2012 Jahr | | Datum | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NTnw | 385 | | 24.09.2012 | | 399 | | 385 | | 385 | | 24.09.2012 | |
| NThw | | 598 | 24.09.2012 | | | 620 | | 598 | | 598 | 24.09.2012 | |
| M | 448 | 723 | | | 466 | 730 | 432 | 715 | 445 | 720 | | |
| HTnw | 685 | | 05.01.2012 | | 685 | | 478 | | 685 | | 05.01.2012 | |
| HThw | | 814 | 24.01.2012 | | | 814 | | 782 | | 814 | 24.01.2012 | |
| | 2003/2012 (*) 10 Jahre | | | | | | | | 2003/2012 | | | |
| NTnw | 373 | | 12.10.2004 | | 387 | | 373 | | 373 | | 12.10.2004 | |
| NThw | | 421 | 21.09.2011 | | | 572 | | 421 | | 421 | 21.09.2011 | |
| MN | 392 | 576 | | | 399 | 594 | 395 | 603 | 390 | 576 | | |
| M | 455 | 723 | | | 470 | 728 | 440 | 718 | 454 | 723 | | |
| MH | 601 | 811 | | | 601 | 811 | 506 | 798 | 602 | 811 | | |
| HTnw | 685 | | 05.01.2012 | | 685 | | 526 | | 685 | | 05.01.2012 | |
| HThw | | 821 | 22.01.2008 | | | 821 | | 805 | | 821 | 22.01.2008 | |

## Extremwerte **)

| | NTnw cm | | Datum | NThw cm | Datum | HTnw cm | Datum | HThw cm | Datum |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 306 | e | 08.12.1959 | 417 | 07.12.1959 | 786 | 17.02.1962 | 843 | 17.02.1962 |
| 2 | 338 | e | 15.03.1964 | 439 | 09.01.1970 | 761 | 14.01.1916 | 841 | 21.01.1976 |
| 3 | 342 | e | 21.10.1999 | 452 | 18.01.1912 | 748 | 17.02.1962 | 841 | 03.01.1976 |
| 4 | 347 | e | 08.12.1959 | 455 | 15.03.1964 | 744 | 07.01.1932 | 838 | 22.01.1976 |
| 5 | 348 | e | 18.11.1965 | 456 | 01.02.1950 | 734 | 26.11.1928 | 837 | 04.01.1976 |
| 6 | 349 | | 18.05.1976 | 461 | 18.01.1912 | 733 | 23.01.1918 | 835 | 31.12.1977 |
| 7 | 350 | | 09.12.1959 | 467 | 19.01.1963 | 733 | 21.01.1918 | 833 | 21.01.1976 |
| 8 | 351 | | 15.03.1964 | 467 | 19.01.1912 | 732 | 04.01.1932 | 831 | 04.01.1978 |
| 9 | 354 | e | 06.11.1951 | 473 | 08.12.1959 | 730 | 22.01.1918 | 831 | 15.11.1977 |
| 10 | 355 | | 07.12.1959 | 474 | 14.09.2011 | 728 | 24.01.1918 | 828 | 13.11.1977 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | 60 | | | | | | | | | | | | 352 | | 708 | 707 | 705.8 |
| 680 | | | 59 | | | | | | | | | | | | 351 | | 707 | 706 | 705.7 |
| 660 | | | 59 | | | | | | | | | | | | 351 | | 707 | 706 | 705.7 |
| 640 | | | 57 | | | | | | | | | | | | 349 | | 705 | 704 | 705.4 |
| 620 | | | 57 | | | | | | | | | | | | 349 | | 705 | 704 | 705.1 |
| 600 | | | 57 | | | | | | | | | | | | 349 | | 705 | 704 | 704.2 |
| 580 | | 60 | 50 | | | | | | | | | | | | 342 | | 698 | 697 | 700.7 |
| 560 | | 59 | 43 | | | | | | | | | | | | 334 | | 690 | 690 | 695.9 |
| 540 | | 56 | 34 | | | | | | | | | | | | 322 | | 678 | 681 | 687.3 |
| 520 | 58 | 48 | 24 | | | | | | | | | | | 59 | 304 | | 660 | 671 | 673.4 |
| 500 | 57 | 33 | 17 | 56 | 60 | | | | | | | | | 54 | 281 | | 637 | 659 | 645.4 |
| 480 | 57 | 12 | 4 | 53 | 59 | | 60 | 58 | 60 | | 58 | 60 | 58 | 48 | 243 | 356 | 599 | 636 | 590.0 |
| 460 | 55 | 5 | 3 | 39 | 51 | 58 | 59 | 57 | 58 | 60 | 57 | 55 | 56 | 36 | 211 | 346 | 557 | 589 | 476.3 |
| 440 | 48 | 2 | 1 | 16 | 28 | 35 | 52 | 46 | 46 | 55 | 47 | 38 | 35 | 21 | 130 | 284 | 414 | 420 | 261.5 |
| 420 | 13 | | | | | 9 | 11 | 5 | 5 | 13 | 4 | 4 | 6 | 7 | 22 | 42 | 64 | 64 | 37.1 |
| 400 | 1 | | | | | | | | | 1 | 1 | | | 1 | 1 | 2 | 3 | 3 | 3.0 |
| 380 | | | | | | | | | | | | | | | | | | | 0.3 |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |
| 300 | | | | | | | | | | | | | | | | | | | |
| 280 | | | | | | | | | | | | | | | | | | | |
| 260 | | | | | | | | | | | | | | | | | | | |
| 240 | | | | | | | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | |
| 960 | | | | | | | | | | | | | | | | | | | |
| 940 | | | | | | | | | | | | | | | | | | | |
| 920 | | | | | | | | | | | | | | | | | | | |
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | 705.9 |
| 820 | | 60 | 60 | 56 | | | | | | | | | | | 352 | | 707 | 707 | 705.8 |
| 800 | 58 | 56 | 52 | 55 | 60 | | | 57 | | | 58 | | | 60 | 339 | 355 | 694 | 698 | 695.4 |
| 780 | 56 | 45 | 33 | 52 | 59 | 58 | 60 | 56 | 60 | 60 | 57 | 60 | 58 | 56 | 303 | 353 | 656 | 669 | 664.2 |
| 760 | 55 | 25 | 20 | 46 | 52 | 56 | 58 | 55 | 57 | 59 | 54 | 58 | 55 | 52 | 254 | 341 | 595 | 622 | 601.3 |
| 740 | 50 | 12 | 14 | 39 | 45 | 47 | 50 | 45 | 52 | 52 | 47 | 51 | 51 | 42 | 207 | 297 | 504 | 535 | 491.3 |
| 720 | 46 | 8 | 8 | 28 | 33 | 33 | 35 | 32 | 35 | 35 | 36 | 29 | 27 | 29 | 156 | 202 | 358 | 360 | 329.1 |
| 700 | 31 | 1 | 5 | 21 | 10 | 18 | 16 | 13 | 8 | 15 | 14 | 13 | 12 | 18 | 86 | 79 | 165 | 163 | 159.2 |
| 680 | 14 | | 4 | 13 | 5 | 6 | 4 | 1 | | 11 | 7 | 6 | 6 | 11 | 42 | 29 | 71 | 74 | 67.1 |
| 660 | 3 | | 3 | 6 | 1 | 1 | 1 | 1 | | 3 | 2 | 2 | 3 | 8 | 14 | 9 | 23 | 31 | 25.1 |
| 640 | 1 | | 1 | 3 | 1 | 1 | | | | | 2 | | 1 | 5 | 7 | 2 | 9 | 14 | 10.7 |
| 620 | | | | | | | | | | | 1 | | | 5 | | 1 | 1 | 6 | 4.9 |
| 600 | | | | | | | | | | | 1 | | | 1 | | 1 | 1 | 2 | 3.1 |
| 580 | | | | | | | | | | | | | | | | | | | 1.9 |
| 560 | | | | | | | | | | | | | | | | | | | 1.4 |
| 540 | | | | | | | | | | | | | | | | | | | 1.4 |
| 520 | | | | | | | | | | | | | | | | | | | 1.4 |
| 500 | | | | | | | | | | | | | | | | | | | 1.2 |
| 480 | | | | | | | | | | | | | | | | | | | 0.3 |
| 460 | | | | | | | | | | | | | | | | | | | 0.2 |
| 440 | | | | | | | | | | | | | | | | | | | 0.1 |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
**)Extremwerte ab 1901, e = Wert ist ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.01 m

W Tide
cm

Pegel : Oldenburg-Drielake Nr. 4960030
Gewässer : Hunte
Gebiet : Hunte

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.02 | 434 | 7.07 | 716 | 2.11 | 435 | 7.08 | 709 | 3.09 | 503 | 8.08 | 780 | 4.22 | 427 | 8.53 | 649 | 3.12 | 458 | 8.08 | 715 | 4.06 | 450 | 9.21 | 683 | 5.15 | 408 | 10.31 | 641 | 1. |
| | 14.31 | 430 | 19.42 | 707 | 14.48 | 420 | 20.00 | 683 | 15.42 | 513 | 20.16 | 739 | 16.25 | 424 | 21.00 | 633 | 15.24 | 460 | 20.25 | 714 | 16.18 | 446 | 22.16 | 741 | 17.40 | 407 | 23.03 | 696 | |
| 2. | 2.30 | 434 | 7.55 | 741 | 2.23 | 441 | 8.05 | 806 | 3.50 | 524 | 8.44 | 791 | 5.19 T | 431 | 9.54 T | 632 | 3.43 | 461 | 8.42 | 695 | 5.38 | 453 | 10.54 | 702 | 6.38 | 423 | 11.55 | 681 | 2. |
| | 15.12 | 451 | 20.12 | 702 | 15.37 | 478 | 20.30 | 716 | 16.35 | 545 | 21.09 | 762 | 17.23 T | 439 | 22.06 T | 653 | 16.14 | 451 | 21.04 | 665 | 18.14 | 440 | 23.33 | 701 | 19.00 | 418 | - | - | |
| 3. | 3.36 | 430 | 8.44 | 688 | 3.47 | 450 | 8.46 | 701 | 4.47 | 537 | 8.57 | 740 | 6.03 T | 442 | 11.02 T | 665 | 5.23 | 430 | 9.55 | 624 | 7.25 | 425 | - | - | 7.54 | 414 | 0.22 | 696 | 3. |
| | 16.07 | 427 | 21.22 | 673 | 15.42 | 457 | 21.45 | 769 | 16.51 | 530 | 21.18 | 773 | 18.53 T | 440 | 23.44 T | 668 | 17.29 | 428 | 22.36 | 663 | 19.51 | 421 | 12.31 | 678 | 20.11 | 429 | 13.09 | 698 | |
| 4. | 4.04 | 436 | 9.21 | 705 | 4.18 | 517 | 8.04 b | 750 | 3.06 | 641 | 9.39 | 799 | 7.45 T | 455 | - | - | 6.27 | 436 | 11.36 | 671 | 8.41 | 414 | 0.58 | 684 | 8.56 | 438 | 1.23 | 724 | 4. |
| | 16.51 | 436 | 22.16 | 690 | 17.25 | 482 | 22.15 | 745 | 18.14 | 599 | 21.31 b | 793 | 20.18 T | 435 | 12.23 T | 677 | 18.53 | 446 | - | - | 20.55 | 416 | 13.49 | 668 | 21.10 | 435 | 14.05 | 717 | |
| 5. | 5.22 | 439 | 10.41 | 712 | 5.47 | 469 | 11.20 | 779 | 6.21 | 584 | 9.52 b | 797 | 9.09 T | 421 | 0.56 T | 675 | 8.23 | 445 | 0.11 | 719 | 9.43 | 418 | 2.04 | 700 | 9.47 | 440 | 2.26 | 744 | 5. |
| | 18.21 | 434 | 23.50 | 681 | 18.20 | 488 | 23.15 | 739 | 15.47 | 685 | - | - | 21.03 T | 424 | 13.44 T | 638 | 20.30 | 447 | 13.17 | 681 | 21.58 | 418 | 14.45 | 693 | 22.06 | 433 | 15.00 | 738 | |
| 6. | 6.38 | 443 | - | - | 6.55 | 472 | - | - | 8.28 | 653 | 1.27 b | 809 | 10.05 T | 444 | 2.00 T | 698 | 9.27 | 445 | 1.36 | 718 | 10.25 | 422 | 3.00 | 715 | 10.44 | 430 | 3.16 | 739 | 6. |
| | 19.33 | 440 | 12.05 | 716 | 19.30 | 479 | 12.06 | 733 | 21.24 | 589 | 11.47 b | 808 | 22.22 T | 432 | 14.45 T | 686 | 21.45 | 436 | 14.13 | 696 | 22.41 | 438 | 15.38 | 728 | 23.02 | 432 | 15.49 | 728 | |
| 7. | 8.02 | 433 | 0.51 | 679 | 8.26 | 490 | 0.45 | 781 | 9.45 | 550 | 1.24 | 755 | 11.13 T | 466 | 3.12 T | 690 | 10.26 | 435 | 2.37 | 706 | 11.14 | 447 | 3.51 | 776 | 11.32 | 435 | 4.10 | 740 | 7. |
| | 20.50 | 427 | 13.19 | 698 | 20.12 | 498 | 13.23 | 740 | 21.29 | 580 | 14.11 | 797 | 23.23 T | 450 | 15.44 T | 675 | 22.13 | 441 | 15.07 | 676 | 23.30 | 437 | 16.19 | 753 | - | - | 16.35 | 726 | |
| 8. | 8.59 | 419 | 1.51 | 663 | 9.04 | 515 | 0.30 b | 771 | 10.07 | 589 | 0.41 b | 792 | - | - | 4.02 T | 675 | 10.47 | 483 | 3.40 | 762 | 11.58 | 436 | 4.32 | 753 | 0.00 | 419 | 4.59 | 698 | 8. |
| | 21.31 | 420 | 14.10 | 690 | 21.27 | 492 | 13.37 | 765 | 22.38 | 570 | 13.34 b | 801 | 12.05 T | 433 | 16.41 T | 655 | 23.15 | 471 | 15.46 | 779 | - | - | 17.00 | 731 | 12.22 | 422 | 17.25 | 712 | |
| 9. | 9.39 | 424 | 2.38 | 673 | 8.42 | 549 | 2.49 | 755 | 11.07 | 545 | 3.00 | 796 | 0.00 T | 428 | 4.50 T | 697 | 11.57 | 454 | 4.03 | 757 | 0.15 | 437 | 5.20 | 727 | 0.44 | 420 | 5.53 | 722 | 9. |
| | 22.01 | 422 | 14.48 | 694 | 21.51 | 564 | 12.23 b | 784 | 23.00 | 562 | 15.37 | 787 | 12.15 T | 448 | 17.04 T | 697 | 23.54 | 447 | 16.38 | 715 | 12.32 | 432 | 17.41 | 748 | 12.58 | 434 | 18.07 | 738 | |
| 10. | 10.26 | 426 | 3.11 | 690 | 10.21 | 529 | 1.05 b | 774 | 11.46 | 552 | 2.30 b | 790 | 0.39 T | 444 | 5.25 T | 702 | - | - | 4.54 | 762 | 0.49 | 442 | 6.00 | 742 | 1.30 | 436 | 6.34 | 717 | 10. |
| | 22.46 | 418 | 15.31 | 693 | 22.51 | 514 | 14.05 b | 765 | 23.54 | 540 | 16.10 | 784 | 13.15 T | 442 | 17.53 T | 672 | 12.24 | 457 | 17.19 | 760 | 13.09 | 450 | 18.17 | 753 | 13.45 | 432 | 18.55 | 742 | |
| 11. | 11.14 | 418 | 3.56 | 672 | 11.13 | 490 | 3.28 | 782 | - | - | 4.26 | 806 | 1.25 T | 429 | 6.13 T | 685 | 0.39 | 456 | 5.38 | 782 | 1.33 | 447 | 6.43 | 755 | 2.18 | 434 | 7.24 | 720 | 11. |
| | 23.27 | 400 | 16.15 | 652 | 23.19 | 483 | 15.54 | 745 | 12.19 | 537 | 16.51 | 790 | 13.45 T | 433 | 18.33 T | 692 | 13.12 | 460 | 18.06 | 745 | 13.52 | 454 | 19.06 | 767 | 14.21 | 438 | 19.39 | 763 | |
| 12. | 11.38 | 399 | 4.34 | 629 | 11.42 | 478 | 4.10 | 758 | 0.33 | 530 | 5.06 | 801 | 1.43 T | 429 | 6.42 T | 727 | 1.24 | 452 | 6.26 | 764 | 2.24 | 451 | 7.29 | 738 | 2.53 | 448 | 8.15 | 747 | 12. |
| | 23.41 | 406 | 16.57 | 656 | 23.52 | 495 | 16.49 | 781 | 12.42 | 526 | 16.43 b | 774 | 14.11 T | 437 | 19.05 T | 714 | 13.43 | 455 | 18.43 | 756 | 14.36 | 447 | 19.46 | 749 | 15.11 | 453 | 20.26 | 764 | |
| 13. | - | - | 4.57 | 706 | - | - | 4.42 | 763 | 1.05 | 558 | 7.43 b | 776 | 2.19 T | 433 | 7.19 T | 735 | 2.05 | 452 | 7.02 | 749 | 3.11 | 453 | 8.21 | 731 | 4.04 | 433 | 9.06 | 679 | 13. |
| | 12.03 | 431 | 17.09 | 720 | 12.11 | 480 | 17.26 | 716 | 13.33 | 554 | 17.01 b | 773 | 14.47 T | 438 | 19.49 T | 723 | 14.24 | 439 | 19.24 | 725 | 15.22 | 447 | 20.33 | 742 | 16.11 | 424 | 21.17 | 712 | |
| 14. | 0.19 | 432 | 5.20 | 698 | 0.06 | 486 | 5.11 | 801 | 1.52 | 540 | 5.48 b | 795 | 2.55 T | 444 | 8.09 T | 760 | 2.50 | 440 | 7.48 | 724 | 4.02 | 447 | 9.13 | 714 | 4.50 | 422 | 10.05 | 682 | 14. |
| | 12.43 | 428 | 17.48 | 680 | 12.56 | 497 | 17.43 | 753 | 14.28 | 510 | 19.06 | 765 | 15.21 T | 457 | 20.19 T | 744 | 15.08 | 441 | 20.02 | 714 | 16.12 | 447 | 21.35 | 735 | 16.51 | 435 | 22.19 | 750 | |
| 15. | 0.44 | 416 | 5.59 | 702 | 0.54 | 506 | 4.49 b | 773 | 2.38 | 505 | 7.17 | 789 | 3.17 T | 458 | 7.38 T | 749 | 3.32 | 429 | 8.34 | 706 | 5.10 | 444 | 10.25 | 695 | 5.42 | 448 | 10.53 | 692 | 15. |
| | 13.17 | 430 | 18.22 | 678 | 13.49 | 493 | 18.30 | 745 | 15.03 | 495 | 19.41 | 752 | 15.49 T | 477 | 20.53 T | 782 | 15.44 | 438 | 20.45 | 713 | 17.20 | 442 | 23.00 | 734 | 17.54 | 434 | 23.50 | 753 | |
| 16. | 1.23 | 414 | 6.38 | 678 | 1.39 | 501 | 6.34 | 771 | 3.17 | 496 | 8.00 | 771 | 4.52 | 462 | 9.34 | 722 | 4.16 | 437 | 9.22 | 701 | 6.34 | 443 | 11.52 | 701 | 6.47 | 456 | - | - | 16. |
| | 13.54 | 418 | 19.05 | 664 | 14.27 | 491 | 19.37 | 778 | 15.45 | 489 | 20.24 | 739 | 17.16 | 444 | 22.15 | 720 | 16.31 | 449 | 21.42 | 714 | 19.04 | 442 | - | - | 19.32 | 469 | 12.30 | 754 | |
| 17. | 1.52 | 413 | 7.13 | 695 | 2.36 | 542 | 6.18 b | 788 | 4.00 | 487 | 8.46 | 763 | 5.42 | 447 | 10.45 | 716 | 5.34 | 434 | 10.41 | 690 | 8.03 | 432 | 0.25 | 728 | 7.58 | 450 | 0.36 | 753 | 17. |
| | 14.22 | 427 | 19.34 | 683 | 15.10 | 543 | 19.46 | 796 | 16.24 | 481 | 21.17 | 740 | 18.09 | 449 | 23.18 | 718 | 17.46 | 445 | 23.05 | 721 | 20.15 | 424 | 13.05 | 678 | 20.28 | 431 | 13.02 | 707 | |
| 18. | 2.26 | 423 | 7.45 | 700 | 3.32 | 533 | 7.27 b | 784 | 4.49 | 489 | 9.36 | 750 | 7.25 | 441 | - | - | 7.05 | 431 | - | - | 8.42 | 418 | 1.07 | 681 | 9.03 | 425 | 1.33 | 709 | 18. |
| | 15.04 | 429 | 20.21 | 672 | 16.02 | 531 | 20.38 | 772 | 17.20 | 482 | 22.34 | 762 | 19.36 | 447 | 12.20 | 697 | 19.22 | 445 | 12.13 | 688 | 20.56 | 425 | 14.01 | 695 | 21.19 | 411 | 14.12 | 677 | |
| 19. | 3.11 | 431 | 8.35 | 710 | 4.18 | 516 | 9.00 | 779 | 5.46 | 499 | 10.53 | 797 | 8.15 | 468 | 0.54 | 756 | 8.24 | 441 | 0.33 | 752 | 9.43 | 426 | 2.04 | 714 | 9.37 | 426 | 2.31 | 706 | 19. |
| | 15.59 | 428 | 21.23 | 680 | 17.04 | 503 | 21.33 | 724 | 18.24 | 518 | 22.28 b | 769 | 21.09 | 488 | 13.28 | 801 | 20.51 | 443 | 13.33 | 716 | 21.55 | 429 | 14.51 | 699 | 22.02 | 432 | 14.52 | 717 | |
| 20. | 4.17 | 426 | 9.45 | 695 | 5.20 | 490 | 10.07 | 719 | 6.36 | 535 | 10.58 b | 783 | 10.10 | 451 | 1.52 | 778 | 9.31 | 430 | 1.50 | 723 | 10.24 | 437 | 3.07 | 720 | 10.23 | 433 | 3.13 | 723 | 20. |
| | 17.16 | 417 | 22.46 | 677 | 17.40 | 500 | 22.50 | 789 | 20.00 | 532 | - | - | 22.13 | 444 | 14.52 | 706 | 21.41 | 436 | 14.39 | 708 | 22.36 | 433 | 15.34 | 715 | 22.44 | 424 | 15.30 | 714 | |
| 21. | 5.46 | 428 | 11.04 | 694 | 6.37 | 514 | 11.17 | 768 | 9.04 | 521 | 0.38 | 800 | 10.42 | 455 | 3.10 | 732 | 10.21 | 437 | 2.50 | 736 | 10.54 | 436 | 3.46 | 727 | 10.59 | 431 | 3.53 | 713 | 21. |
| | 18.38 | 417 | - | - | 19.36 | 480 | - | - | 21.08 | 562 | 14.09 | 762 | 22.52 | 452 | 15.36 | 737 | 22.35 | 432 | 15.21 | 713 | 23.08 | 430 | 16.02 | 717 | 23.20 | 429 | 16.14 | 725 | |
| 22. | 7.03 | 417 | 0.04 | 674 | 8.04 | 486 | 0.09 | 736 | 9.53 | 584 | 4.43 b | 728 | 11.31 | 446 | 3.47 | 742 | 11.09 | 435 | 3.40 | 729 | 11.27 | 441 | 4.22 | 729 | 11.31 | 436 | 4.32 | 723 | 22. |
| | 19.53 | 424 | 12.22 | 703 | 20.26 | 493 | 12.50 | 753 | 22.08 | 575 | 16.09 b | 718 | 23.20 | 455 | 16.18 | 712 | 23.20 | 430 | 16.07 | 708 | 23.43 | 441 | 16.42 | 731 | 23.57 | 428 | 16.44 | 730 | |
| 23. | 8.16 | 425 | 1.11 | 691 | 9.07 | 495 | 1.17 | 775 | 11.02 | 585 | 2.40 | 806 | - | - | 4.27 | 778 | 11.43 | 429 | 4.21 | 723 | - | - | 4.50 | 723 | - | - | 5.06 | 716 | 23. |
| | 20.47 | 420 | 13.27 | 710 | 21.26 | 495 | 13.52 | 759 | 23.16 | 576 | 15.22 | 798 | 12.02 | 465 | 16.51 | 747 | 23.54 | 433 | 16.42 | 707 | 12.02 | 440 | 17.04 | 718 | 12.07 | 436 | 17.16 | 724 | |
| 24. | 9.13 | 428 | 2.08 | 713 | 10.00 | 518 | 2.21 | 791 | 11.53 | 566 | 3.10 b | 814 | 0.06 | 462 | 5.12 | 783 | - | - | 4.52 | 723 | 0.21 | 426 | 5.24 | 709 | 0.36 | 422 | 5.41 | 695 | 24. |
| | 21.51 | 439 | 14.31 | 743 | 22.36 | 526 | 14.10 b | 805 | - | - | 16.15 | 794 | 12.36 | 472 | 17.38 | 780 | 12.11 | 429 | 17.12 | 714 | 12.31 | 441 | 17.36 | 723 | 12.45 | 428 | 17.48 | 711 | |
| 25. | 10.19 | 423 | 2.56 | 712 | 11.00 | 504 | 3.12 | 777 | 0.08 | 562 | 4.32 | 798 | 0.46 | 486 | 5.09 b | 773 | 0.24 | 433 | 5.29 | 727 | 0.50 | 436 | 5.54 | 717 | 1.10 | 416 | 6.19 | 689 | 25. |
| | 22.25 | 448 | 15.52 | 731 | 23.10 | 511 | 15.48 | 775 | 12.51 | 548 | 16.54 | 724 | 13.12 | 489 | 17.56 | 773 | 12.39 | 433 | 17.42 | 719 | 13.00 | 438 | 17.59 | 708 | 13.13 | 424 | 18.24 | 714 | |
| 26. | 11.03 | 456 | 2.24 b | 724 | 11.49 | 503 | 4.04 | 794 | 1.03 | 521 | 5.00 | 711 | 1.27 | 473 | 6.19 | 770 | 0.55 | 437 | 5.53 | 719 | 1.20 | 416 | 6.35 | 684 | 1.48 | 415 | 6.57 | 677 | 26. |
| | 23.17 | 461 | 16.06 | 784 | - | - | 15.48 b | 773 | 13.30 e | 497 | 17.27 e | 656 | 13.44 | 474 | 18.29 | 737 | 13.09 | 430 | 18.07 | 709 | 13.17 | 437 | 18.25 | 714 | 13.46 | 415 | 19.00 | 708 | |
| 27. | 11.46 | 446 | 4.36 | 765 | 0.09 | 502 | 5.00 | 776 | 1.15 e | 480 | 5.52 e | 763 | 1.59 | 467 | 6.46 | 735 | 1.24 | 429 | 6.26 | 714 | 1.44 | 432 | 6.48 | 690 | 2.22 | 416 | 7.32 | 683 | 27. |
| | - | - | 16.29 b | 747 | 12.35 | 490 | 17.16 | 780 | 13.34 e | 508 | 18.00 e | 750 | 14.09 | 456 | 19.01 | 727 | 13.32 | 433 | 18.36 | 718 | 13.44 | 436 | 18.54 | 718 | 14.22 | 424 | 19.34 | 715 | |
| 28. | 0.11 | 513 | 3.33 b | 741 | 0.49 | 492 | 5.40 | 778 | 1.46 e | 502 | 6.25 e | 776 | 2.12 | 461 | 7.06 | 744 | 1.51 | 430 | 6.53 | 708 | 2.22 | 429 | 7.27 | 689 | 2.59 | 427 | 8.06 | 694 | 28. |
| | 12.48 | 456 | 17.45 | 739 | 13.34 | 475 | 18.11 | 707 | 14.18 | 497 | 18.41 | 730 | 14.27 | 467 | 19.17 | 743 | 13.57 | 433 | 19.11 | 725 | 14.37 | 428 | 19.37 | 680 | 15.03 | 425 | 20.24 | 720 | |
| 29. | 1.09 | 427 | 6.08 | 712 | 1.08 | 477 | 5.34 b | 756 | 2.34 | 486 | 7.05 | 738 | 2.36 | 465 | 7.37 | 736 | 2.07 | 441 | 7.26 | 737 | 3.25 | 410 | 8.01 | 620 | 3.31 | 431 | 9.10 | 718 | 29. |
| | 13.34 | 432 | 18.47 | 696 | 13.50 | 520 | 17.14 b | 758 | 14.51 | 481 | 19.13 | 706 | 14.58 | 460 | 19.45 | 716 | 14.16 | 458 | 19.36 | 768 | 15.08 | 406 | 20.49 | 662 | 15.58 | 441 | 21.18 | 721 | |
| 30. | 1.30 | 425 | 7.11 | 785 | 1.53 | 523 | 5.46 b | 768 | 3.02 | 469 | 7.25 | 698 | | | | | 2.28 | 464 | 7.59 | 760 | 3.47 | 418 | 9.08 | 670 | 4.38 | 427 | 10.05 | 704 | 30. |
| | 14.00 | 464 | 18.53 | 744 | 14.29 | 531 | 19.00 | 808 | 15.32 | 457 | 19.44 | 662 | | | | | 14.38 | 476 | 19.52 | 746 | 16.08 | 422 | 21.28 | 696 | 17.00 | 433 | 22.17 | 710 | |
| 31. | | | | | 3.05 | 529 | 7.40 | 756 | 3.45 | 446 | 8.09 | 658 | | | | | 2.58 | 462 | 8.45 | 752 | | | | | 5.48 | 419 | 11.10 | 688 | 31. |
| | | | | | 15.33 | 506 | 19.53 | 708 | 16.03 | 435 | 20.14 | 632 | | | | | 15.54 | 470 | 20.48 | 737 | | | | | 18.14 | 424 | 23.39 | 718 | |
| Mittel | | 430 | | 701 | | 498 | | 761 | | 534 | | 764 | | 450 | | 717 | | 444 | | 721 | | 434 | | 714 | | 430 | | 715 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 466 | 730 |

Winterhalbjahr: 1.11. bis 30.4.
14 Tage Treibeis
b = berechnet
e = ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.01 m

W Tide
cm

Pegel : Oldenburg-Drielake Nr. 4960030
Gewässer : Hunte
Gebiet : Hunte

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.02 | 434 | 7.07 | 716 | 2.11 | 435 | 7.08 | 709 | 3.09 | 503 | 8.08 | 780 | 4.22 | 427 | 8.53 | 649 | 3.12 | 458 | 8.08 | 715 | 4.06 | 450 | 9.21 | 683 | 5.15 | 408 | 10.31 | 641 | 1. |
| | 14.31 | 430 | 19.42 | 707 | 14.48 | 420 | 20.00 | 683 | 15.42 | 513 | 20.16 | 739 | 16.25 | 424 | 21.00 | 633 | 15.24 | 460 | 20.25 | 714 | 16.18 | 446 | 22.16 | 741 | 17.40 | 407 | 23.03 | 696 | |
| 2. | 2.30 | 434 | 7.55 | 741 | 2.23 | 441 | 8.05 | 806 | 3.50 | 524 | 8.44 | 791 | 5.19 T | 431 | 9.54 T | 632 | 3.43 | 461 | 8.42 | 695 | 5.38 | 453 | 10.54 | 702 | 6.38 | 423 | 11.55 | 681 | 2. |
| | 15.12 | 451 | 20.12 | 702 | 15.37 | 478 | 20.30 | 716 | 16.35 | 545 | 21.09 | 762 | 17.23 T | 439 | 22.06 T | 653 | 16.14 | 451 | 21.04 | 665 | 18.14 | 440 | 23.33 | 701 | 19.00 | 418 | - | - | |
| 3. | 3.36 | 430 | 8.44 | 688 | 3.47 | 450 | 8.46 | 701 | 4.47 | 537 | 8.57 | 740 | 6.03 T | 442 | 11.02 T | 665 | 5.23 | 430 | 9.55 | 624 | 7.25 | 425 | - | - | 7.54 | 414 | 0.22 | 696 | 3. |
| | 16.07 | 427 | 21.22 | 673 | 15.42 | 457 | 21.45 | 769 | 16.51 | 530 | 21.18 | 773 | 18.53 T | 440 | 23.44 T | 668 | 17.29 | 428 | 22.36 | 663 | 19.51 | 421 | 12.31 | 678 | 20.11 | 429 | 13.09 | 698 | |
| 4. | 4.04 | 436 | 9.21 | 705 | 4.18 | 517 | 8.04 b | 750 | 3.06 | 641 | 9.39 | 799 | 7.45 T | 455 | - | - | 6.27 | 436 | 11.36 | 671 | 8.41 | 414 | 0.58 | 684 | 8.56 | 438 | 1.23 | 724 | 4. |
| | 16.51 | 436 | 22.16 | 690 | 17.25 | 482 | 22.15 | 745 | 18.14 | 599 | 21.31 b | 793 | 20.18 T | 435 | 12.23 T | 677 | 18.53 | 446 | - | - | 20.55 | 416 | 13.49 | 668 | 21.10 | 435 | 14.05 | 717 | |
| 5. | 5.22 | 439 | 10.41 | 712 | 5.47 | 469 | 11.20 | 779 | 6.21 | 584 | 9.52 b | 797 | 9.09 T | 421 | 0.56 T | 675 | 8.23 | 445 | 0.11 | 719 | 9.43 | 418 | 2.04 | 700 | 9.47 | 440 | 2.26 | 744 | 5. |
| | 18.21 | 434 | 23.50 | 681 | 18.20 | 488 | 23.15 | 739 | 15.47 | 685 | - | - | 21.03 T | 424 | 13.44 T | 638 | 20.30 | 447 | 13.17 | 681 | 21.58 | 418 | 14.45 | 693 | 22.06 | 433 | 15.00 | 738 | |
| 6. | 6.38 | 443 | - | - | 6.55 | 472 | - | - | 8.28 | 653 | 1.27 b | 809 | 10.05 T | 444 | 2.00 T | 698 | 9.27 | 445 | 1.36 | 718 | 10.25 | 422 | 3.00 | 715 | 10.44 | 430 | 3.16 | 739 | 6. |
| | 19.33 | 440 | 12.05 | 716 | 19.30 | 479 | 12.06 | 733 | 21.24 | 589 | 11.47 b | 808 | 22.22 T | 432 | 14.45 T | 686 | 21.45 | 436 | 14.13 | 696 | 22.41 | 438 | 15.38 | 728 | 23.02 | 432 | 15.49 | 728 | |
| 7. | 8.02 | 433 | 0.51 | 679 | 8.26 | 490 | 0.45 | 781 | 9.45 | 550 | 1.24 | 755 | 11.13 T | 466 | 3.12 T | 690 | 10.26 | 435 | 2.37 | 706 | 11.14 | 447 | 3.51 | 776 | 11.32 | 435 | 4.10 | 740 | 7. |
| | 20.50 | 427 | 13.19 | 698 | 20.12 | 498 | 13.23 | 740 | 21.29 | 580 | 14.11 | 797 | 23.23 T | 450 | 15.44 T | 675 | 22.13 | 441 | 15.07 | 676 | 23.30 | 437 | 16.19 | 753 | - | - | 16.35 | 726 | |
| 8. | 8.59 | 419 | 1.51 | 663 | 9.04 | 515 | 0.30 b | 771 | 10.07 | 589 | 0.41 b | 792 | - | - | 4.02 T | 675 | 10.47 | 483 | 3.40 | 762 | 11.58 | 436 | 4.32 | 753 | 0.00 | 419 | 4.59 | 698 | 8. |
| | 21.31 | 420 | 14.10 | 690 | 21.27 | 492 | 13.37 | 765 | 22.38 | 570 | 13.34 b | 801 | 12.05 T | 433 | 16.41 T | 655 | 23.15 | 471 | 15.46 | 779 | - | - | 17.00 | 731 | 12.22 | 422 | 17.25 | 712 | |
| 9. | 9.39 | 424 | 2.38 | 673 | 8.42 | 549 | 2.49 | 755 | 11.07 | 545 | 3.00 | 796 | 0.00 T | 428 | 4.50 T | 697 | 11.57 | 454 | 4.03 | 757 | 0.15 | 437 | 5.20 | 727 | 0.44 | 420 | 5.53 | 722 | 9. |
| | 22.01 | 422 | 14.48 | 694 | 21.51 | 564 | 12.23 b | 784 | 23.00 | 562 | 15.37 | 787 | 12.15 T | 448 | 17.04 T | 697 | 23.54 | 447 | 16.38 | 715 | 12.32 | 432 | 17.41 | 748 | 12.58 | 434 | 18.07 | 738 | |
| 10. | 10.26 | 426 | 3.11 | 690 | 10.21 | 529 | 1.05 b | 774 | 11.46 | 552 | 2.30 b | 790 | 0.39 T | 444 | 5.25 T | 702 | - | - | 4.54 | 762 | 0.49 | 442 | 6.00 | 742 | 1.30 | 436 | 6.34 | 717 | 10. |
| | 22.46 | 418 | 15.31 | 693 | 22.51 | 514 | 14.05 b | 765 | 23.54 | 540 | 16.10 | 784 | 13.15 T | 442 | 17.53 T | 672 | 12.24 | 457 | 17.19 | 760 | 13.09 | 450 | 18.17 | 753 | 13.45 | 432 | 18.55 | 742 | |
| 11. | 11.14 | 418 | 3.56 | 672 | 11.13 | 490 | 3.28 | 782 | - | - | 4.26 | 806 | 1.25 T | 429 | 6.13 T | 685 | 0.39 | 456 | 5.38 | 782 | 1.33 | 447 | 6.43 | 755 | 2.18 | 434 | 7.24 | 720 | 11. |
| | 23.27 | 400 | 16.15 | 652 | 23.19 | 483 | 15.54 | 745 | 12.19 | 537 | 16.51 | 790 | 13.45 T | 433 | 18.33 T | 692 | 13.12 | 460 | 18.06 | 745 | 13.52 | 454 | 19.06 | 767 | 14.21 | 438 | 19.39 | 763 | |
| 12. | 11.38 | 399 | 4.34 | 629 | 11.42 | 478 | 4.10 | 758 | 0.33 | 530 | 5.06 | 801 | 1.43 T | 429 | 6.42 T | 727 | 1.24 | 452 | 6.26 | 764 | 2.24 | 451 | 7.29 | 738 | 2.53 | 448 | 8.15 | 747 | 12. |
| | 23.41 | 406 | 16.57 | 656 | 23.52 | 495 | 16.49 | 781 | 12.42 | 526 | 16.43 b | 774 | 14.11 T | 437 | 19.05 T | 714 | 13.43 | 455 | 18.43 | 756 | 14.36 | 447 | 19.46 | 749 | 15.11 | 453 | 20.26 | 764 | |
| 13. | - | - | 4.57 | 706 | - | - | 4.42 | 763 | 1.05 | 558 | 7.43 b | 776 | 2.19 T | 433 | 7.19 T | 735 | 2.05 | 452 | 7.02 | 749 | 3.11 | 453 | 8.21 | 731 | 4.04 | 433 | 9.06 | 679 | 13. |
| | 12.03 | 431 | 17.09 | 720 | 12.11 | 480 | 17.26 | 716 | 13.33 | 554 | 17.01 b | 773 | 14.47 T | 438 | 19.49 T | 723 | 14.24 | 439 | 19.24 | 725 | 15.22 | 447 | 20.33 | 742 | 16.11 | 424 | 21.17 | 712 | |
| 14. | 0.19 | 432 | 5.20 | 698 | 0.06 | 486 | 5.11 | 801 | 1.52 | 540 | 5.48 b | 795 | 2.55 T | 444 | 8.09 T | 760 | 2.50 | 440 | 7.48 | 724 | 4.02 | 447 | 9.13 | 714 | 4.50 | 422 | 10.05 | 682 | 14. |
| | 12.43 | 428 | 17.48 | 680 | 12.56 | 497 | 17.43 | 753 | 14.28 | 510 | 19.06 | 765 | 15.21 T | 457 | 20.19 T | 744 | 15.08 | 441 | 20.02 | 714 | 16.12 | 447 | 21.35 | 735 | 16.51 | 435 | 22.19 | 750 | |
| 15. | 0.44 | 416 | 5.59 | 702 | 0.54 | 506 | 4.49 b | 773 | 2.38 | 505 | 7.17 | 789 | 3.17 T | 458 | 7.38 T | 749 | 3.32 | 429 | 8.34 | 706 | 5.10 | 444 | 10.25 | 695 | 5.42 | 448 | 10.53 | 692 | 15. |
| | 13.17 | 430 | 18.22 | 678 | 13.49 | 493 | 18.30 | 745 | 15.03 | 495 | 19.41 | 752 | 15.49 T | 477 | 20.53 T | 782 | 15.44 | 438 | 20.45 | 713 | 17.20 | 442 | 23.00 | 734 | 17.54 | 434 | 23.50 | 753 | |
| 16. | 1.23 | 414 | 6.38 | 678 | 1.39 | 501 | 6.34 | 771 | 3.17 | 496 | 8.00 | 771 | 4.52 | 462 | 9.34 | 722 | 4.16 | 437 | 9.22 | 701 | 6.34 | 443 | 11.52 | 701 | 6.47 | 456 | - | - | 16. |
| | 13.54 | 418 | 19.05 | 664 | 14.27 | 491 | 19.37 | 778 | 15.45 | 489 | 20.24 | 739 | 17.16 | 444 | 22.15 | 720 | 16.31 | 449 | 21.42 | 714 | 19.04 | 442 | - | - | 19.32 | 469 | 12.30 | 754 | |
| 17. | 1.52 | 413 | 7.13 | 695 | 2.36 | 542 | 6.18 b | 788 | 4.00 | 487 | 8.46 | 763 | 5.42 | 447 | 10.45 | 716 | 5.34 | 434 | 10.41 | 690 | 8.03 | 432 | 0.25 | 728 | 7.58 | 450 | 0.36 | 753 | 17. |
| | 14.22 | 427 | 19.34 | 683 | 15.10 | 543 | 19.46 | 796 | 16.24 | 481 | 21.17 | 740 | 18.09 | 449 | 23.18 | 718 | 17.46 | 445 | 23.05 | 721 | 20.15 | 424 | 13.05 | 678 | 20.28 | 431 | 13.02 | 707 | |
| 18. | 2.26 | 423 | 7.45 | 700 | 3.32 | 533 | 7.27 b | 784 | 4.49 | 489 | 9.36 | 750 | 7.25 | 441 | - | - | 7.05 | 431 | - | - | 8.42 | 418 | 1.07 | 681 | 9.03 | 425 | 1.33 | 709 | 18. |
| | 15.04 | 429 | 20.21 | 672 | 16.02 | 531 | 20.38 | 772 | 17.20 | 482 | 22.34 | 762 | 19.36 | 447 | 12.20 | 697 | 19.22 | 445 | 12.13 | 688 | 20.56 | 425 | 14.01 | 695 | 21.19 | 411 | 14.12 | 677 | |
| 19. | 3.11 | 431 | 8.35 | 710 | 4.18 | 516 | 9.00 | 779 | 5.46 | 499 | 10.53 | 797 | 8.15 | 468 | 0.54 | 756 | 8.24 | 441 | 0.33 | 752 | 9.43 | 426 | 2.04 | 714 | 9.37 | 426 | 2.31 | 706 | 19. |
| | 15.59 | 428 | 21.23 | 680 | 17.04 | 503 | 21.33 | 724 | 18.24 | 518 | 22.28 b | 769 | 21.09 | 488 | 13.28 | 801 | 20.51 | 443 | 13.33 | 716 | 21.55 | 429 | 14.51 | 699 | 22.02 | 432 | 14.52 | 717 | |
| 20. | 4.17 | 426 | 9.45 | 695 | 5.20 | 490 | 10.07 | 719 | 6.36 | 535 | 10.58 b | 783 | 10.10 | 451 | 1.52 | 778 | 9.31 | 430 | 1.50 | 723 | 10.24 | 437 | 3.07 | 720 | 10.23 | 433 | 3.13 | 723 | 20. |
| | 17.16 | 417 | 22.46 | 677 | 17.40 | 500 | 22.50 | 789 | 20.00 | 532 | - | - | 22.13 | 444 | 14.52 | 706 | 21.41 | 436 | 14.39 | 708 | 22.36 | 433 | 15.34 | 715 | 22.44 | 424 | 15.30 | 714 | |
| 21. | 5.46 | 428 | 11.04 | 694 | 6.37 | 514 | 11.17 | 768 | 9.04 | 521 | 0.38 | 800 | 10.42 | 455 | 3.10 | 732 | 10.21 | 437 | 2.50 | 736 | 10.54 | 436 | 3.46 | 727 | 10.59 | 431 | 3.53 | 713 | 21. |
| | 18.38 | 417 | - | - | 19.36 | 480 | - | - | 21.08 | 562 | 14.09 | 762 | 22.52 | 452 | 15.36 | 737 | 22.35 | 432 | 15.21 | 713 | 23.08 | 430 | 16.02 | 717 | 23.20 | 429 | 16.14 | 725 | |
| 22. | 7.03 | 417 | 0.04 | 674 | 8.04 | 486 | 0.09 | 736 | 9.53 | 584 | 4.43 b | 728 | 11.31 | 446 | 3.47 | 742 | 11.09 | 435 | 3.40 | 729 | 11.27 | 441 | 4.22 | 729 | 11.31 | 436 | 4.32 | 723 | 22. |
| | 19.53 | 424 | 12.22 | 703 | 20.26 | 493 | 12.50 | 753 | 22.08 | 575 | 16.09 b | 718 | 23.20 | 455 | 16.18 | 712 | 23.20 | 430 | 16.07 | 708 | 23.43 | 441 | 16.42 | 731 | 23.57 | 428 | 16.44 | 730 | |
| 23. | 8.16 | 425 | 1.11 | 691 | 9.07 | 495 | 1.17 | 775 | 11.02 | 585 | 2.40 | 806 | - | - | 4.27 | 778 | 11.43 | 429 | 4.21 | 723 | - | - | 4.50 | 723 | - | - | 5.06 | 716 | 23. |
| | 20.47 | 420 | 13.27 | 710 | 21.26 | 495 | 13.52 | 759 | 23.16 | 576 | 15.22 | 798 | 12.02 | 465 | 16.51 | 747 | 23.54 | 433 | 16.42 | 707 | 12.02 | 440 | 17.04 | 718 | 12.07 | 436 | 17.16 | 724 | |
| 24. | 9.13 | 428 | 2.08 | 713 | 10.00 | 518 | 2.21 | 791 | 11.53 | 566 | 3.10 b | 814 | 0.06 | 462 | 5.12 | 783 | - | - | 4.52 | 723 | 0.21 | 426 | 5.24 | 709 | 0.36 | 422 | 5.41 | 695 | 24. |
| | 21.51 | 439 | 14.31 | 743 | 22.36 | 526 | 14.10 b | 805 | - | - | 16.15 | 794 | 12.36 | 472 | 17.38 | 780 | 12.11 | 429 | 17.12 | 714 | 12.31 | 441 | 17.36 | 723 | 12.45 | 428 | 17.48 | 711 | |
| 25. | 10.19 | 423 | 2.56 | 712 | 11.00 | 504 | 3.12 | 777 | 0.08 | 562 | 4.32 | 798 | 0.46 | 486 | 5.09 b | 773 | 0.24 | 433 | 5.29 | 727 | 0.50 | 436 | 5.54 | 717 | 1.10 | 416 | 6.19 | 689 | 25. |
| | 22.25 | 448 | 15.52 | 731 | 23.10 | 511 | 15.48 | 775 | 12.51 | 548 | 16.54 | 724 | 13.12 | 489 | 17.56 | 773 | 12.39 | 433 | 17.42 | 719 | 13.00 | 438 | 17.59 | 708 | 13.13 | 424 | 18.24 | 714 | |
| 26. | 11.03 | 456 | 2.24 b | 724 | 11.49 | 503 | 4.04 | 794 | 1.03 | 521 | 5.00 | 711 | 1.27 | 473 | 6.19 | 770 | 0.55 | 437 | 5.53 | 719 | 1.20 | 416 | 6.35 | 684 | 1.48 | 415 | 6.57 | 677 | 26. |
| | 23.17 | 461 | 16.06 | 784 | - | - | 15.48 b | 773 | 13.30 e | 497 | 17.27 e | 656 | 13.44 | 474 | 18.29 | 737 | 13.09 | 430 | 18.07 | 709 | 13.17 | 437 | 18.25 | 714 | 13.46 | 415 | 19.00 | 708 | |
| 27. | 11.46 | 446 | 4.36 | 765 | 0.09 | 502 | 5.00 | 776 | 1.15 e | 480 | 5.52 e | 763 | 1.59 | 467 | 6.46 | 735 | 1.24 | 429 | 6.26 | 714 | 1.44 | 432 | 6.48 | 690 | 2.22 | 416 | 7.32 | 683 | 27. |
| | - | - | 16.29 b | 747 | 12.35 | 490 | 17.16 | 780 | 13.34 e | 508 | 18.00 e | 750 | 14.09 | 456 | 19.01 | 727 | 13.32 | 433 | 18.36 | 718 | 13.44 | 436 | 18.54 | 718 | 14.22 | 424 | 19.34 | 715 | |
| 28. | 0.11 | 513 | 3.33 b | 741 | 0.49 | 492 | 5.40 | 778 | 1.46 e | 502 | 6.25 e | 776 | 2.12 | 461 | 7.06 | 744 | 1.51 | 430 | 6.53 | 708 | 2.22 | 429 | 7.27 | 689 | 2.59 | 427 | 8.06 | 694 | 28. |
| | 12.48 | 456 | 17.45 | 739 | 13.34 | 475 | 18.11 | 707 | 14.18 | 497 | 18.41 | 730 | 14.27 | 467 | 19.17 | 743 | 13.57 | 433 | 19.11 | 725 | 14.37 | 428 | 19.37 | 680 | 15.03 | 425 | 20.24 | 720 | |
| 29. | 1.09 | 427 | 6.08 | 712 | 1.08 | 477 | 5.34 b | 756 | 2.34 | 486 | 7.05 | 738 | 2.36 | 465 | 7.37 | 736 | 2.07 | 441 | 7.26 | 737 | 3.25 | 410 | 8.01 | 620 | 3.31 | 431 | 9.10 | 718 | 29. |
| | 13.34 | 432 | 18.47 | 696 | 13.50 | 520 | 17.14 b | 758 | 14.51 | 481 | 19.13 | 706 | 14.58 | 460 | 19.45 | 716 | 14.16 | 458 | 19.36 | 768 | 15.08 | 406 | 20.49 | 662 | 15.58 | 441 | 21.18 | 721 | |
| 30. | 1.30 | 425 | 7.11 | 785 | 1.53 | 523 | 5.46 b | 768 | 3.02 | 469 | 7.25 | 698 | | | | | 2.28 | 464 | 7.59 | 760 | 3.47 | 418 | 9.08 | 670 | 4.38 | 427 | 10.05 | 704 | 30. |
| | 14.00 | 464 | 18.53 | 744 | 14.29 | 531 | 19.00 | 808 | 15.32 | 457 | 19.44 | 662 | | | | | 14.38 | 476 | 19.52 | 746 | 16.08 | 422 | 21.28 | 696 | 17.00 | 433 | 22.17 | 710 | |
| 31. | | | | | 3.05 | 529 | 7.40 | 756 | 3.45 | 446 | 8.09 | 658 | | | | | 2.58 | 462 | 8.45 | 752 | | | | | 5.48 | 419 | 11.10 | 688 | 31. |
| | | | | | 15.33 | 506 | 19.53 | 708 | 16.03 | 435 | 20.14 | 632 | | | | | 15.54 | 470 | 20.48 | 737 | | | | | 18.14 | 424 | 23.39 | 718 | |
| Mittel | | 430 | | 701 | | 498 | | 761 | | 534 | | 764 | | 450 | | 717 | | 444 | | 721 | | 434 | | 714 | | 430 | | 715 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 466 | 730 |

Winterhalbjahr: 1.11. bis 30.4.
14 Tage Treibeis
b = berechnet
e = ergänzt

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 45926 $km^2$

PNP : NN - 5.03 m

Lage: 82.3 km unterhalb Gr.Weserbrücke links

W Tide

cm

Pegel : Fedderwardersiel AP Nr. 4995105

Gewässer : Weser

Gebiet : Unterweser

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 4.17 | 674 | - | - | 4.24 | 673 |
| | - | - | 16.59 | 666 | - | - | 17.12 | 633 |
| 2. | - | - | 4.54 | 701 | - | - | 5.06 | 760 |
| | - | - | 17.37 | 649 | - | - | 17.53 | 666 |
| 3. | - | - | 5.58 | 643 | - | - | 6.16 | 663 |
| | - | - | 18.40 | 629 | - | - | 19.00 | 716 |
| 4. | - | - | 6.43 | 656 | - | - | 6.31 | 801 |
| | - | - | 19.38 | 639 | - | - | 19.30 | 691 |
| 5. | - | - | 8.03 | 669 | - | - | 8.39 | 723 |
| | - | - | 21.08 | 631 | - | - | 20.42 | 689 |
| 6. | - | - | 9.25 | 671 | - | - | 9.22 | 687 |
| | - | - | 22.14 | 628 | - | - | 21.45 | 732 |
| 7. | - | - | 10.33 | 652 | - | - | 10.46 | 692 |
| | - | - | 23.12 | 616 | - | - | 22.21 | 783 |
| 8. | - | - | 11.23 | 645 | - | - | 10.49 | 711 |
| | - | - | 23.47 | 626 | - | - | - | - |
| 9. | - | - | - | - | - | - | 0.12 | 691 |
| | - | - | 12.01 | 645 | - | - | 11.27 | 810 |
| 10. | - | - | 0.24 ○ | 643 | - | - | 23.30 ○ * | 840 |
| | - | - | 12.44 | 646 | - | - | 12.16 | 774 |
| 11. | - | - | 1.04 | 632 | - | - | 0.39 | 723 |
| | - | - | 13.20 | 606 | - | - | 13.16 | 688 |
| 12. | - | - | 1.41 | 582 | - | - | 1.29 | 702 |
| | - | - | 14.09 | 611 | - | - | 14.03 | 720 |
| 13. | - | - | 2.04 | 669 | - | - | 1.43 | 713 |
| | - | - | 14.19 | 678 | - | - | 14.51 | 655 |
| 14. | - | - | 2.33 | 651 | - | - | 2.26 | 747 |
| | - | - | 15.01 | 632 | - | - | 15.12 | 690 |
| 15. | - | - | 3.12 | 666 | - | - | 2.52 | 763 |
| | - | - | 15.37 | 629 | - | - | 15.56 | 685 |
| 16. | - | - | 3.44 | 635 | - | - | 3.56 | 710 |
| | - | - | 16.17 | 616 | - | - | 16.54 | 701 |
| 17. | - | - | 4.25 | 653 | - | - | 4.39 | 763 |
| | - | - | 16.54 | 634 | - | - | 17.07 | 723 |
| 18. | - | - | 4.53 | 659 | - | - | 5.25 | 750 |
| | - | - | 17.40 | 622 | - | - | 18.03 | 694 |
| 19. | - | - | 5.53 | 666 | - | - | 6.24 | 708 |
| | - | - | 18.43 | 633 | - | - | 19.07 | 653 |
| 20. | - | - | 7.02 | 651 | - | - | 7.40 | 651 |
| | - | - | 20.03 | 629 | - | - | 20.11 | 714 |
| 21. | - | - | 8.23 | 647 | - | - | 8.41 | 698 |
| | - | - | 21.17 | 629 | - | - | 21.41 | 665 |
| 22. | - | - | 9.36 | 659 | - | - | 10.18 | 685 |
| | - | - | 22.27 | 643 | - | - | 22.36 | 709 |
| 23. | - | - | 10.37 | 672 | - | - | 11.15 | 691 |
| | - | - | 23.23 | 673 | - | - | 23.34 | 729 |
| 24. | - | - | 11.36 | 702 | - | - | - ● | - |
| | - | - | - | - | - | - | 12.03 | 765 |
| 25. | - | - | 0.07 ● | 671 | - | - | 0.37 | 707 |
| | - | - | 12.41 | 698 | - | - | 13.09 | 707 |
| 26. | - | - | 0.23 | 855 | - | - | 1.18 | 728 |
| | - | - | 12.56 | 748 | - | - | 13.39 | 749 |
| 27. | - | - | 1.31 | 720 | - | - | 2.19 | 709 |
| | - | - | 15.07 | 793 | - | - | 14.24 | 721 |
| 28. | - | - | 1.52 | 856 | - | - | 2.46 | 719 |
| | - | - | 14.53 | 696 | - | - | 15.45 | 643 |
| 29. | - | - | 3.17 | 676 | - | - | 3.54 | 783 |
| | - | - | 15.53 | 653 | - | - | 15.21 | 803 |
| 30. | - | - | 4.11 | 746 | - | - | 3.39 | 776 |
| | - | - | 15.52 | 705 | - | - | 16.26 | 735 |
| 31. | | | | | - | - | 4.58 | 687 |
| | | | | | - | - | 17.30 | 633 |
| Mittel | | - | | 664 | | - | | 716 |

| Tag | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 5.28 | 708 | - | - | 6.12 | 581 | - | - | 5.37 | 653 | - | - | 6.49 | 626 | - | - | 7.39 | 595 |
| | - | - | 17.48 | 667 | - | - | 18.28 | 565 | - | - | 17.53 | 650 | - | - | 19.38 | 682 | - | - | 20.17 | 649 |
| 2. | - | - | 6.09 | 713 | - | - | 7.18 | 566 | - | - | 6.17 | 629 | - | - | 8.15 | 646 | - | - | 9.15 | 633 |
| | - | - | 18.44 | 683 | - | - | 19.40 | 584 | - | - | 18.39 | 602 | - | - | 20.55 | 650 | - | - | 21.29 | 654 |
| 3. | - | - | 6.51 | 668 | - | - | 8.38 | 599 | - | - | 7.23 | 561 | - | - | 9.47 | 627 | - | - | 10.25 | 652 |
| | - | - | 18.36 | 701 | - | - | 21.21 | 601 | - | - | 20.07 | 600 | - | - | 22.06 | 636 | - | - | 22.34 | 684 |
| 4. | - | - | 7.35 | 746 | - | - | 9.52 | 612 | - | - | 9.12 | 607 | - | - | 11.00 | 616 | - | - | 11.18 | 672 |
| | - | - | 19.56 | 747 | - | - | 22.20 | 610 | - | - | 21.37 | 660 | - | - | 23.16 | 650 | - | - | 23.32 | 704 |
| 5. | - | - | 8.22 | 754 | - | - | 11.09 | 578 | - | - | 10.38 | 619 | - | - | 11.57 | 642 | - | - | - | - |
| | - | - | 21.46 | 848 | - | - | 23.18 | 637 | - | - | 22.57 | 661 | - | - | - | - | - | - | 12.06 | 694 |
| 6. | - | - | 10.10 | 748 | - | - | - | - | - | - | 11.38 | 637 | - | - | 0.12 ○ | 673 | - | - | 0.18 ○ | 706 |
| | - | - | 23.09 | 661 | - | - | 12.04 | 628 | - | - | 23.52 | 650 | - | - | 12.40 | 684 | - | - | 12.57 | 689 |
| 7. | - | - | 11.37 | 701 | - | - | 0.20 ○ | 635 | - | - | - | - | - | - | 0.31 | 732 | - | - | 1.09 | 705 |
| | - | - | 23.35 | 783 | - | - | 12.54 | 621 | - | - | 12.30 | 621 | - | - | 13.18 | 702 | - | - | 13.37 | 687 |
| 8. | - | - | - | - | - | - | 1.08 | 625 | - | - | 0.49 ○ | 701 | - | - | 1.33 | 713 | - | - | 2.05 | 663 |
| | - | - | 12.00 | 745 | - | - | 13.45 | 605 | - | - | 13.01 | 713 | - | - | 14.05 | 686 | - | - | 14.32 | 676 |
| 9. | - | - | 0.32 ○ | 703 | - | - | 2.03 | 649 | - | - | 1.11 | 707 | - | - | 2.26 | 682 | - | - | 2.55 | 685 |
| | - | - | 13.10 | 692 | - | - | 14.18 | 641 | - | - | 13.57 | 663 | - | - | 14.36 | 709 | - | - | 15.08 | 702 |
| 10. | - | - | 0.59 | 755 | - | - | 2.32 | 661 | - | - | 1.57 | 713 | - | - | 3.03 | 701 | - | - | 3.46 | 672 |
| | - | - | 13.40 | 691 | - | - | 15.01 | 623 | - | - | 14.24 | 703 | - | - | 15.21 | 711 | - | - | 15.59 | 707 |
| 11. | - | - | 1.46 | 720 | - | - | 3.22 | 637 | - | - | 2.42 | 728 | - | - | 3.43 | 710 | - | - | 4.36 | 676 |
| | - | - | 14.17 | 702 | - | - | 15.51 | 639 | - | - | 15.11 | 688 | - | - | 16.06 | 721 | - | - | 16.36 | 721 |
| 12. | - | - | 2.22 | 721 | - | - | 3.55 | 683 | - | - | 3.31 | 710 | - | - | 4.39 | 689 | - | - | 5.25 | 696 |
| | - | - | 15.17 | 819 | - | - | 16.23 | 663 | - | - | 15.56 | 695 | - | - | 16.56 | 698 | - | - | 17.26 | 720 |
| 13. | - | - | 2.58 | 832 | - | - | 4.30 | 685 | - | - | 4.14 | 694 | - | - | 5.33 | 677 | - | - | 6.20 | 630 |
| | - | - | 15.24 | 789 | - | - | 17.05 | 670 | - | - | 16.39 | 668 | - | - | 17.42 | 693 | - | - | 18.33 | 672 |
| 14. | - | - | 3.41 | 737 | - | - | 5.06 | 715 | - | - | 5.01 | 670 | - | - | 6.31 | 661 | - | - | 7.19 | 632 |
| | - | - | 16.38 | 681 | - | - | 17.33 | 692 | - | - | 17.20 | 659 | - | - | 18.50 | 683 | - | - | 19.24 | 708 |
| 15. | - | - | 4.30 | 714 | - | - | 5.13 | 784 | - | - | 5.50 | 651 | - | - | 7.47 | 639 | - | - | 8.09 | 644 |
| | - | - | 17.08 | 672 | - | - | 18.04 | 721 | - | - | 18.03 | 659 | - | - | 20.08 | 680 | - | - | 20.53 | 709 |
| 16. | - | - | 5.20 | 695 | - | - | 6.54 | 665 | - | - | 6.48 | 645 | - | - | 9.16 | 641 | - | - | 9.39 | 702 |
| | - | - | 17.55 | 661 | - | - | 19.36 | 665 | - | - | 19.03 | 657 | - | - | 21.39 | 676 | - | - | 21.40 | 716 |
| 17. | - | - | 6.07 | 689 | - | - | 8.06 | 658 | - | - | 8.10 | 629 | - | - | 10.23 | 627 | - | - | 10.17 | 660 |
| | - | - | 18.45 | 666 | - | - | 20.43 | 659 | - | - | 20.26 | 666 | - | - | 22.08 | 638 | - | - | 22.44 | 669 |
| 18. | - | - | 7.07 | 680 | - | - | 9.42 | 640 | - | - | 9.31 | 633 | - | - | 11.12 | 644 | - | - | 11.23 | 633 |
| | - | - | 20.02 | 689 | - | - | 22.07 | 694 | - | - | 21.42 | 694 | - | - | 23.09 | 673 | - | - | 23.39 | 673 |
| 19. | - | - | 8.10 | 728 | - | - | 10.40 | 745 | - | - | 10.58 | 663 | - | - | - | - | - | - | - | - |
| | - | - | 20.18 | 757 | - | - | 22.57 | 721 | - | - | 23.04 | 670 | - | - | 12.02 | 648 | - | - | 12.00 | 670 |
| 20. | - | - | 9.35 | 749 | - | - | - | - | - | - | 11.55 | 655 | - | - | 0.19 | 676 | - | - | 0.18 | 682 |
| | - | - | 21.58 | 724 | - | - | 12.09 | 647 | - | - | 23.50 | 688 | - | - | 12.42 | 667 | - | - | 12.41 | 673 |
| 21. | - | - | 11.58 | 681 | - | - | 0.25 ● | 681 | - | - | - | - | - | - | 0.54 ● | 684 | - | - | 1.06 ● | 678 |
| | - | - | 23.33 | 820 | - | - | 12.52 | 681 | - | - | 12.33 | 661 | - | - | 13.09 | 678 | - | - | 13.16 | 691 |
| 22. | - | - | 11.18 | 787 | - | - | 0.59 | 691 | - | - | 0.45 ● | 683 | - | - | 1.27 | 690 | - | - | 1.38 | 687 |
| | - | - | - | - | - | - | 13.41 | 658 | - | - | 13.21 | 655 | - | - | 13.42 | 682 | - | - | 13.46 | 697 |
| 23. | - | - | 0.25 ● | 713 | - | - | 1.21 | 729 | - | - | 1.24 | 679 | - | - | 2.02 | 676 | - | - | 2.15 | 679 |
| | - | - | 13.00 | 697 | - | - | 14.00 | 694 | - | - | 13.53 | 656 | - | - | 14.16 | 671 | - | - | 14.20 | 691 |
| 24. | - | - | 1.07 | 735 | - | - | 2.19 | 723 | - | - | 2.00 | 676 | - | - | 2.34 | 666 | - | - | 2.44 | 656 |
| | - | - | 13.46 | 696 | - | - | 14.37 | 720 | - | - | 14.21 | 665 | - | - | 14.52 | 679 | - | - | 14.59 | 675 |
| 25. | - | - | 1.59 | 701 | - | - | 2.45 | 747 | - | - | 2.39 | 679 | - | - | 3.06 | 670 | - | - | 3.27 | 650 |
| | - | - | 14.42 | 627 | - | - | 15.02 | 711 | - | - | 14.49 | 667 | - | - | 15.05 | 666 | - | - | 15.30 | 678 |
| 26. | - | - | 2.44 | 618 | - | - | 3.23 | 711 | - | - | 3.01 | 670 | - | - | 3.35 | 642 | - | - | 4.02 | 638 |
| | - | - | 15.15 | 563 | - | - | 15.46 | 675 | - | - | 15.14 | 664 | - | - | 15.40 | 677 | - | - | 16.06 | 669 |
| 27. | - | - | 3.24 | 674 | - | - | 4.02 | 675 | - | - | 3.37 | 666 | - | - | 4.00 | 638 | - | - | 4.41 | 643 |
| | - | - | 15.28 | 663 | - | - | 16.18 | 668 | - | - | 15.52 | 665 | - | - | 16.07 | 671 | - | - | 16.43 | 676 |
| 28. | - | - | 3.48 | 694 | - | - | 4.26 | 685 | - | - | 4.08 | 656 | - | - | 4.40 | 637 | - | - | 5.21 | 648 |
| | - | - | 16.17 | 647 | - | - | 16.34 | 681 | - | - | 16.23 | 674 | - | - | 16.46 | 636 | - | - | 17.30 | 682 |
| 29. | - | - | 4.33 | 658 | - | - | 4.54 | 674 | - | - | 4.35 | 680 | - | - | 4.56 | 575 | - | - | 6.22 | 670 |
| | - | - | 16.48 | 628 | - | - | 17.13 | 652 | - | - | 16.36 | 705 | - | - | 18.05 | 615 | - | - | 18.28 | 683 |
| 30. | - | - | 5.00 | 622 | | | | | - | - | 4.59 | 693 | - | - | 6.30 | 619 | - | - | 7.21 | 659 |
| | - | - | 17.15 | 583 | | | | | - | - | 17.08 | 685 | - | - | 18.40 | 652 | - | - | 19.30 | 675 |
| 31. | - | - | 5.35 | 584 | | | | | - | - | 5.59 | 686 | | | | | - | - | 8.20 | 645 |
| | - | - | 17.42 | 559 | | | | | - | - | 17.59 | 682 | | | | | - | - | 20.47 | 684 |
| Mittel | | - | | 701 | | - | | 662 | | - | | 665 | | - | | 666 | | - | | 674 |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | | 679 |

* 5. Wert am 09.12.2011

Winterhalbjahr: 1.11. bis 30.4.
Das Tideniedrigwasser wird an diesem Pegel nicht ausgewertet !

NLWKN

$A_{E_0}$ : 45926 $km^2$

PNP : NN - 5.03 m

Lage: 82.3 km unterhalb Gr.Weserbrücke links

W Tide

cm

Pegel : Fedderwardersiel AP Nr. 4995105

Gewässer : Weser

Gebiet : Unterweser

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 9.35 | 696 | - | - | 10.06 | 678 | - | - | - | - | - | - | 1.21 | 682 | - | - | 1.30 | 653 | - | - | 2.07 | 649 | - | - | 2.08 | 698 | 1. |
| | - | - | 21.51 | 711 | - | - | 22.35 | 680 | - | - | 12.06 | 683 | - | - | 13.24 | 710 | - | - | 13.29 | 707 | - | - | 14.21 | 648 | - | - | 14.37 | 680 | |
| 2. | - | - | 10.35 | 689 | - | - | 11.10 | 666 | - | - | 0.46 | ○ 662 | - | - | 2.03 | 674 | - | - | 1.58 | 692 | - | - | 2.20 | 710 | - | - | 2.47 | 674 | 2. |
| | - | - | 22.49 | 696 | - | - | 23.39 | 668 | - | - | 12.53 | 724 | - | - | 14.01 | 711 | - | - | 14.06 | 695 | - | - | 14.46 | 688 | - | - | 15.09 | 663 | |
| 3. | - | - | 11.38 | 681 | - | - | - | - | - | - | 1.30 | 694 | - | - | 2.28 | 686 | - | - | 2.30 | 673 | - | - | 3.10 | 689 | - | - | 3.13 | 685 | 3. |
| | - | - | 23.57 | 714 | - | - | 12.11 | ○ 686 | - | - | 13.37 | 718 | - | - | 14.40 | 713 | - | - | 14.37 | 690 | - | - | 15.23 | 677 | - | - | 15.45 | 646 | |
| 4. | - | - | - | - | - | - | 0.48 | 681 | - | - | 2.17 | 679 | - | - | 3.04 | 677 | - | - | 2.56 | 685 | - | - | 3.22 | 715 | - | - | 3.50 | 701 | 4. |
| | - | - | 12.24 | ○ 713 | - | - | 13.04 | 697 | - | - | 14.22 | 723 | - | - | 15.14 | 715 | - | - | 15.20 | 706 | - | - | 15.44 | 669 | - | - | 16.13 | 653 | |
| 5. | - | - | 0.48 | 729 | - | - | 1.45 | 674 | - | - | 2.59 | 681 | - | - | 3.25 | 717 | - | - | 3.18 | 687 | - | - | 3.49 | 695 | - | - | 4.14 | 680 | 5. |
| | - | - | 13.14 | 715 | - | - | 13.57 | 703 | - | - | 15.01 | 718 | - | - | 15.34 | 724 | - | - | 16.26 | 704 | - | - | 16.31 | 686 | - | - | 17.03 | 652 | |
| 6. | - | - | 1.44 | 679 | - | - | 2.36 | 686 | - | - | 3.46 | 678 | - | - | 4.01 | 677 | - | - | 3.25 | 690 | - | - | 4.35 | 682 | - | - | 5.10 | 698 | 6. |
| | - | - | 14.09 | 685 | - | - | 14.41 | 715 | - | - | 15.38 | 717 | - | - | 16.10 | 666 | - | - | 16.13 | 689 | - | - | 17.38 | 679 | - | - | 17.50 | 627 | |
| 7. | - | - | 2.45 | 688 | - | - | 3.21 | 672 | - | - | 4.10 | 683 | - | - | 4.24 | 675 | - | - | 4.22 | 697 | - | - | 5.24 | 713 | - | - | 5.56 | 621 | 7. |
| | - | - | 14.50 | 712 | - | - | 15.25 | 715 | - | - | 16.06 | 731 | - | - | 16.25 | 691 | - | - | 16.52 | 712 | - | - | 17.54 | 658 | - | - | 18.59 | 599 | |
| 8. | - | - | 3.36 | 675 | - | - | 4.01 | 670 | - | - | 4.39 | 669 | - | - | 4.57 | 666 | - | - | 4.55 | 678 | - | - | 6.13 | 678 | - | - | 6.43 | 647 | 8. |
| | - | - | 15.43 | 712 | - | - | 16.06 | 706 | - | - | 16.52 | 696 | - | - | 17.18 | 653 | - | - | 17.33 | 634 | - | - | 19.07 | 660 | - | - | 19.41 | 619 | |
| 9. | - | - | 4.20 | 662 | - | - | 4.48 | 667 | - | - | 5.15 | 665 | - | - | 5.33 | 643 | - | - | 5.31 | 691 | - | - | 7.29 | 668 | - | - | 8.35 | 668 | 9. |
| | - | - | 16.28 | 708 | - | - | 16.35 | 716 | - | - | 17.30 | 675 | - | - | 18.10 | 630 | - | - | 18.21 | 651 | - | - | 20.30 | 625 | - | - | 20.36 | 713 | |
| 10. | - | - | 5.00 | 668 | - | - | 5.03 | 677 | - | - | 5.47 | 651 | - | - | 6.32 | 655 | - | - | 6.59 | 651 | - | - | 8.52 | 666 | - | - | 8.56 | 700 | 10. |
| | - | - | 17.04 | 706 | - | - | 17.18 | 701 | - | - | 18.03 | 661 | - | - | 19.04 | 646 | - | - | 20.06 | 625 | - | - | 21.38 | 678 | - | - | 21.55 | 657 | |
| 11. | - | - | 5.49 | 655 | - | - | 5.48 | 654 | - | - | 6.29 | 637 | - | - | 8.01 | 658 | - | - | 8.28 | 644 | - | - | 9.50 | 709 | - | - | 10.37 | 664 | 11. |
| | - | - | 18.05 | 695 | - | - | 18.12 | 694 | - | - | 18.57 | 631 | - | - | 20.52 | 663 | - | - | 21.25 | 609 | - | - | 22.38 | 684 | - | - | 23.08 | 675 | |
| 12. | - | - | 6.36 | 655 | - | - | 6.30 | 656 | - | - | 7.37 | 615 | - | - | 9.29 | 668 | - | - | 9.40 | 599 | - | - | 11.03 | 678 | - | - | 11.33 | 682 | 12. |
| | - | - | 18.49 | 702 | - | - | 18.47 | 698 | - | - | 20.21 | 614 | - | - | 22.05 | 660 | - | - | 22.56 | 657 | - | - | 23.43 | 662 | - | - | - | - | |
| 13. | - | - | 7.34 | 656 | - | - | 7.17 | 643 | - | - | 8.53 | 617 | - | - | 10.36 | 673 | - | - | 10.51 | 651 | - | - | - | ● - | - | - | 0.02 | ● 682 | 13. |
| | - | - | 19.52 | 680 | - | - | 19.54 | 652 | - | - | 21.42 | 617 | - | - | 23.25 | 656 | - | - | 23.32 | 633 | - | - | 12.08 | 660 | - | - | 12.28 | 686 | |
| 14. | - | - | 8.31 | 643 | - | - | 8.28 | 654 | - | - | 10.18 | 629 | - | - | 11.47 | 674 | - | - | 11.49 | 668 | - | - | 0.33 | 683 | - | - | 0.54 | 682 | 14. |
| | - | - | 20.57 | 657 | - | - | 20.57 | 678 | - | - | 22.45 | 640 | - | - | 23.44 | 747 | - | - | - | - | - | - | 12.52 | 690 | - | - | 13.24 | 640 | |
| 15. | - | - | 9.32 | 615 | - | - | 9.40 | 673 | - | - | 11.13 | 654 | - | - | 11.57 | 722 | - | - | 0.20 | ● 657 | - | - | 1.15 | 694 | - | - | 2.29 | 588 | 15. |
| | - | - | 21.57 | 662 | - | - | 22.16 | 668 | - | - | 23.48 | 631 | - | - | - | - | - | - | 12.41 | 720 | - | - | 13.39 | 704 | - | - | 14.11 | 650 | |
| 16. | - | - | 10.34 | 654 | - | - | 10.48 | 680 | - | - | - | - | - | - | 0.45 | ● 683 | - | - | 1.00 | 672 | - | - | 2.00 | 696 | - | - | 2.16 | 710 | 16. |
| | - | - | 22.40 | 675 | - | - | 23.11 | 665 | - | - | 12.02 | 681 | - | - | 12.58 | 702 | - | - | 13.25 | 671 | - | - | 14.32 | 688 | - | - | 14.58 | 704 | |
| 17. | - | - | 11.32 | 670 | - | - | 11.40 | 693 | - | - | 0.36 | ● 668 | - | - | 1.27 | 691 | - | - | 1.12 | 742 | - | - | 2.45 | 696 | - | - | 3.09 | 725 | 17. |
| | - | - | 23.37 | 656 | - | - | - | - | - | - | 12.45 | 702 | - | - | 13.33 | 724 | - | - | 13.49 | 697 | - | - | 15.32 | 675 | - | - | 16.00 | 678 | |
| 18. | - | - | - | - | - | - | 0.04 | 684 | - | - | 1.19 | 670 | - | - | 2.03 | 685 | - | - | 2.21 | 691 | - | - | 3.30 | 709 | - | - | 4.03 | 719 | 18. |
| | - | - | 12.14 | 676 | - | - | 12.25 | 678 | - | - | 13.28 | 695 | - | - | 14.24 | 717 | - | - | 14.41 | 707 | - | - | 16.06 | 697 | - | - | 16.43 | 667 | |
| 19. | - | - | 0.36 | ● 682 | - | - | 0.55 | ● 673 | - | - | 1.53 | 696 | - | - | 2.37 | 728 | - | - | 3.00 | 697 | - | - | 4.12 | 705 | - | - | 4.56 | 677 | 19. |
| | - | - | 12.46 | 680 | - | - | 13.00 | 731 | - | - | 14.03 | 713 | - | - | 14.51 | 744 | - | - | 15.30 | 693 | - | - | 16.58 | 618 | - | - | 17.38 | 618 | |
| 20. | - | - | 1.16 | 666 | - | - | 1.24 | 723 | - | - | 2.48 | 694 | - | - | 3.27 | 702 | - | - | 3.46 | 690 | - | - | 5.14 | 650 | - | - | 5.36 | 627 | 20. |
| | - | - | 13.27 | 691 | - | - | 13.26 | 720 | - | - | 14.45 | 723 | - | - | 15.39 | 709 | - | - | 16.09 | 689 | - | - | 17.51 | 654 | - | - | 18.02 | 538 | |
| 21. | - | - | 1.54 | 671 | - | - | 2.15 | 695 | - | - | 3.09 | 695 | - | - | 4.12 | 673 | - | - | 4.32 | 688 | - | - | 5.45 | 663 | - | - | 6.37 | 555 | 21. |
| | - | - | 14.03 | 682 | - | - | 14.20 | 714 | - | - | 15.19 | 714 | - | - | 16.26 | 681 | - | - | 17.10 | 657 | - | - | 19.00 | 613 | - | - | 19.05 | 543 | |
| 22. | - | - | 2.36 | 649 | - | - | 2.57 | 681 | - | - | 4.03 | 695 | - | - | 4.43 | 682 | - | - | 5.30 | 660 | - | - | 6.55 | 728 | - | - | 7.32 | 591 | 22. |
| | - | - | 14.34 | 684 | - | - | 14.56 | 702 | - | - | 15.54 | 736 | - | - | 17.15 | 688 | - | - | 18.01 | 637 | - | - | 19.34 | 610 | - | - | 19.49 | 548 | |
| 23. | - | - | 2.57 | 648 | - | - | 3.31 | 657 | - | - | 4.21 | 697 | - | - | 5.36 | 672 | - | - | 6.23 | 664 | - | - | 8.01 | 609 | - | - | 8.05 | 541 | 23. |
| | - | - | 15.11 | 694 | - | - | 15.30 | 711 | - | - | 16.34 | 719 | - | - | 18.11 | 640 | - | - | 19.24 | 617 | - | - | 20.52 | 652 | - | - | 21.05 | 624 | |
| 24. | - | - | 3.47 | 661 | - | - | 4.08 | 682 | - | - | 5.12 | 675 | - | - | 6.22 | 585 | - | - | 7.35 | 662 | - | - | 9.15 | 684 | - | - | 9.24 | 676 | 24. |
| | - | - | 16.05 | 693 | - | - | 16.12 | 705 | - | - | 17.23 | 686 | - | - | 19.20 | 557 | - | - | 20.38 | 628 | - | - | 21.57 | 639 | - | - | 22.32 | 658 | |
| 25. | - | - | 4.22 | 695 | - | - | 4.51 | 680 | - | - | 6.06 | 671 | - | - | 6.56 | 619 | - | - | 9.09 | 683 | - | - | 10.57 | 596 | - | - | 11.01 | 664 | 25. |
| | - | - | 16.13 | 737 | - | - | 16.58 | 706 | - | - | 18.16 | 686 | - | - | 20.43 | 616 | - | - | 22.12 | 709 | - | - | 22.10 | 712 | - | - | 23.17 | 685 | |
| 26. | - | - | 5.04 | 692 | - | - | 5.32 | 674 | - | - | 6.47 | 657 | - | - | 9.11 | 639 | - | - | 10.12 | 682 | - | - | 10.58 | 684 | - | - | 11.28 | 694 | 26. |
| | - | - | 17.07 | 702 | - | - | 17.42 | 681 | - | - | 19.24 | 696 | - | - | 22.07 | 631 | - | - | 22.51 | 646 | - | - | 23.38 | 682 | - | - | 23.32 | 685 | |
| 27. | - | - | 5.47 | 651 | - | - | 6.21 | 642 | - | - | 7.57 | 664 | - | - | 10.42 | 674 | - | - | 11.12 | 685 | - | - | - | - | - | - | 11.55 | 698 | 27. |
| | - | - | 18.06 | 679 | - | - | 18.41 | 682 | - | - | 20.58 | 625 | - | - | 23.23 | 680 | - | - | 23.23 | 667 | - | - | 12.07 | 673 | - | - | - | - | |
| 28. | - | - | 6.42 | 651 | - | - | 7.22 | 680 | - | - | 9.40 | 640 | - | - | 11.33 | 687 | - | - | 11.52 | 687 | - | - | 0.24 | ○ 672 | - | - | 0.34 | ○ 708 | 28. |
| | - | - | 18.52 | 662 | - | - | 19.40 | 672 | - | - | 22.20 | 692 | - | - | - | - | - | - | - | - | - | - | 12.53 | 675 | - | - | 12.53 | 647 | |
| 29. | - | - | 7.52 | 665 | - | - | 8.32 | 654 | - | - | 10.49 | 689 | - | - | 0.18 | 663 | - | - | 0.21 | ○ 651 | - | - | 1.04 | 690 | - | - | 1.22 | 629 | 29. |
| | - | - | 20.13 | 677 | - | - | 21.09 | 671 | - | - | 23.48 | 680 | - | - | 12.17 | 728 | - | - | 12.36 | 678 | - | - | 13.29 | 684 | - | - | 13.44 | 655 | |
| 30. | - | - | 8.59 | 658 | - | - | 9.50 | 661 | - | - | - | - | - | - | 0.29 | ○ 709 | - | - | 0.52 | 697 | - | - | 1.34 | 700 | - | - | 1.41 | 732 | 30. |
| | - | - | 21.19 | 680 | - | - | 22.32 | 672 | - | - | 12.00 | 682 | - | - | 12.54 | 702 | - | - | 13.04 | 707 | - | - | 14.00 | 682 | - | - | 13.45 | 735 | |
| 31. | | | | | - | - | 10.59 | 683 | - | - | 0.22 | ○ 692 | | | | | - | - | 1.25 | 691 | | | | | - | - | 2.02 | 731 | 31. |
| | | | | | - | - | 23.38 | 673 | - | - | 12.42 | 726 | | | | | - | - | 13.41 | 671 | | | | | - | - | 14.44 | 677 | |
| Mittel | | - | | 680 | | - | | 683 | | - | | 679 | | - | | 678 | | - | | 674 | | - | | 675 | | - | | 659 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | | 678 |

Sommerhalbjahr: 1.5. bis 31.10.

Das Tideniedrigwasser wird an diesem Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 45926 $km^2$

PNP : NN - 5.03 m

Lage: 82.3 km unterhalb Gr.Weserbrücke links

W Tide

cm

Pegel : Fedderwardersiel AP — Nr. 4995105

Gewässer : Weser

Gebiet : Unterweser

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | | 12. | | 1.+ | | 31. | | 1. | | 3. | | 29. | | 1. | | 15. | | 27. | | 12. | | 24. | | 12. | | 25. | | 20. |
| N | | 582 | | 633 | | 559 | | 565 | | 561 | | 575 | | 595 | | 615 | | 642 | | 614 | | 557 | | 599 | | 596 | | 538 |
| M | | 664 | | 716 | | 701 | | 662 | | 665 | | 666 | | 674 | | 680 | | 683 | | 679 | | 678 | | 674 | | 675 | | 659 |
| H | | 856 | | 840 | | 848 | | 784 | | 728 | | 732 | | 721 | | 737 | | 731 | | 736 | | 747 | | 742 | | 728 | | 735 |
| Tag | | 28. | | 9. | | 5. | | 15. | | 11. | | 7. | | 11. | | 25. | | 19. | | 22. | | 14. | | 17. | | 22. | | 30. |
| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
| Jahr | | 2002 | | 2010 | | 2004 | | 2011 | | 2012 | | 2004 | | 2008+ | | 2005 | | 2004 | | 2005 | | 2012 | | 2011 | | 2005 | | 2010 |
| N | | 505 | | 516 | | 518 | | 523 | | 561 | | 565 | | 585 | | 612 | | 592 | | 601 | | 557 | | 531 | | 549 | | 516 |
| MN | | 580 | | 578 | | 577 | | 569 | | 581 | | 593 | | 600 | | 623 | | 628 | | 620 | | 599 | | 580 | | 589 | | 580 |
| M | | 680 | | 675 | | 679 | | 666 | | 671 | | 668 | | 673 | | 680 | | 682 | | 682 | | 678 | | 674 | | 681 | | 678 |
| MH | | 824 | | 790 | | 791 | | 792 | | 785 | | 740 | | 733 | | 747 | | 753 | | 755 | | 756 | | 776 | | 821 | | 794 |
| H | | 965 | | 857 | | 886 | | 866 | | 893 | | 801 | | 754 | | 797 | | 792 | | 774 | | 791 | | 845 | | 965 | | 857 |
| Jahr | | 2007 | | 2005 | | 2007 | | 2004 | | 2007 | | 2003 | | 2011 | | 2007 | | 2005 | | 2008 | | 2004 | | 2009 | | 2007 | | 2005 |
| HThw ab 1951 | | 965 | | 953 | | 988 | | 1025 | | 990* | | 855 | | 769 | | 798 | | 792 | | 815 | | 850 | | 871 | | 965 | | 953 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | | | | | | |
| NThw | 557 | 24.09.2012 | 559 | 557 | 538 | 20.12.2012 |
| M | 679 | | 679 | 678 | 675 | |
| HTnw | | | | | | |
| HThw | 856 | 28.11.2011 | 856 | 747 | 848 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | | | | | | |
| NThw | 505 | 03.11.2002 | 505 | 531 | 516 | 01.12.2010 |
| MN | 534 | | 534 | 572 | 535 | |
| M | 676 | | 673 | 678 | 676 | |
| MH | 862 | | 857 | 794 | 874 | |
| HTnw | | | | | | |
| HThw | 965 | 09.11.2007 | 965 | 845 | 965 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | | | 372 | 15.03.1964 | | | 1025 | 16.02.1962 |
| 2 | | | 380 | 15.03.1964 | | | 990 | * 13.03.1906 |
| 3 | | | 402 | 07.12.1959 | | | 988 | 03.01.1976 |
| 4 | | | 441 | 08.08.1952 | | | 973 | 21.01.1976 |
| 5 | | | 446 | 14.03.1969 | | | 965 | 09.11.2007 |
| 6 | | | 448 | 28.02.1981 | | | 960 | 01.11.2006 |
| 7 | | | 450 | 17.01.1965 | | | 959 | 28.01.1994 |
| 8 | | | 459 | 07.03.1952 | | | 957 | 10.01.1995 |
| 9 | | | 460 | 17.03.1969 | | | 953 | 06.12.1973 |
| 10 | | | 460 | 30.11.1988 | | | 947 | 19.11.1973 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | 705.7 |
| 660 | | | | | | | | | | | | | | | | | | | 705.5 |
| 640 | | | | | | | | | | | | | | | | | | | 705.5 |
| 620 | | | | | | | | | | | | | | | | | | | 705.5 |
| 600 | | | | | | | | | | | | | | | | | | | 705.5 |
| 580 | | | | | | | | | | | | | | | | | | | 705.3 |
| 560 | | | | | | | | | | | | | | | | | | | 705.1 |
| 540 | | | | | | | | | | | | | | | | | | | 704.0 |
| 520 | | | | | | | | | | | | | | | | | | | 703.4 |
| 500 | | | | | | | | | | | | | | | | | | | 701.0 |
| 480 | | | | | | | | | | | | | | | | | | | 697.1 |
| 460 | | | | | | | | | | | | | | | | | | | 689.0 |
| 440 | | | | | | | | | | | | | | | | | | | 673.6 |
| 420 | | | | | | | | | | | | | | | | | | | 633.1 |
| 400 | | | | | | | | | | | | | | | | | | | 538.8 |
| 380 | | | | | | | | | | | | | | | | | | | 374.4 |
| 360 | | | | | | | | | | | | | | | | | | | 216.1 |
| 340 | | | | | | | | | | | | | | | | | | | 107.2 |
| 320 | | | | | | | | | | | | | | | | | | | 45.5 |
| 300 | | | | | | | | | | | | | | | | | | | 18.8 |
| 280 | | | | | | | | | | | | | | | | | | | 7.1 |
| 260 | | | | | | | | | | | | | | | | | | | 3.1 |
| 240 | | | | | | | | | | | | | | | | | | | 1.4 |
| 220 | | | | | | | | | | | | | | | | | | | 0.2 |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | 705.7 |
| 960 | | | | | | | | | | | | | | | | | | | 705.5 |
| 940 | | | | | | | | | | | | | | | | | | | 705.5 |
| 920 | | | | | | | | | | | | | | | | | | | 705.5 |
| 900 | | | | | | | | | | | | | | | | | | | 705.5 |
| 880 | | | | | | | | | | | | | | | | | | | 705.3 |
| 860 | 58 | 60 | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.1 |
| 840 | 56 | 59 | 59 | | | | | | | | | | | | 348 | | 703 | 706 | 704.0 |
| 820 | 56 | 59 | 57 | | | | | | | | | | | | 346 | | 701 | 704 | 703.4 |
| 800 | 56 | 56 | 56 | 56 | | | | | | | | | | | 342 | | 697 | 703 | 701.0 |
| 780 | 55 | 54 | 53 | 55 | | | | | | | | | | | 335 | | 690 | 699 | 697.1 |
| 760 | 55 | 48 | 53 | 55 | | | | | | | 58 | 60 | | | 329 | 355 | 684 | 699 | 689.0 |
| 740 | 53 | 45 | 45 | 53 | 60 | 58 | 60 | 58 | 60 | 59 | 56 | 59 | 58 | 60 | 314 | 352 | 666 | 686 | 673.6 |
| 720 | 52 | 36 | 39 | 48 | 59 | 56 | 58 | 56 | 57 | 53 | 51 | 58 | 57 | 56 | 290 | 333 | 623 | 648 | 633.1 |
| 700 | 49 | 23 | 30 | 45 | 52 | 50 | 49 | 46 | 46 | 46 | 40 | 51 | 48 | 49 | 249 | 278 | 527 | 552 | 538.8 |
| 680 | 47 | 10 | 18 | 35 | 41 | 38 | 35 | 28 | 28 | 26 | 29 | 29 | 29 | 36 | 189 | 175 | 364 | 372 | 374.4 |
| 660 | 35 | 6 | 10 | 26 | 22 | 22 | 16 | 13 | 8 | 14 | 14 | 18 | 13 | 25 | 121 | 83 | 204 | 201 | 216.1 |
| 640 | 19 | 2 | 8 | 18 | 10 | 13 | 6 | 1 | | 9 | 7 | 8 | 7 | 15 | 70 | 31 | 101 | 102 | 107.2 |
| 620 | 5 | | 5 | 10 | 5 | 4 | 1 | 1 | | 4 | 4 | 3 | 5 | 10 | 29 | 13 | 42 | 52 | 45.5 |
| 600 | 1 | | 4 | 6 | 1 | 1 | 1 | | | | 2 | 1 | 1 | 8 | 13 | 4 | 17 | 25 | 18.8 |
| 580 | | | 2 | 3 | 1 | 1 | | | | | 1 | | | 5 | 7 | 1 | 8 | 13 | 7.1 |
| 560 | | | 1 | | | | | | | | 1 | | | 5 | 1 | 1 | 2 | 7 | 3.1 |
| 540 | | | | | | | | | | | | | | 1 | | | | 1 | 1.4 |
| 520 | | | | | | | | | | | | | | | | | | | 0.2 |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

* Vor der Zeitangabe

Das Tideniedrigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 45825 $km^2$

PNP : NN - 5.00 m

Lage: 0.4 km rechts

W Tide

cm

Pegel : Wremertief AP

Gewässer : Weser

Gebiet : Unterweser

Nr. 4995110

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | | 12. | | 31. | | 31. | | 1. | | 3. | | 29. | | 1. | | 15. | | 13.+ | | 12.+ | | 24. | | 12. | | 25. | | 20. |
| N | | 574 | | 625 | | 560 | | 564 | | 560 | | 566 | | 592 | | 613 | | 641 | | 612 | | 565 | | 598 | | 598 | | 534 |
| M | | 660 | | 711 | | 702 | | 664 | | 666 | | 666 | | 672 | | 679 | | 680 | | 676 | | 679 | | 675 | | 676 | | 660 |
| H | | 854 | | 833 | | 846 | | 779 | | 728 | | 728 | | 720 | | 739 | | 737 | | 734 | | 747 | | 742 | | 731 | | 740 |
| Tag | | 26. | | 9. | | 5. | | 15. | | 11. | | 7. | | 11. | | 25. | | 19. | | 22. | | 14. | | 17. | | 22. | | 30. |

| | 2002/2011 | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | | 2002 | | 2010 | | 2008 | | 2007+ | | 2012 | | 2004 | | 2008 | | 2006+ | | 2004 | | 2005 | | 2012 | | 2011 | | 2005 | | 2010 |
| N | | 493 | | 509 | | 515 | | 524 | | 560 | | 565 | | 577 | | 613 | | 593 | | 596 | | 565 | | 522 | | 548 | | 509 |
| MN | | 575 | | 576 | | 576 | | 565 | | 580 | | 591 | | 599 | | 622 | | 628 | | 618 | | 597 | | 577 | | 585 | | 576 |
| M | | 678 | | 674 | | 680 | | 666 | | 670 | | 667 | | 671 | | 678 | | 681 | | 681 | | 678 | | 673 | | 680 | | 677 |
| MH | | 826 | | 789 | | 795 | | 793 | | 791 | | 740 | | 735 | | 750 | | 754 | | 756 | | 757 | | 778 | | 825 | | 793 |
| H | | 966 | | 847 | | 889 | | 863 | | 899 | | 802 | | 760 | | 811 | | 797 | | 779 | | 801 | | 851 | | 966 | | 847 |
| Jahr | | 2007 | | 2003 | | 2007 | | 2004 | | 2007 | | 2003 | | 2003 | | 2007 | | 2005 | | 2008 | | 2004 | | 2009 | | 2007 | | 2003 |
| HThw ab 1898 | | 966 | | 980 | | 1016 | | 1045 | | 998 | | 864 | | 760 | | 811 | | 798 | | 826 | | 863 | | 871 | | 966 | | 980 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | | | | | | |
| NThw | 560 | 31.01.2012 | 560 | 565 | 534 | 20.12.2012 |
| M | 677 | | 678 | 677 | 674 | |
| HTnw | | | | | | |
| HThw | 854 | 26.11.2011 | 854 | 747 | 846 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | | | | | | |
| NThw | 493 | 03.11.2002 | 493 | 522 | 509 | 01.12.2010 |
| MN | 530 | | 530 | 570 | 531 | |
| M | 675 | | 672 | 677 | 675 | |
| MH | 863 | | 857 | 798 | 873 | |
| HTnw | | | | | | |
| HThw | 966 | 09.11.2007 | 966 | 851 | 966 | 09.11.2007 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | | | 441 | 21.11.1927 | | | 1045 | 16.02.1962 |
| 2 | | | 442 | 12.01.1913 | | | 1016 | 03.01.1976 |
| 3 | | | 446 | 08.03.1952 | | | 998 | 13.03.1906 |
| 4 | | | 450 | 15.03.1964 | | | 982 | 21.01.1976 |
| 5 | | | 453 | 18.01.1912 | | | 980 | 03.12.1999 |
| 6 | | | 453 | 14.03.1969 | | | 975 | 02.12.1917 |
| 7 | | | 457 | * 01.01.1897 | | | 968 | 28.01.1994 |
| 8 | | | 460 | 17.11.1965 | | | 966 | 09.11.2007 |
| 9 | | | 460 | 02.03.1987 | | | 964 | 10.01.1995 |
| 10 | | | 462 | 17.03.1969 | | | 955 | 16.02.1916 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez | Abflussjahr (*) 2012 Wi | Abflussjahr (*) 2012 So | Abflussjahr (*) 2012 Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | | | | | | | | | | | | | | | | | |
| 620 | | | | | | | | | | | | | | | | | | | |
| 600 | | | | | | | | | | | | | | | | | | | |
| 580 | | | | | | | | | | | | | | | | | | | |
| 560 | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |
| 300 | | | | | | | | | | | | | | | | | | | |
| 280 | | | | | | | | | | | | | | | | | | | |
| 260 | | | | | | | | | | | | | | | | | | | |
| 240 | | | | | | | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez | Abflussjahr (*) 2012 Wi | Abflussjahr (*) 2012 So | Abflussjahr (*) 2012 Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | 705.8 |
| 960 | | | | | | | | | | | | | | | | | | | 705.7 |
| 940 | | | | | | | | | | | | | | | | | | | 705.6 |
| 920 | | | | | | | | | | | | | | | | | | | 705.6 |
| 900 | | | | | | | | | | | | | | | | | | | 705.6 |
| 880 | | | | | | | | | | | | | | | | | | | 705.4 |
| 860 | 58 | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.1 |
| 840 | 56 | 60 | 59 | | | | | | | | | | | | 349 | | 704 | 706 | 704.3 |
| 820 | 56 | 59 | 56 | | | | | | | | | | | | 345 | | 700 | 703 | 703.0 |
| 800 | 55 | 56 | 56 | | | | | | | | | | | | 341 | | 696 | 703 | 700.5 |
| 780 | 55 | 54 | 53 | 56 | | | | | | | | | | | 336 | | 691 | 700 | 696.7 |
| 760 | 55 | 51 | 52 | 55 | | | | | | | 58 | 60 | | 60 | 331 | 355 | 686 | 698 | 689.0 |
| 740 | 53 | 45 | 45 | 53 | 60 | 58 | 60 | 58 | 60 | 59 | 56 | 59 | 58 | 59 | 314 | 352 | 666 | 685 | 672.1 |
| 720 | 52 | 40 | 40 | 50 | 59 | 57 | 59 | 56 | 58 | 56 | 50 | 58 | 56 | 56 | 298 | 337 | 635 | 655 | 635.4 |
| 700 | 51 | 25 | 32 | 44 | 52 | 51 | 51 | 48 | 49 | 47 | 40 | 50 | 49 | 48 | 255 | 285 | 540 | 561 | 547.9 |
| 680 | 47 | 14 | 18 | 35 | 42 | 39 | 36 | 33 | 37 | 29 | 29 | 28 | 27 | 40 | 195 | 192 | 387 | 393 | 389.3 |
| 660 | 36 | 7 | 10 | 23 | 23 | 22 | 17 | 13 | 8 | 14 | 14 | 18 | 12 | 25 | 121 | 84 | 205 | 199 | 224.9 |
| 640 | 22 | 2 | 8 | 14 | 10 | 12 | 6 | 1 | | 10 | 8 | 8 | 7 | 16 | 68 | 33 | 101 | 100 | 111.4 |
| 620 | 6 | | 6 | 10 | 5 | 3 | 1 | 1 | | 4 | 3 | 2 | 4 | 9 | 30 | 11 | 41 | 48 | 48.1 |
| 600 | 2 | | 4 | 5 | 1 | 1 | 1 | | | | 2 | 1 | 1 | 8 | 13 | 4 | 17 | 24 | 20.1 |
| 580 | 1 | | 2 | 2 | 1 | 1 | | | | | 2 | | | 5 | 7 | 2 | 9 | 13 | 8.1 |
| 560 | | | | | | | | | | | | | | 5 | | | | 5 | 3.2 |
| 540 | | | | | | | | | | | | | | 1 | | | | 1 | 1.5 |
| 520 | | | | | | | | | | | | | | | | | | | 0.2 |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

* Vor der Zeitangabe

Das Tideniedrigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 45825 $km^2$

PNP : NN - 5.00 m

Lage: 0.4 km rechts

W Tide

cm

Pegel : Wremertief AP

Gewässer : Weser

Gebiet : Unterweser

Nr. 4995110

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 4.18 | 669 | - | - | 4.19 | 669 | - | - | 5.34 | 706 | - | - | 6.22 | 583 | - | - | 5.39 | 654 | - | - | 6.55 | 627 | - | - | 7.55 | 592 | 1. |
| | - | - | 17.02 | 660 | - | - | 17.12 | 630 | - | - | 17.56 | 665 | - | - | 18.37 | 564 | - | - | 17.52 | 651 | - | - | 19.47 | 693 | - | - | 20.30 | 645 | |
| 2. | - | - | 4.59 | 697 | - | - | 5.18 | 756 | - | - | 6.21 | 710 | - | - | 7.31 | 571 | - | - | 6.25 | 630 | - | - | 8.31 | 646 | - | - | 9.23 | 631 | 2. |
| | - | - | 17.38 | 646 | - | - | 18.01 | 660 | - | - | 18.57 | 684 | - | - | 19.43 | 587 | - | - | 18.41 | 601 | - | - | 21.06 | 649 | - | - | 21.40 | 650 | |
| 3. | - | - | 6.00 | 639 | - | - | 6.22 | 667 | - | - | 6.45 | 672 | - | - | 8.34 | 602 | - | - | 7.31 | 560 | - | - | 10.03 | 620 | - | - | 10.34 | 649 | 3. |
| | - | - | 18.49 | 624 | - | - | 19.22 | 715 | - | - | 18.56 | 705 | - | - | 21.24 | 609 | - | - | 20.13 | 603 | - | - | 22.20 | 630 | - | - | 22.40 | 682 | |
| 4. | - | - | 6.47 | 650 | - | - | 6.31 | 803 | - | - | 8.01 | 747 | - | - | 9.53 | 618 | - | - | 9.10 | 610 | - | - | 11.03 | 611 | - | - | 11.26 | 672 | 4. |
| | - | - | 19.39 | 636 | - | - | 19.40 | 692 | - | - | 20.07 | 756 | - | - | 22.24 | 615 | - | - | 21.38 | 659 | - | - | 23.28 | 648 | - | - | 23.40 | 702 | |
| 5. | - | - | 8.04 | 661 | - | - | 9.00 | 723 | - | - | 8.36 | 760 | - | - | 11.07 | 585 | - | - | 10.47 | 617 | - | - | - | - | - | - | - | - | 5. |
| | - | - | 21.19 | 625 | - | - | 20.42 | 686 | - | - | 22.04 | 846 | - | - | 23.25 | 643 | - | - | 22.58 | 659 | - | - | 12.10 | 642 | - | - | 12.11 | 691 | |
| 6. | - | - | 9.27 | 665 | - | - | 9.36 | 684 | - | - | 10.11 | 741 | - | - | - | - | - | - | 11.43 | 637 | - | - | 0.18 ○ | 673 | - | - | 0.23 ○ | 699 | 6. |
| | - | - | 22.15 | 620 | - | - | 22.05 | 727 | - | - | 23.20 | 664 | - | - | 12.19 | 633 | - | - | 23.58 | 652 | - | - | 12.53 | 685 | - | - | 12.59 | 685 | |
| 7. | - | - | 10.37 | 641 | - | - | 11.00 | 684 | - | - | 11.49 | 700 | - | - | 0.27 ○ | 641 | - | - | - | - | - | - | 0.52 | 728 | - | - | 1.18 | 700 | 7. |
| | - | - | 23.10 | 608 | - | - | 22.25 | 780 | - | - | 23.46 | 781 | - | - | 12.56 | 621 | - | - | 12.35 | 628 | - | - | 13.28 | 696 | - | - | 13.49 | 685 | |
| 8. | - | - | 11.24 | 639 | - | - | 10.48 | 705 | - | - | - | - | - | - | 1.08 | 624 | - | - | 0.46 ○ | 703 | - | - | 1.40 | 710 | - | - | 2.16 | 660 | 8. |
| | - | - | 23.50 | 622 | - | - | - | - | - | - | 12.05 | 743 | - | - | 13.54 | 609 | - | - | 13.00 | 712 | - | - | 14.14 | 687 | - | - | 14.40 | 672 | |
| 9. | - | - | - | - | - | - | 0.00 | 687 | - | - | 0.40 ○ | 698 | - | - | 2.07 | 651 | - | - | 1.14 | 704 | - | - | 2.29 | 686 | - | - | 3.04 | 683 | 9. |
| | - | - | 12.00 | 642 | - | - | 11.44 | 816 | - | - | 13.19 | 689 | - | - | 14.21 | 641 | - | - | 14.02 | 663 | - | - | 14.48 | 710 | - | - | 15.18 | 698 | |
| 10. | - | - | 0.24 ○ | 641 | - | - | 23.31 ○ * | 833 | - | - | 1.04 | 754 | - | - | 2.28 | 660 | - | - | 1.58 | 712 | - | - | 3.12 | 702 | - | - | 3.52 | 672 | 10. |
| | - | - | 12.48 | 642 | - | - | 12.21 | 770 | - | - | 13.40 | 693 | - | - | 15.10 | 625 | - | - | 14.27 | 702 | - | - | 15.23 | 709 | - | - | 16.06 | 703 | |
| 11. | - | - | 1.06 | 623 | - | - | 0.37 | 717 | - | - | 1.53 | 719 | - | - | 3.24 | 640 | - | - | 2.41 | 728 | - | - | 3.53 | 710 | - | - | 4.36 | 678 | 11. |
| | - | - | 13.24 | 597 | - | - | 13.06 | 682 | - | - | 14.19 | 700 | - | - | 15.49 | 644 | - | - | 15.22 | 687 | - | - | 16.14 | 717 | - | - | 16.37 | 720 | |
| 12. | - | - | 1.44 | 574 | - | - | 1.35 | 692 | - | - | 2.33 | 723 | - | - | 3.56 | 693 | - | - | 3.33 | 709 | - | - | 4.46 | 688 | - | - | 5.34 | 693 | 12. |
| | - | - | 14.14 | 607 | - | - | 14.09 | 714 | - | - | 15.23 | 821 | - | - | 16.23 | 666 | - | - | 16.02 | 694 | - | - | 17.04 | 697 | - | - | 17.32 | 717 | |
| 13. | - | - | 2.11 | 664 | - | - | 1.56 | 710 | - | - | 3.11 | 834 | - | - | 4.30 | 683 | - | - | 4.19 | 693 | - | - | 5.39 | 679 | - | - | 6.26 | 630 | 13. |
| | - | - | 14.21 | 671 | - | - | 14.49 | 649 | - | - | 15.23 | 786 | - | - | 17.07 | 668 | - | - | 16.48 | 668 | - | - | 17.50 | 693 | - | - | 18.43 | 669 | |
| 14. | - | - | 2.36 | 649 | - | - | 2.24 | 749 | - | - | 3.48 | 733 | - | - | 5.13 | 716 | - | - | 5.04 | 670 | - | - | 6.33 | 662 | - | - | 7.27 | 638 | 14. |
| | - | - | 15.13 | 626 | - | - | 15.15 | 685 | - | - | 16.34 | 680 | - | - | 17.33 | 691 | - | - | 17.22 | 659 | - | - | 19.02 | 683 | - | - | 19.36 | 703 | |
| 15. | - | - | 3.18 | 659 | - | - | 3.00 | 760 | - | - | 4.48 | 713 | - | - | 5.17 | 779 | - | - | 5.54 | 653 | - | - | 7.53 | 638 | - | - | 8.28 | 644 | 15. |
| | - | - | 15.38 | 621 | - | - | 16.15 | 678 | - | - | 17.18 | 673 | - | - | 18.08 | 718 | - | - | 18.07 | 660 | - | - | 20.20 | 674 | - | - | 21.02 | 706 | |
| 16. | - | - | 3.55 | 628 | - | - | 3.43 | 703 | - | - | 5.25 | 696 | - | - | 6.58 | 665 | - | - | 6.47 | 647 | - | - | 9.23 | 642 | - | - | 9.44 | 706 | 16. |
| | - | - | 16.26 | 613 | - | - | 17.06 | 679 | - | - | 17.59 | 663 | - | - | 19.40 | 667 | - | - | 19.08 | 659 | - | - | 21.43 | 677 | - | - | 21.55 | 713 | |
| 17. | - | - | 4.27 | 653 | - | - | 4.57 | 757 | - | - | 6.16 | 690 | - | - | 8.13 | 661 | - | - | 8.20 | 632 | - | - | 10.27 | 633 | - | - | 10.21 | 659 | 17. |
| | - | - | 16.54 | 628 | - | - | 17.10 | 715 | - | - | 18.49 | 669 | - | - | 20.42 | 662 | - | - | 20.31 | 667 | - | - | 22.21 | 639 | - | - | 22.50 | 665 | |
| 18. | - | - | 5.07 | 652 | - | - | 5.36 | 743 | - | - | 7.10 | 681 | - | - | 9.43 | 644 | - | - | 9.43 | 636 | - | - | 11.18 | 647 | - | - | 11.32 | 634 | 18. |
| | - | - | 17.47 | 617 | - | - | 18.08 | 691 | - | - | 20.03 | 697 | - | - | 22.19 | 701 | - | - | 21.50 | 695 | - | - | 23.18 | 673 | - | - | 23.43 | 669 | |
| 19. | - | - | 5.56 | 660 | - | - | 6.44 | 706 | - | - | 8.21 | 728 | - | - | 10.38 | 747 | - | - | 10.57 | 665 | - | - | - | - | - | - | - | - | 19. |
| | - | - | 18.53 | 627 | - | - | 19.09 | 653 | - | - | 20.26 | 758 | - | - | 23.05 | 719 | - | - | 23.11 | 672 | - | - | 12.15 | 649 | - | - | 12.07 | 671 | |
| 20. | - | - | 7.06 | 644 | - | - | 7.39 | 647 | - | - | 9.31 | 750 | - | - | - | - | - | - | 11.57 | 659 | - | - | 0.22 | 677 | - | - | 0.28 | 682 | 20. |
| | - | - | 20.03 | 622 | - | - | 20.15 | 704 | - | - | 22.04 | 724 | - | - | 12.13 | 649 | - | - | 23.58 | 689 | - | - | 12.45 | 668 | - | - | 12.44 | 671 | |
| 21. | - | - | 8.24 | 639 | - | - | 8.33 | 691 | - | - | 11.56 | 686 | - | - | 0.29 ● | 689 | - | - | - | - | - | - | 1.00 ● | 686 | - | - | 1.07 ● | 675 | 21. |
| | - | - | 21.24 | 622 | - | - | 21.45 | 659 | - | - | 23.52 | 825 | - | - | 12.51 | 685 | - | - | 12.44 | 663 | - | - | 13.19 | 676 | - | - | 13.23 | 684 | |
| 22. | - | - | 9.43 | 653 | - | - | 10.20 | 677 | - | - | 11.31 | 791 | - | - | 1.04 | 690 | - | - | 0.52 ● | 684 | - | - | 1.33 | 692 | - | - | 1.48 | 684 | 22. |
| | - | - | 22.23 | 641 | - | - | 22.43 | 700 | - | - | - | - | - | - | 13.48 | 665 | - | - | 13.23 | 657 | - | - | 13.51 | 684 | - | - | 13.58 | 691 | |
| 23. | - | - | 10.45 | 666 | - | - | 11.30 | 684 | - | - | 0.37 ● | 710 | - | - | 1.28 | 737 | - | - | 1.30 | 678 | - | - | 2.03 | 677 | - | - | 2.24 | 675 | 23. |
| | - | - | 23.19 | 671 | - | - | 23.39 | 723 | - | - | 13.04 | 695 | - | - | 14.07 | 689 | - | - | 13.56 | 656 | - | - | 14.21 | 673 | - | - | 14.29 | 684 | |
| 24. | - | - | 11.38 | 707 | - | - | - ● | - | - | - | 1.12 | 734 | - | - | 2.20 | 727 | - | - | 2.10 | 676 | - | - | 2.41 | 666 | - | - | 2.56 | 652 | 24. |
| | - | - | - | - | - | - | 12.12 | 759 | - | - | 13.48 | 694 | - | - | 14.44 | 721 | - | - | 14.31 | 663 | - | - | 14.55 | 678 | - | - | 15.04 | 668 | |
| 25. | - | - | 0.13 ● | 665 | - | - | 0.32 | 702 | - | - | 2.02 | 698 | - | - | 2.47 | 746 | - | - | 2.41 | 679 | - | - | 3.13 | 672 | - | - | 3.35 | 647 | 25. |
| | - | - | 12.44 | 699 | - | - | 13.21 | 701 | - | - | 14.35 | 627 | - | - | 15.05 | 710 | - | - | 14.54 | 668 | - | - | 15.10 | 662 | - | - | 15.39 | 673 | |
| 26. | - | - | 0.30 | 854 | - | - | 1.25 | 724 | - | - | 2.44 | 619 | - | - | 3.30 | 707 | - | - | 3.14 | 670 | - | - | 3.45 | 642 | - | - | 4.10 | 635 | 26. |
| | - | - | 13.03 | 749 | - | - | 13.40 | 743 | - | - | 15.31 | 565 | - | - | 15.43 | 672 | - | - | 15.22 | 662 | - | - | 15.50 | 674 | - | - | 16.14 | 664 | |
| 27. | - | - | 1.58 | 725 | - | - | 2.15 | 705 | - | - | 3.27 | 674 | - | - | 4.03 | 674 | - | - | 3.41 | 666 | - | - | 4.11 | 642 | - | - | 4.49 | 644 | 27. |
| | - | - | 15.17 | 802 | - | - | 14.31 | 712 | - | - | 15.32 | 664 | - | - | 16.15 | 668 | - | - | 15.58 | 664 | - | - | 16.14 | 672 | - | - | 16.48 | 676 | |
| 28. | - | - | 1.59 | 853 | - | - | 2.55 | 712 | - | - | 3.46 | 691 | - | - | 4.26 | 684 | - | - | 4.17 | 657 | - | - | 4.49 | 637 | - | - | 5.28 | 649 | 28. |
| | - | - | 14.59 | 691 | - | - | 15.46 | 642 | - | - | 16.16 | 646 | - | - | 16.37 | 683 | - | - | 16.29 | 673 | - | - | 16.49 | 622 | - | - | 17.39 | 680 | |
| 29. | - | - | 3.25 | 672 | - | - | 3.55 | 789 | - | - | 4.35 | 656 | - | - | 5.00 | 672 | - | - | 4.45 | 682 | - | - | 5.20 | 566 | - | - | 6.24 | 671 | 29. |
| | - | - | 15.53 | 649 | - | - | 15.31 | 806 | - | - | 16.56 | 625 | - | - | 17.15 | 653 | - | - | 16.49 | 708 | - | - | 18.06 | 614 | - | - | 18.35 | 680 | |
| 30. | - | - | 4.09 | 747 | - | - | 3.37 | 770 | - | - | 4.56 | 618 | | | | | - | - | 5.14 | 692 | - | - | 6.35 | 620 | - | - | 7.30 | 658 | 30. |
| | - | - | 15.53 | 698 | - | - | 16.36 | 729 | - | - | 17.17 | 583 | | | | | - | - | 17.16 | 688 | - | - | 18.45 | 647 | - | - | 19.42 | 672 | |
| 31. | | | | | - | - | 4.55 | 679 | - | - | 5.39 | 583 | | | | | - | - | 6.08 | 685 | | | | | - | - | 8.28 | 645 | 31. |
| | | | | | - | - | 17.38 | 625 | - | - | 17.47 | 560 | | | | | - | - | 18.10 | 676 | | | | | - | - | 20.49 | 676 | |
| Mittel | | - | | 660 | | - | | 711 | | - | | 702 | | - | | 664 | | - | | 666 | | - | | 666 | | - | | 672 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | | 678 |

* 5. Wert am 09.12.2011

Winterhalbjahr: 1.11. bis 30.4.
Das Tideniedrigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{E_0}$ : 45825 $km^2$

PNP : NN - 5.00 m

Lage: 0.4 km rechts

W Tide

cm

Pegel : Wremertief AP Nr. 4995110

Gewässer : Weser

Gebiet : Unterweser

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 9.42 | 696 | - | - | 10.18 | 679 | - | - | - | - | - | - | 1.22 | 679 | - | - | 1.39 | 655 | - | - | 2.16 | 652 | - | - | 2.11 | 701 | 1. |
| | - | - | 22.02 | 708 | - | - | 22.41 | 680 | - | - | 12.08 | 682 | - | - | 13.31 | 707 | - | - | 13.41 | 708 | - | - | 14.36 | 652 | - | - | 14.37 | 678 | |
| 2. | - | - | 10.43 | 690 | - | - | 11.14 | 669 | - | - | 0.51 | ○ 660 | - | - | 2.07 | 673 | - | - | 2.05 | 690 | - | - | 2.27 | 717 | - | - | 2.47 | 675 | 2. |
| | - | - | 23.02 | 695 | - | - | 23.47 | 667 | - | - | 13.02 | 718 | - | - | 14.08 | 713 | - | - | 14.07 | 695 | - | - | 14.47 | 693 | - | - | 15.16 | 661 | |
| 3. | - | - | 11.43 | 680 | - | - | - | - | - | - | 1.33 | 688 | - | - | 2.30 | 689 | - | - | 2.35 | 674 | - | - | 3.10 | 692 | - | - | 3.18 | 686 | 3. |
| | - | - | - | - | - | - | ○ 12.23 | 684 | - | - | 13.51 | 712 | - | - | 14.48 | 707 | - | - | 14.40 | 694 | - | - | 15.28 | 676 | - | - | 15.53 | 649 | |
| 4. | - | - | 0.08 | ○ 710 | - | - | 0.52 | 678 | - | - | 2.23 | 675 | - | - | 3.06 | 677 | - | - | 3.00 | 690 | - | - | 3.21 | 718 | - | - | 4.00 | 710 | 4. |
| | - | - | 12.34 | 710 | - | - | 13.13 | 691 | - | - | 14.29 | 719 | - | - | 15.21 | 714 | - | - | 15.25 | 708 | - | - | 15.50 | 668 | - | - | 16.29 | 650 | |
| 5. | - | - | 1.00 | 725 | - | - | 1.54 | 669 | - | - | 3.09 | 675 | - | - | 3.32 | 715 | - | - | 3.25 | 686 | - | - | 3.57 | 696 | - | - | 4.22 | 678 | 5. |
| | - | - | 13.23 | 713 | - | - | 14.08 | 695 | - | - | 15.09 | 711 | - | - | 15.48 | 721 | - | - | 16.25 | 712 | - | - | 16.33 | 684 | - | - | 17.15 | 652 | |
| 6. | - | - | 1.53 | 676 | - | - | 2.42 | 676 | - | - | 3.43 | 676 | - | - | 4.04 | 674 | - | - | 3.40 | 691 | - | - | 4.37 | 682 | - | - | 5.19 | 691 | 6. |
| | - | - | 14.18 | 681 | - | - | 14.48 | 710 | - | - | 15.45 | 713 | - | - | 16.29 | 668 | - | - | 16.16 | 688 | - | - | 17.40 | 687 | - | - | 17.56 | 631 | |
| 7. | - | - | 2.46 | 684 | - | - | 3.23 | 668 | - | - | 4.13 | 686 | - | - | 4.30 | 681 | - | - | 4.33 | 696 | - | - | 5.38 | 713 | - | - | 5.59 | 622 | 7. |
| | - | - | 14.59 | 711 | - | - | 15.34 | 710 | - | - | 16.14 | 727 | - | - | 16.31 | 689 | - | - | 17.00 | 713 | - | - | 18.07 | 663 | - | - | 19.11 | 598 | |
| 8. | - | - | 3.45 | 673 | - | - | 4.05 | 664 | - | - | 4.41 | 670 | - | - | 5.02 | 668 | - | - | 5.04 | 676 | - | - | 6.28 | 684 | - | - | 6.55 | 649 | 8. |
| | - | - | 15.52 | 711 | - | - | 16.13 | 701 | - | - | 16.57 | 690 | - | - | 17.23 | 651 | - | - | 17.46 | 634 | - | - | 19.23 | 663 | - | - | 19.51 | 620 | |
| 9. | - | - | 4.29 | 664 | - | - | 5.01 | 670 | - | - | 5.19 | 664 | - | - | 5.41 | 643 | - | - | 5.49 | 689 | - | - | 7.34 | 667 | - | - | 8.40 | 678 | 9. |
| | - | - | 16.33 | 714 | - | - | 16.50 | 712 | - | - | 17.32 | 672 | - | - | 18.17 | 629 | - | - | 18.33 | 652 | - | - | 20.40 | 625 | - | - | 20.50 | 716 | |
| 10. | - | - | 5.14 | 672 | - | - | 5.08 | 674 | - | - | 5.54 | 648 | - | - | 6.37 | 655 | - | - | 7.09 | 651 | - | - | 9.09 | 667 | - | - | 9.08 | 690 | 10. |
| | - | - | 17.15 | 700 | - | - | 17.23 | 695 | - | - | 18.11 | 655 | - | - | 19.15 | 646 | - | - | 20.14 | 628 | - | - | 21.47 | 676 | - | - | 22.13 | 646 | |
| 11. | - | - | 5.53 | 652 | - | - | 5.58 | 653 | - | - | 6.36 | 633 | - | - | 8.06 | 660 | - | - | 8.42 | 645 | - | - | 9.59 | 710 | - | - | 10.45 | 658 | 11. |
| | - | - | 18.09 | 690 | - | - | 18.13 | 691 | - | - | 19.03 | 626 | - | - | 21.00 | 662 | - | - | 21.36 | 609 | - | - | 22.47 | 684 | - | - | 23.15 | 674 | |
| 12. | - | - | 6.46 | 652 | - | - | 6.37 | 657 | - | - | 7.42 | 612 | - | - | 9.41 | 669 | - | - | 10.03 | 598 | - | - | 11.09 | 680 | - | - | 11.42 | 678 | 12. |
| | - | - | 19.01 | 697 | - | - | 19.00 | 695 | - | - | 20.22 | 612 | - | - | 22.15 | 658 | - | - | 23.06 | 666 | - | - | 23.46 | 664 | - | - | - | - | |
| 13. | - | - | 7.42 | 656 | - | - | 7.28 | 641 | - | - | 8.56 | 613 | - | - | 10.36 | 672 | - | - | 11.00 | 652 | - | - | - | ● - | - | - | 0.10 | ● 679 | 13. |
| | - | - | 20.00 | 679 | - | - | 19.57 | 650 | - | - | 21.46 | 613 | - | - | 23.28 | 657 | - | - | 23.35 | 637 | - | - | 12.09 | 664 | - | - | 12.30 | 684 | |
| 14. | - | - | 8.39 | 643 | - | - | 8.32 | 652 | - | - | 10.22 | 626 | - | - | 11.48 | 685 | - | - | 11.53 | 672 | - | - | 0.41 | 680 | - | - | 0.58 | 678 | 14. |
| | - | - | 21.06 | 653 | - | - | 21.03 | 674 | - | - | 22.51 | 635 | - | - | 23.54 | 747 | - | - | - | - | - | - | 12.58 | 690 | - | - | 13.36 | 639 | |
| 15. | - | - | 9.40 | 613 | - | - | 9.42 | 668 | - | - | 11.18 | 650 | - | - | - | - | - | - | 0.32 | ● 657 | - | - | 1.23 | 694 | - | - | 2.42 | 592 | 15. |
| | - | - | 22.09 | 661 | - | - | 22.18 | 663 | - | - | 23.55 | 625 | - | - | 12.12 | 722 | - | - | 12.47 | 723 | - | - | 13.44 | 703 | - | - | 14.17 | 649 | |
| 16. | - | - | 10.37 | 653 | - | - | 10.49 | 679 | - | - | - | - | - | - | 0.50 | ● 682 | - | - | 1.04 | 673 | - | - | 2.07 | 696 | - | - | 2.23 | 705 | 16. |
| | - | - | 22.55 | 674 | - | - | 23.20 | 662 | - | - | 12.06 | 677 | - | - | 13.07 | 703 | - | - | 13.42 | 672 | - | - | 14.40 | 688 | - | - | 15.06 | 702 | |
| 17. | - | - | 11.38 | 673 | - | - | 11.42 | 690 | - | - | 0.35 | ● 666 | - | - | 1.32 | 692 | - | - | 1.19 | 742 | - | - | 2.55 | 692 | - | - | 3.14 | 722 | 17. |
| | - | - | 23.47 | 654 | - | - | - | - | - | - | 12.50 | 696 | - | - | 13.40 | 726 | - | - | 13.54 | 697 | - | - | 15.39 | 674 | - | - | 16.02 | 675 | |
| 18. | - | - | - | - | - | - | 0.06 | 679 | - | - | 1.22 | 670 | - | - | 2.14 | 688 | - | - | 2.24 | 691 | - | - | 3.33 | 709 | - | - | 4.04 | 717 | 18. |
| | - | - | 12.28 | 671 | - | - | 12.52 | 678 | - | - | 13.32 | 689 | - | - | 14.32 | 720 | - | - | 14.46 | 703 | - | - | 16.09 | 694 | - | - | 16.46 | 665 | |
| 19. | - | - | 0.49 | ● 678 | - | - | 1.00 | ● 671 | - | - | 2.00 | 694 | - | - | 2.45 | 733 | - | - | 3.07 | 694 | - | - | 4.22 | 704 | - | - | 5.04 | 675 | 19. |
| | - | - | 12.53 | 676 | - | - | 13.21 | 737 | - | - | 14.08 | 712 | - | - | 14.58 | 745 | - | - | 15.37 | 692 | - | - | 17.00 | 620 | - | - | 17.34 | 617 | |
| 20. | - | - | 1.25 | 662 | - | - | 1.27 | 720 | - | - | 2.44 | 692 | - | - | 3.33 | 702 | - | - | 3.49 | 690 | - | - | 5.20 | 651 | - | - | 5.47 | 624 | 20. |
| | - | - | 13.29 | 688 | - | - | 13.43 | 716 | - | - | 14.49 | 719 | - | - | 15.44 | 707 | - | - | 16.19 | 689 | - | - | 18.00 | 653 | - | - | 18.08 | 534 | |
| 21. | - | - | 2.00 | 666 | - | - | 2.23 | 692 | - | - | 3.12 | 690 | - | - | 4.22 | 675 | - | - | 4.37 | 688 | - | - | 6.00 | 662 | - | - | 6.44 | 557 | 21. |
| | - | - | 14.08 | 678 | - | - | 14.22 | 707 | - | - | 15.24 | 708 | - | - | 16.30 | 681 | - | - | 17.17 | 652 | - | - | 19.06 | 617 | - | - | 19.20 | 542 | |
| 22. | - | - | 2.44 | 651 | - | - | 2.55 | 679 | - | - | 4.01 | 692 | - | - | 4.52 | 681 | - | - | 5.34 | 658 | - | - | 6.59 | 731 | - | - | 7.38 | 591 | 22. |
| | - | - | 14.34 | 682 | - | - | 15.02 | 699 | - | - | 15.58 | 734 | - | - | 17.23 | 685 | - | - | 18.17 | 636 | - | - | 19.46 | 612 | - | - | 20.03 | 548 | |
| 23. | - | - | 3.08 | 653 | - | - | 3.37 | 658 | - | - | 4.28 | 696 | - | - | 5.47 | 669 | - | - | 6.24 | 662 | - | - | 8.21 | 614 | - | - | 8.22 | 540 | 23. |
| | - | - | 15.20 | 695 | - | - | 15.35 | 704 | - | - | 16.42 | 713 | - | - | 18.19 | 636 | - | - | 19.29 | 620 | - | - | 21.03 | 656 | - | - | 21.09 | 628 | |
| 24. | - | - | 3.52 | 662 | - | - | 4.13 | 680 | - | - | 5.15 | 674 | - | - | 6.40 | 576 | - | - | 7.38 | 664 | - | - | 9.20 | 686 | - | - | 9.27 | 676 | 24. |
| | - | - | 16.10 | 694 | - | - | 16.22 | 700 | - | - | 17.29 | 682 | - | - | 20.06 | 565 | - | - | 20.37 | 630 | - | - | 22.06 | 636 | - | - | 23.11 | 665 | |
| 25. | - | - | 4.33 | 696 | - | - | 4.58 | 673 | - | - | 6.06 | 669 | - | - | 7.16 | 623 | - | - | 9.13 | 688 | - | - | 11.35 | 598 | - | - | 11.04 | 664 | 25. |
| | - | - | 16.24 | 739 | - | - | 17.02 | 701 | - | - | 18.22 | 686 | - | - | 20.47 | 617 | - | - | 22.12 | 700 | - | - | 22.11 | 725 | - | - | 23.35 | 691 | |
| 26. | - | - | 5.03 | 692 | - | - | 5.34 | 671 | - | - | 7.00 | 662 | - | - | 9.21 | 639 | - | - | 10.15 | 682 | - | - | 11.04 | 682 | - | - | 11.34 | 695 | 26. |
| | - | - | 17.11 | 697 | - | - | 17.49 | 678 | - | - | 19.38 | 692 | - | - | 22.14 | 634 | - | - | 23.00 | 648 | - | - | 23.43 | 682 | - | - | 23.43 | 687 | |
| 27. | - | - | 6.01 | 651 | - | - | 6.30 | 641 | - | - | 8.06 | 663 | - | - | 10.44 | 674 | - | - | 11.12 | 684 | - | - | - | - | - | - | - | - | 27. |
| | - | - | 18.16 | 679 | - | - | 18.51 | 677 | - | - | 21.00 | 624 | - | - | 23.20 | 678 | - | - | 23.33 | 665 | - | - | 12.09 | 674 | - | - | 12.06 | 703 | |
| 28. | - | - | 6.51 | 652 | - | - | 7.30 | 678 | - | - | 9.52 | 642 | - | - | 11.38 | 690 | - | - | 11.53 | 687 | - | - | 0.32 | ○ 671 | - | - | 0.46 | ○ 702 | 28. |
| | - | - | 19.04 | 659 | - | - | 19.45 | 667 | - | - | 22.26 | 691 | - | - | - | - | - | - | - | - | - | - | 12.59 | 674 | - | - | 12.58 | 649 | |
| 29. | - | - | 8.01 | 665 | - | - | 8.37 | 651 | - | - | 10.55 | 688 | - | - | 0.20 | 664 | - | - | 0.18 | ○ 657 | - | - | 1.11 | 686 | - | - | 1.34 | 633 | 29. |
| | - | - | 20.21 | 673 | - | - | 21.12 | 670 | - | - | 23.50 | 677 | - | - | 12.33 | 729 | - | - | 12.37 | 688 | - | - | 13.37 | 678 | - | - | 13.53 | 658 | |
| 30. | - | - | 8.59 | 660 | - | - | 9.51 | 660 | - | - | - | - | - | - | 0.40 | ○ 712 | - | - | 0.55 | 701 | - | - | 1.41 | 695 | - | - | 1.49 | 735 | 30. |
| | - | - | 21.21 | 679 | - | - | 22.44 | 670 | - | - | 12.06 | 682 | - | - | 13.04 | ○ 703 | - | - | 13.12 | 709 | - | - | 14.01 | 681 | - | - | 13.58 | 740 | |
| 31. | | | | | - | - | 11.06 | 680 | - | - | 0.28 | ○ 691 | | | | | - | - | 1.25 | 689 | | | | | - | - | 2.11 | 735 | 31. |
| | | | | | - | - | 23.46 | 669 | - | - | 12.54 | 721 | | | | | - | - | 13.48 | 674 | | | | | - | - | 14.46 | 688 | |
| Mittel | | - | | 679 | | - | | 680 | | - | | 676 | | - | | 679 | | - | | 675 | | - | | 676 | | - | | 660 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | | 677 |

Sommerhalbjahr: 1.5. bis 31.10.
Das Tideniedrigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 46232 $km^2$

PNP : NN - 5.01 m

Lage: 1.1 km rechts

W Tide cm

Pegel : Spieka-Neufeld AP Nr. 4997105

Gewässer : Weser

Gebiet : Unterweser

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 3.50 | 664 | - | - | 3.59 | 666 |
| | - | - | 16.39 | 654 | - | - | 17.02 | 629 |
| 2. | - | - | 4.42 | 688 | - | - | 5.16 | 747 |
| | - | - | 17.08 | 641 | - | - | 17.30 | 660 |
| 3. | - | - | 5.36 | 633 | - | - | 5.57 | 667 |
| | - | - | 18.27 | 620 | - | - | 19.09 | 715 |
| 4. | - | - | 6.38 | 645 | - | - | 6.18 | 800 |
| | - | - | 19.24 | 629 | - | - | 19.31 | 691 |
| 5. | - | - | 7.47 | 656 | - | - | 8.36 | 723 |
| | - | - | 20.48 | 623 | - | - | 20.26 | 684 |
| 6. | - | - | 8.55 | 658 | - | - | 9.18 | 684 |
| | - | - | 21.53 | 617 | - | - | 22.03 | 723 |
| 7. | - | - | 10.11 | 637 | - | - | 10.33 | 684 |
| | - | - | 23.04 | 603 | - | - | 22.25 | 769 |
| 8. | - | - | 10.56 | 634 | - | - | 10.37 | 697 |
| | - | - | 23.37 | 618 | - | - | 23.49 | 698 |
| 9. | - | - | 11.47 | 637 | - | - | 11.34 | 824 |
| | - | - | - | - | - | - | 23.31 | 830 |
| 10. | - | - | 0.07 ○ | 635 | - | - | - ○ | - |
| | - | - | 12.27 | 637 | - | - | 12.18 | 770 |
| 11. | - | - | 0.58 | 620 | - | - | 0.30 | 712 |
| | - | - | 13.10 | 595 | - | - | 12.56 | 679 |
| 12. | - | - | 1.36 | 575 | - | - | 1.14 | 687 |
| | - | - | 13.48 | 606 | - | - | 13.52 | 710 |
| 13. | - | - | 1.46 | 660 | - | - | 1.41 | 702 |
| | - | - | 13.57 | 666 | - | - | 14.40 | 649 |
| 14. | - | - | 2.16 | 644 | - | - | 2.16 | 751 |
| | - | - | 14.40 | 624 | - | - | 15.02 | 685 |
| 15. | - | - | 2.46 | 652 | - | - | 2.55 | 761 |
| | - | - | 15.23 | 619 | - | - | 15.35 | 674 |
| 16. | - | - | 3.29 | 626 | - | - | 3.42 | 699 |
| | - | - | 16.13 | 610 | - | - | 16.38 | 666 |
| 17. | - | - | 4.06 | 645 | - | - | 4.40 | 745 |
| | - | - | 16.36 | 625 | - | - | 17.06 | 711 |
| 18. | - | - | 4.39 | 649 | - | - | 5.26 | 734 |
| | - | - | 17.27 | 615 | - | - | 18.00 | 684 |
| 19. | - | - | 5.36 | 656 | - | - | 6.22 | 697 |
| | - | - | 18.28 | 623 | - | - | 18.52 | 651 |
| 20. | - | - | 6.32 | 642 | - | - | 7.21 | 644 |
| | - | - | 19.41 | 621 | - | - | 20.12 | 694 |
| 21. | - | - | 7.53 | 637 | - | - | 8.21 | 681 |
| | - | - | 20.56 | 621 | - | - | 21.11 | 652 |
| 22. | - | - | 9.15 | 647 | - | - | 9.54 | 672 |
| | - | - | 22.13 | 637 | - | - | 22.20 | 692 |
| 23. | - | - | 10.15 | 662 | - | - | 11.02 | 679 |
| | - | - | 23.01 | 666 | - | - | 23.26 | 716 |
| 24. | - | - | 11.32 | 695 | - | - | - ● | - |
| | - | - | 23.56 | 660 | - | - | 12.02 | 748 |
| 25. | - | - | - ● | - | - | - | 0.19 | 702 |
| | - | - | 12.27 | 697 | - | - | 13.04 | 696 |
| 26. | - | - | 0.25 | 854 | - | - | 1.17 | 723 |
| | - | - | 12.52 | 748 | - | - | 13.39 | 737 |
| 27. | - | - | 1.36 | 725 | - | - | 2.13 | 700 |
| | - | - | 14.44 | 804 | - | - | 14.17 | 705 |
| 28. | - | - | 1.50 | 851 | - | - | 2.33 | 701 |
| | - | - | 14.35 | 688 | - | - | 15.32 | 643 |
| 29. | - | - | 3.01 | 671 | - | - | 3.53 | 793 |
| | - | - | 15.36 | 648 | - | - | 15.30 | 805 |
| 30. | - | - | 4.04 | 746 | - | - | 3.39 | 755 |
| | - | - | 15.44 | 691 | - | - | 16.19 | 718 |
| 31. | | | | | - | - | 4.37 | 674 |
| | | | | | - | - | 17.15 | 625 |
| Mittel | | - | | 656 | | - | | 707 |

| Tag | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 5.26 | 692 | - | - | 6.17 | 568 | - | - | 5.17 | 645 | - | - | 6.34 | 622 | - | - | 7.30 | 582 |
| | - | - | 17.41 | 653 | - | - | 18.28 | 550 | - | - | 17.31 | 643 | - | - | 19.24 | 693 | - | - | 20.00 | 635 |
| 2. | - | - | 6.09 | 697 | - | - | 7.20 | 555 | - | - | 5.59 | 622 | - | - | 7.52 | 638 | - | - | 8.58 | 622 |
| | - | - | 18.37 | 674 | - | - | 19.35 | 573 | - | - | 18.27 | 592 | - | - | 20.35 | 639 | - | - | 21.16 | 641 |
| 3. | - | - | 6.36 | 669 | - | - | 8.26 | 589 | - | - | 7.26 | 549 | - | - | 9.35 | 613 | - | - | 10.03 | 641 |
| | - | - | 18.40 | 693 | - | - | 21.17 | 592 | - | - | 19.55 | 592 | - | - | 22.01 | 621 | - | - | 22.14 | 672 |
| 4. | - | - | 7.56 | 745 | - | - | 9.46 | 605 | - | - | 8.50 | 600 | - | - | 10.54 | 601 | - | - | 11.03 | 663 |
| | - | - | 20.02 | 755 | - | - | 22.11 | 604 | - | - | 21.16 | 647 | - | - | 22.56 | 640 | - | - | 23.17 | 689 |
| 5. | - | - | 8.26 | 744 | - | - | 11.07 | 573 | - | - | 10.29 | 607 | - | - | 11.44 | 633 | - | - | 11.48 | 679 |
| | - | - | 21.48 | 833 | - | - | 23.00 | 634 | - | - | 22.37 | 648 | - | - | 23.50 | 663 | - | - | - | - |
| 6. | - | - | 9.59 | 726 | - | - | - | - | - | - | 11.21 | 629 | - | - | - ○ | - | - | - | 0.01 ○ | 687 |
| | - | - | 23.03 | 652 | - | - | 12.04 | 622 | - | - | 23.36 | 644 | - | - | 12.24 | 679 | - | - | 12.38 | 674 |
| 7. | - | - | 11.38 | 686 | - | - | 0.19 ○ | 629 | - | - | - | - | - | - | 0.38 | 711 | - | - | 1.00 | 688 |
| | - | - | 23.43 | 769 | - | - | 12.50 | 606 | - | - | 12.20 | 623 | - | - | 13.01 | 687 | - | - | 13.20 | 676 |
| 8. | - | - | - | - | - | - | 0.57 | 610 | - | - | 0.43 ○ | 695 | - | - | 1.18 | 696 | - | - | 1.50 | 653 |
| | - | - | 12.04 | 729 | - | - | 13.45 | 599 | - | - | 12.47 | 699 | - | - | 13.47 | 677 | - | - | 14.16 | 667 |
| 9. | - | - | 0.19 ○ | 683 | - | - | 1.46 | 646 | - | - | 0.49 | 692 | - | - | 2.15 | 680 | - | - | 2.40 | 674 |
| | - | - | 12.54 | 679 | - | - | 14.11 | 631 | - | - | 13.38 | 657 | - | - | 14.31 | 698 | - | - | 14.58 | 685 |
| 10. | - | - | 1.03 | 736 | - | - | 2.09 | 653 | - | - | 1.49 | 702 | - | - | 2.55 | 696 | - | - | 3.26 | 663 |
| | - | - | 13.34 | 679 | - | - | 14.50 | 618 | - | - | 14.16 | 691 | - | - | 15.06 | 700 | - | - | 15.39 | 694 |
| 11. | - | - | 1.50 | 703 | - | - | 3.02 | 634 | - | - | 2.28 | 715 | - | - | 3.35 | 697 | - | - | 4.15 | 671 |
| | - | - | 14.13 | 685 | - | - | 15.26 | 633 | - | - | 14.53 | 680 | - | - | 16.04 | 702 | - | - | 16.34 | 711 |
| 12. | - | - | 2.23 | 708 | - | - | 3.30 | 677 | - | - | 3.09 | 698 | - | - | 4.20 | 677 | - | - | 5.09 | 687 |
| | - | - | 15.03 | 805 | - | - | 16.07 | 661 | - | - | 15.35 | 685 | - | - | 16.39 | 685 | - | - | 17.11 | 705 |
| 13. | - | - | 3.02 | 830 | - | - | 4.05 | 675 | - | - | 3.49 | 684 | - | - | 5.16 | 670 | - | - | 6.10 | 626 |
| | - | - | 15.17 | 767 | - | - | 16.44 | 662 | - | - | 16.20 | 660 | - | - | 17.27 | 679 | - | - | 18.15 | 658 |
| 14. | - | - | 3.32 | 712 | - | - | 4.52 | 701 | - | - | 4.38 | 663 | - | - | 6.10 | 653 | - | - | 7.09 | 633 |
| | - | - | 16.18 | 664 | - | - | 17.16 | 678 | - | - | 17.00 | 650 | - | - | 18.28 | 671 | - | - | 19.14 | 688 |
| 15. | - | - | 4.19 | 695 | - | - | 5.08 | 755 | - | - | 5.28 | 644 | - | - | 7.27 | 630 | - | - | 8.02 | 636 |
| | - | - | 16.51 | 658 | - | - | 17.44 | 701 | - | - | 17.45 | 650 | - | - | 19.55 | 663 | - | - | 20.43 | 697 |
| 16. | - | - | 5.04 | 680 | - | - | 6.27 | 655 | - | - | 6.30 | 638 | - | - | 9.01 | 636 | - | - | 9.31 | 697 |
| | - | - | 17.43 | 652 | - | - | 19.08 | 663 | - | - | 19.04 | 645 | - | - | 21.16 | 671 | - | - | 21.25 | 708 |
| 17. | - | - | 5.51 | 676 | - | - | 7.40 | 651 | - | - | 7.48 | 627 | - | - | 10.08 | 628 | - | - | 9.58 | 656 |
| | - | - | 18.18 | 658 | - | - | 20.15 | 653 | - | - | 20.02 | 656 | - | - | 21.56 | 637 | - | - | 22.28 | 656 |
| 18. | - | - | 6.43 | 673 | - | - | 9.30 | 635 | - | - | 9.18 | 628 | - | - | 11.07 | 640 | - | - | 11.10 | 624 |
| | - | - | 19.38 | 693 | - | - | 22.13 | 694 | - | - | 21.22 | 687 | - | - | 22.54 | 662 | - | - | 23.22 | 658 |
| 19. | - | - | 8.07 | 715 | - | - | 10.36 | 735 | - | - | 10.37 | 662 | - | - | 11.52 | 641 | - | - | 11.41 | 661 |
| | - | - | 20.20 | 743 | - | - | 23.02 | 704 | - | - | 22.45 | 666 | - | - | - | - | - | - | - | - |
| 20. | - | - | 9.31 | 734 | - | - | 11.49 | 643 | - | - | 11.40 | 651 | - | - | 0.00 | 666 | - | - | 0.00 | 670 |
| | - | - | 21.49 | 705 | - | - | - | - | - | - | 23.40 | 679 | - | - | 12.27 | 658 | - | - | 12.20 | 662 |
| 21. | - | - | 11.47 | 681 | - | - | 0.08 ● | 685 | - | - | - | - | - | - | 0.34 ● | 675 | - | - | 0.46 ● | 663 |
| | - | - | 23.52 | 814 | - | - | 12.35 | 675 | - | - | 12.16 | 653 | - | - | 12.53 | 672 | - | - | 12.57 | 672 |
| 22. | - | - | 11.25 | 786 | - | - | 0.48 | 678 | - | - | 0.25 ● | 672 | - | - | 1.11 | 679 | - | - | 1.25 | 672 |
| | - | - | - | - | - | - | 13.27 | 657 | - | - | 13.03 | 648 | - | - | 13.30 | 676 | - | - | 13.26 | 679 |
| 23. | - | - | 0.27 ● | 697 | - | - | 1.19 | 733 | - | - | 1.11 | 667 | - | - | 1.44 | 668 | - | - | 1.57 | 664 |
| | - | - | 12.50 | 681 | - | - | 13.48 | 681 | - | - | 13.38 | 647 | - | - | 13.59 | 664 | - | - | 14.00 | 672 |
| 24. | - | - | 1.00 | 716 | - | - | 2.13 | 719 | - | - | 1.46 | 665 | - | - | 2.16 | 656 | - | - | 2.36 | 642 |
| | - | - | 13.32 | 677 | - | - | 14.39 | 713 | - | - | 14.10 | 653 | - | - | 14.41 | 665 | - | - | 14.41 | 656 |
| 25. | - | - | 1.53 | 682 | - | - | 2.41 | 737 | - | - | 2.23 | 669 | - | - | 2.46 | 664 | - | - | 3.13 | 640 |
| | - | - | 14.32 | 619 | - | - | 14.52 | 700 | - | - | 14.47 | 657 | - | - | 14.56 | 652 | - | - | 15.13 | 662 |
| 26. | - | - | 2.30 | 611 | - | - | 3.09 | 694 | - | - | 2.51 | 660 | - | - | 3.32 | 635 | - | - | 3.51 | 628 |
| | - | - | 15.21 | 552 | - | - | 15.26 | 660 | - | - | 15.01 | 655 | - | - | 15.25 | 667 | - | - | 15.48 | 654 |
| 27. | - | - | 3.03 | 665 | - | - | 3.45 | 663 | - | - | 3.26 | 656 | - | - | 3.54 | 637 | - | - | 4.24 | 635 |
| | - | - | 15.25 | 649 | - | - | 16.00 | 660 | - | - | 15.28 | 657 | - | - | 15.56 | 659 | - | - | 16.27 | 664 |
| 28. | - | - | 3.40 | 676 | - | - | 4.05 | 674 | - | - | 3.52 | 649 | - | - | 4.27 | 628 | - | - | 5.05 | 639 |
| | - | - | 15.54 | 635 | - | - | 16.26 | 673 | - | - | 16.01 | 669 | - | - | 16.32 | 612 | - | - | 17.11 | 669 |
| 29. | - | - | 4.15 | 644 | - | - | 4.36 | 663 | - | - | 4.23 | 673 | - | - | 4.53 | 556 | - | - | 5.59 | 666 |
| | - | - | 16.31 | 615 | - | - | 16.53 | 645 | - | - | 16.34 | 701 | - | - | 17.48 | 601 | - | - | 18.11 | 670 |
| 30. | - | - | 4.48 | 606 | | | | | - | - | 4.52 | 683 | - | - | 6.13 | 611 | - | - | 7.03 | 651 |
| | - | - | 17.08 | 570 | | | | | - | - | 16.58 | 683 | - | - | 18.18 | 640 | - | - | 19.12 | 662 |
| 31. | - | - | 5.36 | 568 | | | | | - | - | 5.48 | 683 | | | | | - | - | 8.08 | 638 |
| | - | - | 17.35 | 543 | | | | | - | - | 17.51 | 666 | | | | | - | - | 20.31 | 660 |
| Mittel | | - | | 689 | | - | | 653 | | - | | 657 | | - | | 656 | | - | | 662 |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | | 670 |

Winterhalbjahr: 1.11. bis 30.4.
Das Tideniedtigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 46232 $km^2$

PNP : NN - 5.01 m

Lage: 1.1 km rechts

W Tide cm

Pegel : Spieka-Neufeld AP Nr. 4997105

Gewässer : Weser

Gebiet : Unterweser

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 3.50 | 664 | - | - | 3.59 | 666 |
| | - | - | 16.39 | 654 | - | - | 17.02 | 629 |
| 2. | - | - | 4.42 | 688 | - | - | 5.16 | 747 |
| | - | - | 17.08 | 641 | - | - | 17.30 | 660 |
| 3. | - | - | 5.36 | 633 | - | - | 5.57 | 667 |
| | - | - | 18.27 | 620 | - | - | 19.09 | 715 |
| 4. | - | - | 6.38 | 645 | - | - | 6.18 | 800 |
| | - | - | 19.24 | 629 | - | - | 19.31 | 691 |
| 5. | - | - | 7.47 | 656 | - | - | 8.36 | 723 |
| | - | - | 20.48 | 623 | - | - | 20.26 | 684 |
| 6. | - | - | 8.55 | 658 | - | - | 9.18 | 684 |
| | - | - | 21.53 | 617 | - | - | 22.03 | 723 |
| 7. | - | - | 10.11 | 637 | - | - | 10.33 | 684 |
| | - | - | 23.04 | 603 | - | - | 22.25 | 769 |
| 8. | - | - | 10.56 | 634 | - | - | 10.37 | 697 |
| | - | - | 23.37 | 618 | - | - | 23.49 | 698 |
| 9. | - | - | 11.47 | 637 | - | - | 11.34 | 824 |
| | - | - | - | - | - | - | 23.31 | 830 |
| 10. | - | - | 0.07 ○ | 635 | - | - | - ○ | - |
| | - | - | 12.27 | 637 | - | - | 12.18 | 770 |
| 11. | - | - | 0.58 | 620 | - | - | 0.30 | 712 |
| | - | - | 13.10 | 595 | - | - | 12.56 | 679 |
| 12. | - | - | 1.36 | 575 | - | - | 1.14 | 687 |
| | - | - | 13.48 | 606 | - | - | 13.52 | 710 |
| 13. | - | - | 1.46 | 660 | - | - | 1.41 | 702 |
| | - | - | 13.57 | 666 | - | - | 14.40 | 649 |
| 14. | - | - | 2.16 | 644 | - | - | 2.16 | 751 |
| | - | - | 14.40 | 624 | - | - | 15.02 | 685 |
| 15. | - | - | 2.46 | 652 | - | - | 2.55 | 761 |
| | - | - | 15.23 | 619 | - | - | 15.35 | 674 |
| 16. | - | - | 3.29 | 626 | - | - | 3.42 | 699 |
| | - | - | 16.13 | 610 | - | - | 16.38 | 666 |
| 17. | - | - | 4.06 | 645 | - | - | 4.40 | 745 |
| | - | - | 16.36 | 625 | - | - | 17.06 | 711 |
| 18. | - | - | 4.39 | 649 | - | - | 5.26 | 734 |
| | - | - | 17.27 | 615 | - | - | 18.00 | 684 |
| 19. | - | - | 5.36 | 656 | - | - | 6.22 | 697 |
| | - | - | 18.28 | 623 | - | - | 18.52 | 651 |
| 20. | - | - | 6.32 | 642 | - | - | 7.21 | 644 |
| | - | - | 19.41 | 621 | - | - | 20.12 | 694 |
| 21. | - | - | 7.53 | 637 | - | - | 8.21 | 681 |
| | - | - | 20.56 | 621 | - | - | 21.11 | 652 |
| 22. | - | - | 9.15 | 647 | - | - | 9.54 | 672 |
| | - | - | 22.13 | 637 | - | - | 22.20 | 692 |
| 23. | - | - | 10.15 | 662 | - | - | 11.02 | 679 |
| | - | - | 23.01 | 666 | - | - | 23.26 | 716 |
| 24. | - | - | 11.32 | 695 | - | - | - ● | - |
| | - | - | 23.56 | 660 | - | - | 12.02 | 748 |
| 25. | - | - | - ● | - | - | - | 0.19 | 702 |
| | - | - | 12.27 | 697 | - | - | 13.04 | 696 |
| 26. | - | - | 0.25 | 854 | - | - | 1.17 | 723 |
| | - | - | 12.52 | 748 | - | - | 13.39 | 737 |
| 27. | - | - | 1.36 | 725 | - | - | 2.13 | 700 |
| | - | - | 14.44 | 804 | - | - | 14.17 | 705 |
| 28. | - | - | 1.50 | 851 | - | - | 2.33 | 701 |
| | - | - | 14.35 | 688 | - | - | 15.32 | 643 |
| 29. | - | - | 3.01 | 671 | - | - | 3.53 | 793 |
| | - | - | 15.36 | 648 | - | - | 15.30 | 805 |
| 30. | - | - | 4.04 | 746 | - | - | 3.39 | 755 |
| | - | - | 15.44 | 691 | - | - | 16.19 | 718 |
| 31. | | | | | - | - | 4.37 | 674 |
| | | | | | - | - | 17.15 | 625 |
| Mittel | | - | | 656 | | - | | 707 |

| Tag | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | - | - | 5.26 | 692 | - | - | 6.17 | 568 | - | - | 5.17 | 645 | - | - | 6.34 | 622 | - | - | 7.30 | 582 |
| | - | - | 17.41 | 653 | - | - | 18.28 | 550 | - | - | 17.31 | 643 | - | - | 19.24 | 693 | - | - | 20.00 | 635 |
| 2. | - | - | 6.09 | 697 | - | - | 7.20 | 555 | - | - | 5.59 | 622 | - | - | 7.52 | 638 | - | - | 8.58 | 622 |
| | - | - | 18.37 | 674 | - | - | 19.35 | 573 | - | - | 18.27 | 592 | - | - | 20.35 | 639 | - | - | 21.16 | 641 |
| 3. | - | - | 6.36 | 669 | - | - | 8.26 | 589 | - | - | 7.26 | 549 | - | - | 9.35 | 613 | - | - | 10.03 | 641 |
| | - | - | 18.40 | 693 | - | - | 21.17 | 592 | - | - | 19.55 | 592 | - | - | 22.01 | 621 | - | - | 22.14 | 672 |
| 4. | - | - | 7.56 | 745 | - | - | 9.46 | 605 | - | - | 8.50 | 600 | - | - | 10.54 | 601 | - | - | 11.03 | 663 |
| | - | - | 20.02 | 755 | - | - | 22.11 | 604 | - | - | 21.16 | 647 | - | - | 22.56 | 640 | - | - | 23.17 | 689 |
| 5. | - | - | 8.26 | 744 | - | - | 11.07 | 573 | - | - | 10.29 | 607 | - | - | 11.44 | 633 | - | - | 11.48 | 679 |
| | - | - | 21.48 | 833 | - | - | 23.00 | 634 | - | - | 22.37 | 648 | - | - | 23.50 | 663 | - | - | - | - |
| 6. | - | - | 9.59 | 726 | - | - | - | - | - | - | 11.21 | 629 | - | - | - ○ | - | - | - | 0.01 ○ | 687 |
| | - | - | 23.03 | 652 | - | - | 12.04 | 622 | - | - | 23.36 | 644 | - | - | 12.24 | 679 | - | - | 12.38 | 674 |
| 7. | - | - | 11.38 | 686 | - | - | 0.19 ○ | 629 | - | - | - | - | - | - | 0.38 | 711 | - | - | 1.00 | 688 |
| | - | - | 23.43 | 769 | - | - | 12.50 | 606 | - | - | 12.20 | 623 | - | - | 13.01 | 687 | - | - | 13.20 | 676 |
| 8. | - | - | - | - | - | - | 0.57 | 610 | - | - | 0.43 ○ | 695 | - | - | 1.18 | 696 | - | - | 1.50 | 653 |
| | - | - | 12.04 | 729 | - | - | 13.45 | 599 | - | - | 12.47 | 699 | - | - | 13.47 | 677 | - | - | 14.16 | 667 |
| 9. | - | - | 0.19 ○ | 683 | - | - | 1.46 | 646 | - | - | 0.49 | 692 | - | - | 2.15 | 680 | - | - | 2.40 | 674 |
| | - | - | 12.54 | 679 | - | - | 14.11 | 631 | - | - | 13.38 | 657 | - | - | 14.31 | 698 | - | - | 14.58 | 685 |
| 10. | - | - | 1.03 | 736 | - | - | 2.09 | 653 | - | - | 1.49 | 702 | - | - | 2.55 | 696 | - | - | 3.26 | 663 |
| | - | - | 13.34 | 679 | - | - | 14.50 | 618 | - | - | 14.16 | 691 | - | - | 15.06 | 700 | - | - | 15.39 | 694 |
| 11. | - | - | 1.50 | 703 | - | - | 3.02 | 634 | - | - | 2.28 | 715 | - | - | 3.35 | 697 | - | - | 4.15 | 671 |
| | - | - | 14.13 | 685 | - | - | 15.26 | 633 | - | - | 14.53 | 680 | - | - | 16.04 | 702 | - | - | 16.34 | 711 |
| 12. | - | - | 2.23 | 708 | - | - | 3.30 | 677 | - | - | 3.09 | 698 | - | - | 4.20 | 677 | - | - | 5.09 | 687 |
| | - | - | 15.03 | 805 | - | - | 16.07 | 661 | - | - | 15.35 | 685 | - | - | 16.39 | 685 | - | - | 17.11 | 705 |
| 13. | - | - | 3.02 | 830 | - | - | 4.05 | 675 | - | - | 3.49 | 684 | - | - | 5.16 | 670 | - | - | 6.10 | 626 |
| | - | - | 15.17 | 767 | - | - | 16.44 | 662 | - | - | 16.20 | 660 | - | - | 17.27 | 679 | - | - | 18.15 | 658 |
| 14. | - | - | 3.32 | 712 | - | - | 4.52 | 701 | - | - | 4.38 | 663 | - | - | 6.10 | 653 | - | - | 7.09 | 633 |
| | - | - | 16.18 | 664 | - | - | 17.16 | 678 | - | - | 17.00 | 650 | - | - | 18.28 | 671 | - | - | 19.14 | 688 |
| 15. | - | - | 4.19 | 695 | - | - | 5.08 | 755 | - | - | 5.28 | 644 | - | - | 7.27 | 630 | - | - | 8.02 | 636 |
| | - | - | 16.51 | 658 | - | - | 17.44 | 701 | - | - | 17.45 | 650 | - | - | 19.55 | 663 | - | - | 20.43 | 697 |
| 16. | - | - | 5.04 | 680 | - | - | 6.27 | 655 | - | - | 6.30 | 638 | - | - | 9.01 | 636 | - | - | 9.31 | 697 |
| | - | - | 17.43 | 652 | - | - | 19.08 | 663 | - | - | 19.04 | 645 | - | - | 21.16 | 671 | - | - | 21.25 | 708 |
| 17. | - | - | 5.51 | 676 | - | - | 7.40 | 651 | - | - | 7.48 | 627 | - | - | 10.08 | 628 | - | - | 9.58 | 656 |
| | - | - | 18.18 | 658 | - | - | 20.15 | 653 | - | - | 20.02 | 656 | - | - | 21.56 | 637 | - | - | 22.28 | 656 |
| 18. | - | - | 6.43 | 673 | - | - | 9.30 | 635 | - | - | 9.18 | 628 | - | - | 11.07 | 640 | - | - | 11.10 | 624 |
| | - | - | 19.38 | 693 | - | - | 22.13 | 694 | - | - | 21.22 | 687 | - | - | 22.54 | 662 | - | - | 23.22 | 658 |
| 19. | - | - | 8.07 | 715 | - | - | 10.36 | 735 | - | - | 10.37 | 662 | - | - | 11.52 | 641 | - | - | 11.41 | 661 |
| | - | - | 20.20 | 743 | - | - | 23.02 | 704 | - | - | 22.45 | 666 | - | - | - | - | - | - | - | - |
| 20. | - | - | 9.31 | 734 | - | - | 11.49 | 643 | - | - | 11.40 | 651 | - | - | 0.00 | 666 | - | - | 0.00 | 670 |
| | - | - | 21.49 | 705 | - | - | - | - | - | - | 23.40 | 679 | - | - | 12.27 | 658 | - | - | 12.20 | 662 |
| 21. | - | - | 11.47 | 681 | - | - | 0.08 ● | 685 | - | - | - | - | - | - | 0.34 ● | 675 | - | - | 0.46 ● | 663 |
| | - | - | 23.52 | 814 | - | - | 12.35 | 675 | - | - | 12.16 | 653 | - | - | 12.53 | 672 | - | - | 12.57 | 672 |
| 22. | - | - | 11.25 | 786 | - | - | 0.48 | 678 | - | - | 0.25 ● | 672 | - | - | 1.11 | 679 | - | - | 1.25 | 672 |
| | - | - | - | - | - | - | 13.27 | 657 | - | - | 13.03 | 648 | - | - | 13.30 | 676 | - | - | 13.26 | 679 |
| 23. | - | - | 0.27 ● | 697 | - | - | 1.19 | 733 | - | - | 1.11 | 667 | - | - | 1.44 | 668 | - | - | 1.57 | 664 |
| | - | - | 12.50 | 681 | - | - | 13.48 | 681 | - | - | 13.38 | 647 | - | - | 13.59 | 664 | - | - | 14.00 | 672 |
| 24. | - | - | 1.00 | 716 | - | - | 2.13 | 719 | - | - | 1.46 | 665 | - | - | 2.16 | 656 | - | - | 2.36 | 642 |
| | - | - | 13.32 | 677 | - | - | 14.39 | 713 | - | - | 14.10 | 653 | - | - | 14.41 | 665 | - | - | 14.41 | 656 |
| 25. | - | - | 1.53 | 682 | - | - | 2.41 | 737 | - | - | 2.23 | 669 | - | - | 2.46 | 664 | - | - | 3.13 | 640 |
| | - | - | 14.32 | 619 | - | - | 14.52 | 700 | - | - | 14.47 | 657 | - | - | 14.56 | 652 | - | - | 15.13 | 662 |
| 26. | - | - | 2.30 | 611 | - | - | 3.09 | 694 | - | - | 2.51 | 660 | - | - | 3.32 | 635 | - | - | 3.51 | 628 |
| | - | - | 15.21 | 552 | - | - | 15.26 | 660 | - | - | 15.01 | 655 | - | - | 15.25 | 667 | - | - | 15.48 | 654 |
| 27. | - | - | 3.03 | 665 | - | - | 3.45 | 663 | - | - | 3.26 | 656 | - | - | 3.54 | 637 | - | - | 4.24 | 635 |
| | - | - | 15.25 | 649 | - | - | 16.00 | 660 | - | - | 15.28 | 657 | - | - | 15.56 | 659 | - | - | 16.27 | 664 |
| 28. | - | - | 3.40 | 676 | - | - | 4.05 | 674 | - | - | 3.52 | 649 | - | - | 4.27 | 628 | - | - | 5.05 | 639 |
| | - | - | 15.54 | 635 | - | - | 16.26 | 673 | - | - | 16.01 | 669 | - | - | 16.32 | 612 | - | - | 17.11 | 669 |
| 29. | - | - | 4.15 | 644 | - | - | 4.36 | 663 | - | - | 4.23 | 673 | - | - | 4.53 | 556 | - | - | 5.59 | 666 |
| | - | - | 16.31 | 615 | - | - | 16.53 | 645 | - | - | 16.34 | 701 | - | - | 17.48 | 601 | - | - | 18.11 | 670 |
| 30. | - | - | 4.48 | 606 | | | | | - | - | 4.52 | 683 | - | - | 6.13 | 611 | - | - | 7.03 | 651 |
| | - | - | 17.08 | 570 | | | | | - | - | 16.58 | 683 | - | - | 18.18 | 640 | - | - | 19.12 | 662 |
| 31. | - | - | 5.36 | 568 | | | | | - | - | 5.48 | 683 | | | | | - | - | 8.08 | 638 |
| | - | - | 17.35 | 543 | | | | | - | - | 17.51 | 666 | | | | | - | - | 20.31 | 660 |
| Mittel | | - | | 689 | | - | | 653 | | - | | 657 | | - | | 656 | | - | | 662 |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | | 670 |

Winterhalbjahr: 1.11. bis 30.4.
Das Tideniedtigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 46232 $km^2$

PNP : NN - 5.01 m

Lage: 1.1 km rechts

W Tide — cm

Pegel : Spieka-Neufeld AP — Nr. 4997105

Gewässer : Weser

Gebiet : Unterweser

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | | 12. | | 31. | | 31. | | 1. | | 3. | | 29. | | 1. | | 15. | | 13. | | 12.+ | | 24. | | 12. | | 25. | | 20. |
| N | | 575 | | 625 | | 543 | | 550 | | 549 | | 556 | | 582 | | 604 | | 631 | | 605 | | 552 | | 588 | | 589 | | 520 |
| M | | 656 | | 707 | | 689 | | 653 | | 657 | | 656 | | 662 | | 670 | | 671 | | 666 | | 671 | | 668 | | 668 | | 649 |
| H | | 854 | | 830 | | 833 | | 755 | | 715 | | 711 | | 711 | | 731 | | 736 | | 729 | | 746 | | 737 | | 725 | | 732 |
| Tag | | 26. | | 9. | | 5. | | 15. | | 11. | | 7. | | 11. | | 25. | | 19. | | 22. | | 14. | | 17. | | 22. | | 30. |
| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
| Jahr | | 2002 | | 2010 | | 2006 | | 2009 | | 2012 | | 2004 | | 2008 | | 2006 | | 2008 | | 2007 | | 2012 | | 2011 | | 2005 | | 2010 |
| N | | 488 | | 501 | | 506 | | 499 | | 549 | | 552 | | 568 | | 603 | | 487 | | 588 | | 552 | | 513 | | 540 | | 501 |
| MN | | 568 | | 568 | | 561 | | 554 | | 570 | | 582 | | 588 | | 615 | | 605 | | 611 | | 590 | | 567 | | 578 | | 568 |
| M | | 669 | | 664 | | 669 | | 653 | | 660 | | 656 | | 660 | | 669 | | 670 | | 671 | | 668 | | 665 | | 671 | | 668 |
| MH | | 819 | | 781 | | 786 | | 771 | | 786 | | 725 | | 723 | | 742 | | 747 | | 749 | | 753 | | 776 | | 819 | | 786 |
| H | | 969 | | 836 | | 890 | | 842 | | 893 | | 788 | | 753 | | 813 | | 788 | | 770 | | 800 | | 859 | | 969 | | 836 |
| Jahr | | 2007 | | 2003 | | 2007 | | 2004 | | 2007 | | 2003 | | 2011 | | 2007 | | 2005+ | | 2003+ | | 2004 | | 2009 | | 2007 | | 2003 |
| HThw ab 1901 | | 969 | | 979 | | 1010 | | 1045 | | 980 | | 862 | | 753 | | 813 | | 798 | | 832 | | 868 | | 859 | | 969 | | 979 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | | | | | | |
| NThw | 543 | 31.01.2012 | 543 | 552 | 520 | 20.12.2012 |
| M | 669 | | 670 | 668 | 665 | |
| HTnw | | | | | | |
| HThw | 854 | 26.11.2011 | 854 | 746 | 833 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | | | | | | |
| NThw | 487 | 08.07.2008 | 488 | 487 | 487 | 08.07.2008 |
| MN | 512 | | 514 | 552 | 515 | |
| M | 664 | | 662 | 667 | 665 | |
| MH | 855 | | 848 | 796 | 870 | |
| HTnw | | | | | | |
| HThw | 969 | 09.11.2007 | 969 | 859 | 969 | 09.11.2007 |

### Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | | | 446 | 08.03.1952 | | | 1045 | 16.02.1962 |
| 2 | | | 450 | 02.03.1987 | | | 1010 | 03.01.1976 |
| 3 | | | 450 | 14.03.1964 | | | 980 | 13.03.1906 |
| 4 | | | 454 | 17.11.1965 | | | 979 | 03.12.1999 |
| 5 | | | 454 | 17.03.1969 | | | 970 | 21.01.1976 |
| 6 | | | 456 | 07.03.1952 | | | 969 | 09.11.2007 |
| 7 | | | 457 | 15.03.1969 | | | 968 | 28.01.1994 |
| 8 | | | 460 | 08.12.1978 | | | 964 | 10.01.1995 |
| 9 | | | 464 | 16.03.1969 | | | 958 | 24.11.1981 |
| 10 | | | 469 | 13.03.1969 | | | 952 | 27.02.1990 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez | Abflussjahr (*) 2012 Wi | Abflussjahr (*) 2012 So | Abflussjahr (*) 2012 Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | | | | | | | | | | | | | | | | | |
| 620 | | | | | | | | | | | | | | | | | | | |
| 600 | | | | | | | | | | | | | | | | | | | |
| 580 | | | | | | | | | | | | | | | | | | | |
| 560 | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez | Abflussjahr (*) 2012 Wi | Abflussjahr (*) 2012 So | Abflussjahr (*) 2012 Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | 700.8 |
| 960 | | | | | | | | | | | | | | | | | | | 700.7 |
| 940 | | | | | | | | | | | | | | | | | | | 700.7 |
| 920 | | | | | | | | | | | | | | | | | | | 700.7 |
| 900 | | | | | | | | | | | | | | | | | | | 700.6 |
| 880 | | | | | | | | | | | | | | | | | | | 700.3 |
| 860 | 58 | | | | | | | | | | | | | | 352 | | 707 | | 700.3 |
| 840 | 56 | 60 | 60 | | | | | | | | | | | | 350 | | 705 | 707 | 699.6 |
| 820 | 56 | 58 | 58 | | | | | | | | | | | | 346 | | 701 | 705 | 698.4 |
| 800 | 55 | 56 | 56 | | | | | | | | | | | | 341 | | 696 | 703 | 695.5 |
| 780 | 55 | 55 | 55 | | | | | | | | | | | | 339 | | 694 | 702 | 693.2 |
| 760 | 55 | 52 | 53 | 56 | | | | | | | 58 | | | | 334 | 355 | 689 | 700 | 687.3 |
| 740 | 53 | 47 | 49 | 55 | | | | 58 | 60 | 59 | 56 | 60 | 58 | 60 | 322 | 353 | 675 | 693 | 676.1 |
| 720 | 52 | 42 | 45 | 52 | 60 | 58 | 60 | 57 | 59 | 57 | 54 | 59 | 56 | 57 | 309 | 346 | 655 | 674 | 654.2 |
| 700 | 52 | 31 | 39 | 46 | 57 | 55 | 57 | 53 | 56 | 51 | 45 | 53 | 51 | 53 | 280 | 315 | 595 | 616 | 600.5 |
| 680 | 47 | 16 | 26 | 42 | 45 | 47 | 48 | 40 | 43 | 39 | 35 | 34 | 38 | 45 | 223 | 239 | 462 | 482 | 476.9 |
| 660 | 40 | 7 | 16 | 28 | 32 | 27 | 23 | 19 | 17 | 18 | 17 | 21 | 18 | 29 | 150 | 115 | 265 | 265 | 295.6 |
| 640 | 27 | 2 | 9 | 20 | 11 | 18 | 11 | 2 | 3 | 12 | 10 | 9 | 7 | 19 | 87 | 47 | 134 | 131 | 150.4 |
| 620 | 9 | | 8 | 13 | 5 | 6 | 1 | 1 | | 8 | 4 | 4 | 6 | 13 | 41 | 18 | 59 | 69 | 68.7 |
| 600 | 2 | | 4 | 8 | 3 | 1 | 1 | | | | 2 | 1 | 1 | 8 | 18 | 4 | 22 | 29 | 29.4 |
| 580 | 1 | | 4 | 5 | 1 | 1 | | | | | 2 | | | 5 | 12 | 2 | 14 | 18 | 13.0 |
| 560 | | | 2 | 2 | 1 | 1 | | | | | 1 | | | 5 | 6 | 1 | 7 | 12 | 6.0 |
| 540 | | | | | | | | | | | | | | 4 | | | | 4 | 2.9 |
| 520 | | | | | | | | | | | | | | | | | | | 1.6 |
| 500 | | | | | | | | | | | | | | | | | | | 0.3 |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

* Vor der Zeitangabe

Das Tideniedrigwasser wird am Pegel nicht ausgewertet !

NLWKN

$A_{Eo}$ : 12444 km²
PNP : NN + 114.95 m
Lage: 0.7 km unterhalb von Werra und Fulda, links

# Q

m³/s

Pegel : Hann. Münden Nr. 43100109
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 40.0 | 33.6 | 224 | 142 | 92.8 | 63.0 | 51.4 | 66.2 | 58.1 | 71.5 | 53.7 | 52.9 | 53.0 | 60.2 |
| 2. | 38.5 | 34.9 | 239 | 121 | 100 | 59.4 | 53.8 | 61.0 | 63.4 | 61.9 | 52.6 | 54.4 | 52.8 | 56.9 |
| 3. | 42.1 | 34.8 | 286 | 114 | 101 | 57.0 | 55.0 | 53.0 | 57.6 | 62.7 | 52.0 | 54.6 | 58.6 | 52.5 |
| 4. | 51.4 | 37.5 | 318 | 107 | 104 | 59.4 | 60.5 | 57.3 | 53.6 | 59.9 | 52.9 | 59.1 | 70.7 | 53.5 |
| 5. | 46.3 | 45.2 | 337 | 103 | 105 | 70.0 | 58.7 | 69.8 | 59.2 | 53.8 | 58.5 | 63.9 | 79.8 | 55.0 |
| 6. | 36.8 | 72.1 | 425 | 96.3 | 104 | 66.4 | 68.9 | 70.0 | 60.5 | 76.4 | 59.6 | 68.6 | 75.1 | 54.4 |
| 7. | 36.7 | 88.4 | 442 | 87.8 | 101 | 60.3 | 72.8 | 61.4 | 70.1 | 79.3 | 59.9 | 61.6 | 68.2 | 52.7 |
| 8. | 36.9 | 73.5 | 458 | 91.9 | 103 | 58.9 | 70.8 | 57.8 | 58.1 | 63.0 | 60.9 | 58.0 | 64.3 | 50.6 |
| 9. | 36.4 | 82.4 | 419 | 91.4 | 102 | 58.8 | 64.8 | 51.9 | 54.3 | 54.3 | 67.7 | 59.7 | 62.9 | 50.5 |
| 10. | 36.3 | 83.6 | 388 | 91.6 | 98.8 | 63.1 | 59.7 | 52.0 | 53.6 | 54.7 | 72.9 | 55.1 | 61.3 | 64.9 |
| 11. | 36.0 | 92.1 | 367 | 86.3 | 91.7 | 60.6 | 57.2 | 53.4 | 56.2 | 52.9 | 75.6 | 56.4 | 62.1 | 69.8 |
| 12. | 35.4 | 76.0 | 342 | 81.6 | 88.4 | 62.2 | 59.5 | 59.0 | 60.3 | 52.0 | 62.9 | 56.2 | 71.5 | 69.8 |
| 13. | 35.2 | 69.2 | 323 | 84.5 | 87.7 | 67.9 | 63.5 | 57.3 | 64.4 | 52.4 | 66.3 | 55.7 | 63.8 | 65.2 |
| 14. | 40.4 | 74.3 | 306 | 83.4 | 85.4 | 63.4 | 56.8 | 54.8 | 120 | 53.7 | 58.0 | 57.3 | 56.7 | 66.8 |
| 15. | 34.7 | 94.4 | 267 | 92.7 | 83.8 | 59.8 | 53.1 | 64.0 | 153 | 52.7 | 51.7 | 63.8 | 53.1 | 106 |
| 16. | 34.9 | 127 | 232 | 95.6 | 82.2 | 57.7 | 54.8 | 59.2 | 159 | 57.0 | 54.5 | 62.0 | 54.3 | 167 |
| 17. | 34.7 | 175 | 199 | 94.8 | 80.1 | 55.7 | 55.5 | 57.7 | 139 | 58.3 | 53.8 | 55.0 | 54.5 | 248 |
| 18. | 34.7 | 198 | 171 | 107 | 80.0 | 53.6 | 53.5 | 56.1 | 134 | 56.7 | 54.5 | 54.5 | 53.5 | 268 |
| 19. | 34.5 | 168 | 191 | 121 | 79.5 | 54.7 | 53.9 | 51.7 | 135 | 51.5 | 55.1 | 55.0 | 55.3 | 248 |
| 20. | 34.6 | 130 | 284 | 156 | 79.7 | 54.2 | 55.0 | 72.1 | 113 | 54.9 | 53.6 | 52.9 | 50.9 | 207 |
| 21. | 34.6 | 122 | 347 | 145 | 77.3 | 53.4 | 54.2 | 86.6 | 104 | 54.1 | 55.0 | 52.7 | 50.5 | 177 |
| 22. | 34.7 | 121 | 391 | 102 | 74.1 | 60.4 | 52.3 | 84.6 | 102 | 53.5 | 54.1 | 53.4 | 50.8 | 169 |
| 23. | 34.3 | 131 | 421 | 89.4 | 72.0 | 58.6 | 49.7 | 77.7 | 90.7 | 52.8 | 53.3 | 53.8 | 49.7 | 220 |
| 24. | 34.2 | 148 | 417 | 86.4 | 70.2 | 58.5 | 51.5 | 65.1 | 78.6 | 57.7 | 56.4 | 54.5 | 51.3 | 359 |
| 25. | 34.2 | 163 | 370 | 90.4 | 68.4 | 57.9 | 53.8 | 58.0 | 71.5 | 70.0 | 57.3 | 54.6 | 50.3 | 396 |
| 26. | 34.2 | 160 | 321 | 97.5 | 66.6 | 56.9 | 53.9 | 55.2 | 68.1 | 62.3 | 52.8 | 54.9 | 50.1 | 399 |
| 27. | 34.3 | 143 | 261 | 97.5 | 65.0 | 55.7 | 54.3 | 55.7 | 68.5 | 57.3 | 56.8 | 56.2 | 50.5 | 377 |
| 28. | 34.2 | 144 | 212 | 92.2 | 64.3 | 53.5 | 55.9 | 52.5 | 78.0 | 55.7 | 58.6 | 57.1 | 51.8 | 381 |
| 29. | 34.2 | 152 | 189 | 89.2 | 61.7 | 52.1 | 55.6 | 55.1 | 77.4 | 55.2 | 56.3 | 53.0 | 51.8 | 383 |
| 30. | 34.2 | 179 | 169 | | 62.2 | 51.4 | 55.0 | 55.3 | 98.0 | 52.9 | 53.5 | 51.2 | 56.0 | 373 |
| 31. | | 214 | 156 | | 61.2 | | 57.7 | | 103 | 52.6 | | 51.6 | | 315 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24.+ | 1. | 31. | 12. | 31. | 30. | 23. | 19. | 4.+ | 19. | 15. | 30. | 23. | 9. |
| NQ | 34.2 | 33.6 | 156 | 81.6 | 61.2 | 51.4 | 49.7 | 51.7 | 53.6 | 51.5 | 51.7 | 51.2 | 49.7 | 50.5 |
| MQ | 36.7 | 112 | 306 | 101 | 83.6 | 58.8 | 57.2 | 61.0 | 85.9 | 58.2 | 57.7 | 56.4 | 57.8 | 181 |
| HQ | 55.7 | 236 | 472 | 180 | 112 | 71.6 | 74.7 | 94.4 | 169 | 93.5 | 81.8 | 75.4 | 80.2 | 408 |
| Tag | 4. | 31. | 8. | 20. | 6. | 5.+ | 7. | 20.+ | 16. | 6. | 11. | 6. | 6. | 24.+ |
| $h_N$ mm / $h_A$ mm | 8 | 24 | 66 | 20 | 18 | 12 | 12 | 13 | 18 | 13 | 12 | 12 | 12 | 39 |

| | 1940/2011 | | 1941/2012 | | | | | | | 72 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1972 | 1963 | 1960 | 1944 | 1945 | 1943 | 1964 | 1959 | 1949 | 1949 | 1953 |
| NQ | 18.7 | 21.6 | 21.2 | 28.9 | 30.6 | 35.5 | 38.8 | 35.0 | 29.3 | 22.1 | 19.6 | 19.8 | 18.7 | 21.6 |
| MNQ | 58.0 | 72.5 | 81.2 | 93.6 | 94.0 | 89.2 | 64.6 | 59.2 | 55.3 | 52.4 | 51.5 | 50.1 | 57.3 | 72.2 |
| MQ | 100 | 141 | 167 | 175 | 176 | 145 | 95.8 | 84.8 | 77.5 | 68.6 | 65.6 | 73.0 | 96.8 | 142 |
| MHQ | 209 | 305 | 366 | 369 | 363 | 272 | 207 | 171 | 146 | 127 | 118 | 139 | 195 | 307 |
| HQ | 1090 | 862 | 1060 | 1540 | 1020 | 848 | 1880 | 836 | 890 | 642 | 759 | 636 | 803 | 862 |
| Jahr | 1940 | 1993 | 1995 | 1946 | 1947 | 1994 | 1943 | 1981 | 1956 | 1981 | 2007 | 1998 | 1998 | 1993 |

| | 1940/2011 | | 1941/2012 | | | | | | | 72 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm / $Mh_A$ mm | 21 | 30 | 36 | 35 | 38 | 30 | 21 | 18 | 17 | 15 | 14 | 16 | 20 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 33.6 | am 01.12.2011 | 33.6 | 49.7 | 49.7 | am 23.05.2012 |
| MQ m³/s | 89.9 | | 117 | 62.8 | 97.5 | |
| HQ m³/s | 472 | am 08.01.2012 bei W= 441 cm | 472 | 169 | 472 | am 08.01.2012 bei W= 441 cm |
| Nq l/(s km²) | 2.70 | | 2.70 | 3.99 | 3.99 | |
| Mq l/(s km²) | 7.22 | | 9.42 | 5.04 | 7.83 | |
| Hq l/(s km²) | 37.9 | | 37.9 | 13.6 | 37.9 | |
| $h_N$ mm / $h_A$ mm | 228 | | 148 | 80 | 248 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 18.7 | am 02.11.1949 | 18.7 | 19.6 | 18.7 | am 02.11.1949 |
| MNQ m³/s | 36.6 | | 48.4 | 43.0 | 39.6 | |
| MQ m³/s | 114 | | 150 | 77.6 | 114 | |
| MHQ m³/s | 626 | | 582 | 295 | 626 | |
| HQ m³/s | 1540 | am 10.02.1946 bei W= 766 cm | 1540 | 1540 | 1540 | am 10.02.1946 bei W= 766 cm |
| $HQ_1$ m³/s | 475 | | 449 | 163 | 475 | |
| $HQ_5$ m³/s | 823 | | 802 | 384 | 823 | |
| MNq l/(s km²) | 2.94 | | 3.89 | 3.46 | 3.18 | |
| Mq l/(s km²) | 9.16 | | 12.1 | 6.24 | 9.16 | |
| MHq l/(s km²) | 50.3 | | 46.8 | 23.7 | 50.3 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 289 | | 190 | 99 | 290 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 15.7 | 1.26 | 14.10.1921 | 2100 *) | 169 | 836 | 17.05.1943 |
| 2 | 18.7 | 1.50 | 02.11.1949 | 1540 | 124 | 766 | 10.02.1946 |
| 3 | 19.6 | 1.58 | 17.09.1959 | 1330 | 107 | 722 | 01.01.1926 |
| 4 | 19.8 | 1.59 | 28.08.1934 | 1090 | 87.6 | 652 | 06.11.1940 |
| 5 | 20.9 | 1.68 | 06.01.1938 | 1060 | 85.2 | 633 | 31.01.1995 |
| 6 | 21.2 | 1.70 | 07.01.1954 | 1050 | 84.4 | 652 | 29.11.1939 |
| 7 | 21.7 | 1.74 | 13.09.1964 | 1020 | 82.0 | 642 | 15.03.1947 |
| 8 | 21.9 | 1.76 | 21.09.1947 | 996 | 80.0 | 615 | 05.01.2003 |
| 9 | 22.9 | 1.84 | 31.10.1976 | 974 | 78.3 | 629 | 20.03.1942 |
| 10 | 23.4 | 1.88 | 29.09.1929 | 890 | 71.5 | 571 | 20.07.1956 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unter schreitungs dauer in Tagen | Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 458 | 458 | | | |
| 364 | 442 | 442 | 1540 | 680 | 150 |
| 363 | 425 | 425 | 1080 | 605 | 139 |
| 362 | 421 | 421 | 998 | 543 | 139 |
| 361 | 419 | 419 | 890 | 507 | 137 |
| 360 | 417 | 417 | 878 | 480 | 124 |
| 359 | 391 | 399 | 820 | 455 | 124 |
| 358 | 388 | 396 | 794 | 433 | 118 |
| 357 | 370 | 391 | 784 | 416 | 116 |
| 356 | 367 | 388 | 740 | 401 | 114 |
| 350 | 318 | 367 | 603 | 329 | 95.2 |
| 340 | 212 | 286 | 492 | 265 | 82.1 |
| 330 | 163 | 220 | 413 | 227 | 78.5 |
| 320 | 143 | 167 | 355 | 201 | 76.8 |
| 300 | 104 | 105 | 292 | 164 | 70.3 |
| 270 | 89.2 | 87.8 | 232 | 128 | 57.8 |
| 240 | 74.1 | 72.0 | 192 | 105 | 53.5 |
| 210 | 64.8 | 64.9 | 168 | 90.2 | 49.3 |
| 183 | 60.5 | 61.3 | 146 | 80.1 | 46.5 |
| 150 | 57.8 | 58.3 | 130 | 69.4 | 41.1 |
| 130 | 56.3 | 57.0 | 120 | 64.3 | 37.6 |
| 120 | 55.6 | 56.3 | 116 | 62.1 | 33.3 |
| 110 | 55.1 | 55.7 | 110 | 60.2 | 31.9 |
| 100 | 54.7 | 55.1 | 105 | 58.4 | 29.4 |
| 90 | 54.3 | 54.8 | 100 | 56.8 | 28.4 |
| 80 | 53.8 | 54.5 | 97.1 | 55.3 | 27.5 |
| 70 | 53.5 | 54.1 | 94.5 | 53.8 | 27.0 |
| 60 | 53.0 | 53.7 | 92.4 | 51.9 | 26.6 |
| 50 | 52.4 | 53.5 | 90.9 | 49.8 | 24.2 |
| 40 | 51.6 | 53.0 | 89.5 | 47.1 | 23.4 |
| 30 | 40.4 | 52.6 | 88.6 | 44.1 | 22.9 |
| 25 | 36.8 | 52.1 | 88.6 | 41.9 | 22.5 |
| 20 | 35.4 | 51.9 | 87.6 | 38.3 | 22.5 |
| 15 | 34.8 | 51.6 | 87.6 | 35.2 | 21.9 |
| 10 | 34.6 | 51.2 | 84.0 | 31.4 | 21.6 |
| 9 | 34.5 | 50.9 | 84.0 | 30.6 | 21.2 |
| 8 | 34.5 | 50.8 | 83.1 | 29.7 | 21.2 |
| 7 | 34.3 | 50.6 | 83.1 | 28.6 | 21.2 |
| 6 | 34.3 | 50.6 | 82.1 | 27.7 | 20.9 |
| 5 | 34.3 | 50.6 | 81.2 | 26.8 | 20.2 |
| 4 | 34.3 | 50.5 | 80.3 | 25.8 | 20.2 |
| 3 | 34.3 | 50.3 | 80.2 | 24.9 | 19.8 |
| 2 | 34.3 | 50.1 | 79.4 | 24.1 | 19.8 |
| 1 | 34.2 | 50.1 | 79.3 | 22.6 | 19.5 |
| 0 | 33.6 | 49.7 | 77.4 | 18.7 | 18.7 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1921/2012
Extremwerte ab 1921
Wasserstände bis 1954 für Weser-Km -0,0; die Abflüsse sind durch Talsperrenbetrieb beeinflußt
*) durch Bruch der Edertalsperre (in der Statistik nicht berücksichtigt)
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 12996 km²
PNP : NN + 98.00 m
Lage: 36.0 km unterhalb von Werra und Fulda, rechts

# Q
m³/s

Pegel : Wahmbeck Nr. 43900105
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 40.1 | 32.3 | 235 | 152 | 94.2 | 64.2 | 50.9 | 67.6 | 58.1 | 79.9 | 53.7 | 53.5 | 54.3 | 60.3 |
| 2. | 39.8 | 34.2 | 245 | 130 | 102 | 60.6 | 52.6 | 64.5 | 62.6 | 64.0 | 52.4 | 53.5 | 54.9 | 59.4 |
| 3. | 38.7 | 35.6 | 286 | 124 | 104 | 58.3 | 53.6 | 55.5 | 61.2 | 63.3 | 52.1 | 54.6 | 56.6 | 55.6 |
| 4. | 50.0 | 36.7 | 324 | 114 | 107 | 58.4 | 59.3 | 57.7 | 55.0 | 61.7 | 52.4 | 56.2 | 69.1 | 53.4 |
| 5. | 50.4 | 42.0 | 348 | 110 | 108 | 68.7 | 57.9 | 73.6 | 56.4 | 56.6 | 55.7 | 65.3 | 79.3 | 56.8 |
| 6. | 38.4 | 57.8 | 430 | 104 | 108 | 69.1 | 66.1 | 69.7 | 62.8 | 64.7 | 59.5 | 67.6 | 79.5 | 55.6 |
| 7. | 37.3 | 91.3 | 458 | 96.6 | 105 | 61.9 | 72.0 | 68.9 | 69.0 | 84.5 | 59.6 | 66.1 | 72.5 | 54.7 |
| 8. | 36.6 | 78.1 | 484 | 93.5 | 106 | 59.7 | 71.4 | 58.5 | 62.7 | 69.9 | 60.2 | 56.4 | 67.7 | 52.3 |
| 9. | 37.0 | 78.8 | 451 | 93.7 | 106 | 59.2 | 66.9 | 54.9 | 57.0 | 55.4 | 64.3 | 63.0 | 64.3 | 51.3 |
| 10. | 36.4 | 84.3 | 409 | 94.6 | 103 | 62.3 | 60.2 | 51.7 | 54.0 | 55.1 | 71.9 | 54.3 | 63.9 | 60.0 |
| 11. | 36.5 | 92.8 | 382 | 90.4 | 96.2 | 62.2 | 56.4 | 53.2 | 56.3 | 53.6 | 74.5 | 56.3 | 63.7 | 71.8 |
| 12. | 35.9 | 81.1 | 357 | 86.1 | 91.3 | 61.8 | 58.5 | 56.9 | 60.2 | 52.8 | 70.6 | 55.7 | 70.7 | 72.1 |
| 13. | 35.6 | 72.3 | 338 | 86.4 | 90.2 | 68.1 | 60.8 | 60.0 | 65.3 | 52.0 | 62.6 | 56.8 | 69.3 | 67.1 |
| 14. | 37.4 | 73.2 | 322 | 85.7 | 88.3 | 64.5 | 60.6 | 55.6 | 100 | 54.1 | 64.6 | 56.5 | 60.9 | 66.0 |
| 15. | 38.1 | 87.7 | 285 | 93.3 | 86.4 | 59.8 | 53.6 | 62.9 | 159 | 52.7 | 52.9 | 63.5 | 56.5 | 94.7 |
| 16. | 34.8 | 124 | 248 | 98.5 | 84.4 | 57.7 | 56.1 | 60.1 | 168 | 56.2 | 52.9 | 62.7 | 55.5 | 158 |
| 17. | 34.8 | 171 | 218 | 97.9 | 82.5 | 56.5 | 56.1 | 59.5 | 157 | 58.2 | 54.4 | 59.0 | 55.7 | 243 |
| 18. | 35.3 | 204 | 185 | 107 | 81.5 | 54.6 | 55.1 | 57.7 | 143 | 57.3 | 53.7 | 53.7 | 55.0 | 279 |
| 19. | 34.8 | 186 | 193 | 122 | 81.4 | 53.9 | 54.6 | 53.1 | 145 | 53.5 | 55.3 | 55.0 | 55.3 | 264 |
| 20. | 34.5 | 140 | 279 | 148 | 81.1 | 55.2 | 54.9 | 61.5 | 125 | 52.9 | 54.2 | 54.1 | 53.8 | 226 |
| 21. | 35.1 | 130 | 353 | 161 | 79.7 | 53.9 | 55.8 | 90.5 | 110 | 54.0 | 54.8 | 52.6 | 51.9 | 189 |
| 22. | 34.6 | 127 | 405 | 113 | 76.1 | 58.3 | 53.8 | 84.5 | 109 | 53.7 | 54.3 | 52.8 | 51.4 | 177 |
| 23. | 34.4 | 136 | 442 | 95.0 | 74.0 | 60.2 | 51.2 | 82.3 | 97.4 | 52.4 | 53.0 | 53.7 | 51.5 | 227 |
| 24. | 34.4 | 149 | 437 | 89.7 | 72.0 | 58.7 | 51.4 | 69.8 | 84.4 | 55.2 | 54.8 | 53.8 | 52.7 | 363 |
| 25. | 34.0 | 170 | 394 | 93.1 | 70.0 | 58.1 | 53.5 | 60.7 | 75.5 | 65.0 | 59.0 | 54.7 | 51.5 | 410 |
| 26. | 33.1 | 171 | 341 | 99.1 | 68.2 | 57.0 | 54.3 | 56.5 | 70.6 | 68.0 | 53.3 | 54.7 | 51.2 | 410 |
| 27. | 33.1 | 152 | 287 | 102 | 65.8 | 56.5 | 54.4 | 57.2 | 69.9 | 58.6 | 55.2 | 55.2 | 51.9 | 399 |
| 28. | 33.4 | 147 | 231 | 97.2 | 65.9 | 53.7 | 55.7 | 54.2 | 79.1 | 55.4 | 58.4 | 57.1 | 52.3 | 401 |
| 29. | 33.3 | 156 | 204 | 93.0 | 62.8 | 52.4 | 56.1 | 54.3 | 77.0 | 55.8 | 57.4 | 54.4 | 53.4 | 396 |
| 30. | 32.4 | 182 | 182 | | 63.4 | 51.6 | 55.4 | 57.2 | 91.7 | 53.4 | 53.8 | 51.7 | 53.8 | 389 |
| 31. | | 218 | 167 | | 62.0 | | 56.1 | | 111 | 53.5 | | 52.0 | | 342 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 14. | 31. | 30. | 1. | 10. | 10. | 13. | 3. | 30. | 26. | 9. |
| NQ | 32.4 | 32.3 | 167 | 85.7 | 62.0 | 51.6 | 50.9 | 51.7 | 54.0 | 52.0 | 52.1 | 51.7 | 51.2 | 51.3 |
| MQ | 36.7 | 114 | 320 | 106 | 86.0 | 59.2 | 57.3 | 62.3 | 88.8 | 58.8 | 57.7 | 56.7 | 59.3 | 187 |
| HQ | 53.4 | 236 | 503 | 183 | 114 | 71.9 | 74.3 | 95.2 | 174 | 96.2 | 86.2 | 73.5 | 89.8 | 418 |
| Tag | 4. | 31. | 8. | 21. | 6. | 5.+ | 7.+ | 21. | 16. | 1. | 12. | 6. | 5. | 25. |
| $h_N$ mm / $h_A$ mm | 7 | 23 | 66 | 20 | 18 | 12 | 12 | 12 | 18 | 12 | 12 | 12 | 12 | 39 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1972 | 1963 | 1960 | 1944 | 1944 | 1943 | 1964 | 1959 | 1949 | 1949 | 1953 |
| NQ | 20.5 | 23.8 | 24.2 | 28.0 | 32.1 | 39.1 | 40.0 | 40.7 | 27.5 | 22.4 | 20.3 | 19.1 | 20.5 | 23.8 |
| MNQ | 60.7 | 76.2 | 86.1 | 99.3 | 100 | 95.3 | 68.3 | 62.1 | 57.7 | 54.7 | 53.9 | 52.6 | 60.1 | 76.0 |
| MQ | 104 | 147 | 175 | 182 | 183 | 153 | 101 | 88.8 | 81.8 | 71.5 | 68.5 | 76.6 | 101 | 148 |
| MHQ | 204 | 305 | 363 | 374 | 364 | 271 | 184 | 170 | 149 | 124 | 119 | 139 | 192 | 308 |
| HQ | 989 | 844 | 1040 | 1600 | 916 | 840 | 810 | 845 | 919 | 617 | 904 | 637 | 850 | 844 |
| Jahr | 1940 | 1993 | 1995 | 1946 | 1947 | 1994 | 1984 | 1984 | 1956 | 1981 | 2007 | 1998 | 1998 | 1993 |

72 Jahre

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm / $Mh_A$ mm | 21 | 30 | 36 | 35 | 38 | 30 | 21 | 18 | 17 | 15 | 14 | 16 | 20 | 31 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 32.3 | am 01.12.2011 | 32.3 | 50.9 | 50.9 | am 01.05.2012 |
| MQ m³/s | 92.3 | | 121 | 63.6 | 100 | |
| HQ m³/s | 503 | am 08.01.2012 bei W= 464 cm | 503 | 174 | 503 | am 08.01.2012 bei W= 464 cm |
| Nq l/(s km²) | 2.49 | | 2.49 | 3.92 | 3.92 | |
| Mq l/(s km²) | 7.10 | | 9.33 | 4.90 | 7.72 | |
| Hq l/(s km²) | 38.7 | | 38.7 | 13.4 | 38.7 | |
| $h_N$ mm / $h_A$ mm | 224 | | 147 | 78 | 244 | |

| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 19.1 | am 20.10.1949 | 20.5 | 19.1 | 19.1 | am 20.10.1949 |
| MNQ m³/s | 38.8 | | 50.6 | 45.5 | 42.1 | |
| MQ m³/s | 119 | | 157 | 81.3 | 119 | |
| MHQ m³/s | 607 | | 580 | 277 | 605 | |
| HQ m³/s | 1600 | am 10.02.1946 bei W= 758 cm | 1600 | 919 | 1600 | am 10.02.1946 bei W= 758 cm |
| $HQ_1$ m³/s | 480 | | 452 | 160 | 480 | |
| $HQ_5$ m³/s | 819 | | 788 | 407 | 819 | |
| MNq l/(s km²) | 2.99 | | 3.89 | 3.50 | 3.24 | |
| Mq l/(s km²) | 9.16 | | 12.1 | 6.26 | 9.16 | |
| MHq l/(s km²) | 46.7 | | 44.6 | 21.3 | 46.6 | |
| $Mh_N$ mm / $Mh_A$ mm | 289 | | 190 | 99 | 290 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 16.0 | 1.23 | 14.10.1921 | 1900*) | 146 | 820 | 17.05.1943 |
| 2 | 19.1 | 1.47 | 20.10.1949 | 1600 | 123 | 758 | 10.02.1946 |
| 3 | 19.7 | 1.52 | 24.09.1934 | 1280 | 98.5 | 706 | 01.01.1926 |
| 4 | 20.1 | 1.55 | 18.07.1921 | 1050 | 80.8 | 611 | 01.02.1995 |
| 5 | 20.3 | 1.56 | 18.09.1959 | 1000 | 76.9 | 632 | 30.11.1939 |
| 6 | 21.0 | 1.62 | 14.09.1964 | 989 | 76.1 | 628 | 06.11.1940 |
| 7 | 23.2 | 1.79 | 07.11.1943 | 949 | 73.0 | 597 | 05.01.2003 |
| 8 | 23.8 | 1.83 | 19.12.1953 | 919 | 70.7 | 606 | 21.07.1956 |
| 9 | 24.4 | 1.88 | 20.09.1947 | 916 | 70.5 | 605 | 15.03.1947 |
| 10 | 24.7 | 1.90 | 14.09.1991 | 889 | 68.4 | 601 | 10.01.2011 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 484 | 484 | | | |
| 364 | 458 | 458 | 1380 | 693 | 163 |
| 363 | 451 | 451 | 1060 | 611 | 150 |
| 362 | 442 | 442 | 937 | 560 | 149 |
| 361 | 437 | 437 | 898 | 519 | 136 |
| 360 | 430 | 430 | 844 | 491 | 132 |
| 359 | 409 | 430 | 819 | 465 | 131 |
| 358 | 405 | 410 | 815 | 446 | 120 |
| 357 | 394 | 409 | 791 | 432 | 119 |
| 356 | 382 | 405 | 736 | 413 | 115 |
| 350 | 324 | 382 | 611 | 341 | 100 |
| 340 | 231 | 287 | 513 | 278 | 88.7 |
| 330 | 171 | 231 | 435 | 239 | 82.9 |
| 320 | 149 | 168 | 377 | 211 | 79.2 |
| 300 | 109 | 109 | 305 | 174 | 74.6 |
| 270 | 91.7 | 91.3 | 249 | 135 | 59.9 |
| 240 | 75.5 | 72.5 | 200 | 112 | 55.9 |
| 210 | 65.8 | 66.1 | 172 | 94.8 | 51.4 |
| 183 | 61.7 | 62.6 | 152 | 84.1 | 47.0 |
| 150 | 57.9 | 58.6 | 135 | 72.7 | 42.8 |
| 130 | 56.5 | 57.0 | 124 | 67.4 | 40.3 |
| 120 | 56.1 | 56.5 | 119 | 64.9 | 35.9 |
| 110 | 55.3 | 56.2 | 114 | 62.8 | 33.2 |
| 100 | 54.9 | 55.6 | 110 | 61.0 | 31.1 |
| 90 | 54.4 | 55.3 | 107 | 59.4 | 30.0 |
| 80 | 54.0 | 54.9 | 104 | 57.7 | 29.4 |
| 70 | 53.8 | 54.4 | 102 | 56.0 | 29.0 |
| 60 | 53.4 | 54.1 | 98.5 | 54.1 | 27.5 |
| 50 | 52.7 | 53.8 | 95.7 | 52.2 | 26.6 |
| 40 | 52.0 | 53.6 | 93.2 | 49.3 | 25.6 |
| 30 | 39.8 | 53.0 | 91.2 | 46.4 | 24.8 |
| 25 | 37.3 | 52.8 | 90.0 | 43.8 | 24.4 |
| 20 | 36.4 | 52.6 | 89.7 | 40.3 | 23.6 |
| 15 | 35.1 | 52.1 | 88.7 | 37.0 | 23.2 |
| 10 | 34.5 | 51.9 | 86.8 | 33.1 | 22.4 |
| 9 | 34.5 | 51.7 | 86.8 | 32.3 | 22.0 |
| 8 | 34.4 | 51.6 | 86.8 | 31.1 | 21.7 |
| 7 | 34.2 | 51.6 | 86.0 | 30.0 | 21.7 |
| 6 | 34.0 | 51.5 | 85.8 | 28.9 | 21.7 |
| 5 | 33.4 | 51.5 | 85.8 | 28.2 | 21.7 |
| 4 | 33.3 | 51.4 | 85.8 | 27.3 | 21.3 |
| 3 | 33.3 | 51.3 | 85.8 | 26.6 | 21.3 |
| 2 | 33.1 | 51.3 | 85.8 | 25.4 | 21.3 |
| 1 | 32.4 | 51.2 | 84.0 | 23.8 | 20.5 |
| 0 | 32.3 | 50.9 | 82.0 | 19.1 | 19.1 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

*) durch Bruch der Edertalsperre (in der Statistik nicht berücksichtigt)
HQ1, HQ5: Jahresreihe 1941/2012
Beobachtungen vor 1974 am Pegel Sieburg
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 14794 km²
PNP : NN + 94.05 m
Lage: 45.5 km unterhalb von Werra und Fulda, rechts

# Q
m³/s

Pegel : Karlshafen Nr. 45100100
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 45.9 | 37.1 | 260 | 178 | 114 | 74.6 | 59.9 | 78.0 | 67.1 | 90.5 | 60.0 | 58.8 | 60.3 | 64.8 |
| 2. | 45.7 | 38.8 | 269 | 155R | 122 | 71.4 | 60.8 | 73.6 | 70.9 | 71.9 | 58.3 | 58.1 | 61.3 | 65.1 |
| 3. | 43.9 | 41.1 | 311 | 143R | 125 | 68.4 | 64.9 | 64.2 | 70.6 | 70.2 | 58.1 | 59.5 | 62.7 | 61.6 |
| 4. | 54.7 | 42.1 | 348 | 134R | 127 | 68.6 | 68.8 | 67.6 | 63.8 | 69.0 | 58.0 | 61.3 | 74.6 | 58.8 |
| 5. | 57.0 | 46.8 | 376 | 128R | 128 | 77.8 | 68.5 | 89.0 | 63.0 | 64.1 | 60.6 | 72.6 | 84.8 | 62.8 |
| 6. | 45.0 | 61.7 | 486 | 120R | 127 | 80.7 | 76.5 | 80.3 | 71.9 | 68.3 | 65.7 | 75.1 | 87.9 | 62.2 |
| 7. | 42.8 | 98.6 | 516 | 112R | 123 | 73.0 | 82.8 | 80.0 | 76.4 | 93.5 | 65.4 | 74.2 | 80.2 | 60.6 |
| 8. | 41.9 | 88.4 | 537 | 107R | 126 | 70.2 | 81.6 | 67.4 | 73.6 | 78.9 | 66.0 | 63.2 | 75.4 | 58.5 |
| 9. | 42.2 | 86.6 | 509 | 111R | 125 | 69.3 | 77.5 | 63.8 | 66.0 | 62.4 | 68.8 | 69.1 | 70.8 | 56.8 |
| 10. | 41.2 | 96.2 | 459 | 111R | 121 | 72.0 | 70.4 | 58.8 | 61.3 | 61.5 | 77.8 | 60.0 | 70.8 | 65.7 |
| 11. | 41.4 | 102 | 424 | 107R | 113 | 72.9 | 66.3 | 60.9 | 64.5 | 60.2 | 79.5 | 61.9 | 70.5 | 81.0 |
| 12. | 40.9 | 91.4 | 394 | 101R | 107 | 71.8 | 67.1 | 64.8 | 68.8 | 58.9 | 81.0 | 61.6 | 75.4 | 81.2 |
| 13. | 40.9 | 82.1 | 373 | 101R | 105 | 80.4 | 69.5 | 68.7 | 74.0 | 57.8 | 68.8 | 63.0 | 77.0 | 76.4 |
| 14. | 41.2 | 82.9 | 356 | R 99.2 | 103 | 76.8 | 70.8 | 64.2 | 107 | 60.1 | 71.8 | 62.5 | 67.2 | 73.8 |
| 15. | 44.8 | 95.8 | 319 | 108R | 101 | 70.9 | 62.6 | 69.9 | 172 | 58.2 | 59.3 | 70.3 | 62.0 | 101 |
| 16. | 39.7 | 132 | 281 | 116R | 98.4 | 68.0 | 65.9 | 69.4 | 182 | 62.2 | 58.3 | 71.4 | 59.5 | 169 |
| 17. | 39.7 | 188 | 251 | 114R | 96.2 | 65.6 | 65.2 | 68.8 | 174 | 66.0 | 60.2 | 66.2 | 59.5 | 251 |
| 18. | 39.9 | 223 | 215 | 128 | 94.8 | 63.8 | 64.2 | 65.5 | 161 | 63.8 | 59.1 | 59.2 | 58.8 | 293 |
| 19. | 39.8 | 208 | 220 | 143 | 94.6 | 62.7 | 63.8 | 61.2 | 160 | 59.8 | 61.2 | 61.0 | 58.8 | 285 |
| 20. | 39.3 | 160 | 319 | 166 | 93.3 | 64.4 | 64.0 | 66.9 | 141 | 58.9 | 59.7 | 60.0 | 58.2 | 247 |
| 21. | 39.9 | 150 | 390 | 185 | 92.2 | 62.9 | 65.2 | 102 | 122 | 60.5 | 59.4 | 58.3 | 54.9 | 208 |
| 22. | 39.5 | 148 | 463 | 135 | 88.4 | 66.8 | 62.2 | 94.4 | 119 | 60.7 | 59.5 | 58.2 | 54.6 | 195 |
| 23. | 38.8 | 161 | 505 | 114 | 85.8 | 71.1 | 59.7 | 92.6 | 108 | 59.1 | 58.0 | 58.9 | 55.9 | 244 |
| 24. | 39.1 | 176 | 503 | 108 | 83.9 | 68.8 | 59.3 | 79.6 | 95.2 | 60.5 | 59.6 | 59.4 | 57.7 | 407 |
| 25. | 38.7 | 206 | 453 | 113 | 81.8 | 68.3 | 61.1 | 70.3 | 85.0 | 71.4 | 65.2 | 60.1 | 56.6 | 451 |
| 26. | 38.1 | 201 | 388 | 119 | 79.3 | 66.8 | 62.3 | 65.6 | 79.3 | 76.6 | 59.0 | 60.8 | 56.1 | 442 |
| 27. | 37.5 | 179 | 332 | 124 | 76.7 | 65.9 | 62.0 | 65.4 | 77.4 | 66.0 | 59.7 | 61.5 | 56.9 | 430 |
| 28. | 38.2 | 169 | 271 | 119 | 76.7 | 63.1 | 63.4 | 62.9 | 89.7 | 62.4 | 63.5 | 63.3 | 57.3 | 438 |
| 29. | 37.7 | 178 | 241 | 114 | 73.5 | 61.9 | 63.8 | 62.2 | 86.3 | 61.9 | 62.8 | 61.2 | 58.6 | 428 |
| 30. | 37.3 | 201 | 215 | | 74.0 | 60.4 | 63.3 | 67.6 | 98.1 | 59.5 | 58.7 | 58.1 | 58.9 | 417 |
| 31. | | 241 | 195 | | 72.9 | | 63.5 | | 119 | 60.0 | | 58.3 | | 370 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 14. | 31. | 30. | 24. | 10. | 10. | 13. | 4.+ | 2.+ | 22. | 9. |
| NQ | 37.3 | 37.1 | 195 | 99.2 | 72.9 | 60.4 | 59.3 | 58.8 | 61.3 | 57.8 | 58.0 | 58.1 | 54.6 | 56.8 |
| MQ | 41.8 | 129 | 361 | 125 | 101 | 69.3 | 66.4 | 71.5 | 99.0 | 65.6 | 63.4 | 62.8 | 64.8 | 203 |
| HQ | 58.7 | 257 | 557 | 202 | 131 | 84.1 | 84.1 | 108 | 186 | 111 | 92.9 | 84.1 | 95.6 | 462 |
| Tag | 4.+ | 31. | 8. | 21. | 6. | 13. | 7.+ | 21. | 16. | 1. | 12. | 6. | 5.+ | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 23 | 65 | 21 | 18 | 12 | 12 | 13 | 18 | 12 | 11 | 11 | 11 | 37 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1972 | 1963 | 1960 | 1960 | 1964 | 1943 | 1964 | 1959 | 1949 | 1949 | 1953 |
| NQ | 21.0 | 28.1 | 28.6 | 33.2 | 37.0 | 43.4 | 49.8 | 46.3 | 32.1 | 27.4 | 24.1 | 21.9 | 21.0 | 28.1 |
| MNQ | 70.0 | 87.9 | 99.3 | 114 | 115 | 109 | 79.3 | 71.5 | 65.6 | 62.5 | 61.5 | 60.8 | 69.3 | 87.5 |
| MQ | 119 | 167 | 199 | 209 | 210 | 173 | 115 | 101 | 93.0 | 81.1 | 77.8 | 87.3 | 115 | 168 |
| MHQ | 236 | 350 | 418 | 429 | 424 | 307 | 226 | 192 | 178 | 143 | 136 | 160 | 221 | 353 |
| HQ | 1170 | 930 | 1180 | 1850 | 1350 | 922 | 1500 | 919 | 1270 | 667 | 966 | 730 | 1010 | 930 |
| Jahr | 1940 | 1993 | 1995 | 1946 | 1947 | 1994 | 1943 | 1984 | 1965 | 1981 | 2007 | 1998 | 1998 | 1993 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 30 | 36 | 35 | 38 | 30 | 21 | 18 | 17 | 15 | 14 | 16 | 20 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 37.1 | am 01.12.2011 | 37.1 | 57.8 | 54.6 | am 22.11.2012 |
| MQ m³/s | 105 | | 139 | 71.5 | 113 | |
| HQ m³/s | 557 | am 08.01.2012 bei W= 458 cm | 557 | 186 | 557 | am 08.01.2012 bei W= 458 cm |
| Nq l/(s km²) | 2.51 | | 2.51 | 3.91 | 3.69 | |
| Mq l/(s km²) | 7.10 | | 9.38 | 4.83 | 7.65 | |
| Hq l/(s km²) | 37.7 | | 37.7 | 12.6 | 37.7 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 224 | | 148 | 77 | 242 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 21.0 | am 09.11.1949 | 21.0 | 21.9 | 21.0 | am 09.11.1949 |
| MNQ m³/s | 44.9 | | 58.9 | 52.3 | 48.5 | |
| MQ m³/s | 136 | | 179 | 92.6 | 135 | |
| MHQ m³/s | 725 | | 671 | 337 | 722 | |
| HQ m³/s | 1850 | am 10.02.1946 bei W= 746 cm | 1850 | 1500 | 1850 | am 10.02.1946 bei W= 746 cm |
| $HQ_1$ m³/s | 547 | | 504 | 185 | 547 | |
| $HQ_5$ m³/s | 940 | | 899 | 460 | 940 | |
| MNq l/(s km²) | 3.04 | | 3.98 | 3.54 | 3.28 | |
| Mq l/(s km²) | 9.19 | | 12.1 | 6.26 | 9.13 | |
| MHq l/(s km²) | 49.0 | | 45.4 | 22.8 | 48.8 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 290 | | 190 | 100 | 289 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 18.7 | 1.26 | 13.10.1921 | 1850 | 125 | 746 | 10.02.1946 |
| 2 | 21.0 | 1.42 | 09.11.1949 | 1800*) | 122 | 756 | 18.05.1943 |
| 3 | 22.4 | 1.51 | 24.09.1934 | 1510 | 102 | 691 | 02.01.1926 |
| 4 | 24.1 | 1.63 | 18.09.1959 | 1350 | 91.3 | 633 | 15.03.1947 |
| 5 | 24.9 | 1.68 | 14.09.1947 | 1270 | 85.8 | 625 | 17.07.1965 |
| 6 | 25.7 | 1.74 | 14.09.1964 | 1270 | 85.8 | 629 | 30.11.1939 |
| 7 | 27.8 | 1.88 | 14.09.1991 | 1200 | 81.1 | 617 | 01.02.1995 |
| 8 | 28.1 | 1.90 | 22.09.1976 | 1170 | 79.1 | 618 | 06.11.1940 |
| 9 | 28.1 | 1.90 | 19.12.1953 | 1130 | 76.4 | 602 | 05.01.2003 |
| 10 | 28.5 | 1.93 | 14.09.1929 | 1110 | 75.0 | 590 | 21.07.1956 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 537 | 537 | | | |
| 364 | 516 | 516 | 1680 | 781 | 178 |
| 363 | 509 | 509 | 1540 | 699 | 165 |
| 362 | 505 | 505 | 1440 | 635 | 164 |
| 361 | 503 | 503 | 1080 | 591 | 159 |
| 360 | 486 | 486 | 955 | 556 | 145 |
| 359 | 463 | 463 | 922 | 532 | 145 |
| 358 | 459 | 459 | 899 | 511 | 140 |
| 357 | 453 | 453 | 874 | 493 | 135 |
| 356 | 424 | 451 | 818 | 473 | 135 |
| 350 | 356 | 417 | 681 | 388 | 112 |
| 340 | 251 | 332 | 576 | 315 | 100 |
| 330 | 201 | 260 | 480 | 270 | 94.8 |
| 320 | 172 | 195 | 424 | 239 | 92.1 |
| 300 | 127 | 127 | 347 | 196 | 86.0 |
| 270 | 107 | 107 | 285 | 153 | 67.7 |
| 240 | 86.3 | 82.8 | 228 | 128 | 61.2 |
| 210 | 75.1 | 75.4 | 198 | 110 | 57.7 |
| 183 | 70.3 | 70.9 | 172 | 95.8 | 54.2 |
| 150 | 66.2 | 67.1 | 153 | 83.5 | 49.0 |
| 130 | 64.2 | 65.4 | 141 | 76.6 | 43.9 |
| 120 | 63.5 | 64.2 | 136 | 74.0 | 40.4 |
| 110 | 62.8 | 63.5 | 132 | 71.6 | 37.6 |
| 100 | 62.0 | 62.9 | 127 | 69.3 | 34.1 |
| 90 | 61.3 | 62.3 | 124 | 67.2 | 33.2 |
| 80 | 60.6 | 61.6 | 121 | 65.6 | 32.8 |
| 70 | 60.0 | 60.9 | 120 | 63.5 | 32.3 |
| 60 | 59.5 | 60.3 | 117 | 61.3 | 31.5 |
| 50 | 58.9 | 59.8 | 114 | 58.9 | 30.0 |
| 40 | 58.2 | 59.4 | 109 | 55.8 | 28.0 |
| 30 | 45.7 | 58.9 | 107 | 52.9 | 27.5 |
| 25 | 42.2 | 58.8 | 106 | 50.3 | 27.0 |
| 20 | 41.2 | 58.5 | 103 | 46.6 | 26.5 |
| 15 | 39.9 | 58.2 | 101 | 42.7 | 25.9 |
| 10 | 39.3 | 58.0 | 99.3 | 38.2 | 25.4 |
| 9 | 39.1 | 57.8 | 99.3 | 37.1 | 24.9 |
| 8 | 39.1 | 57.7 | 99.3 | 36.0 | 24.9 |
| 7 | 38.8 | 57.3 | 99.3 | 34.8 | 24.9 |
| 6 | 38.7 | 56.9 | 99.3 | 33.3 | 23.9 |
| 5 | 38.2 | 56.8 | 99.3 | 32.2 | 23.4 |
| 4 | 38.1 | 56.6 | 98.4 | 31.1 | 23.4 |
| 3 | 37.7 | 56.1 | 98.4 | 30.1 | 22.9 |
| 2 | 37.5 | 55.9 | 98.4 | 29.1 | 22.9 |
| 1 | 37.3 | 54.9 | 96.6 | 27.5 | 21.9 |
| 0 | 37.1 | 54.6 | 95.7 | 21.0 | 21.0 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1921/2012
Extremwerte ab 1921
Wasserstände bis 1951 für Weser-Km 44,60; die Abflüsse sind durch Talsperrenbetrieb beeinflußt
*) durch Bruch der Edertalsperre
16 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 15924 km²
PNP : NN + 69.39 m
Lage: 110.7 km unterhalb von Werra und Fulda, rechts

# Q

m³/s

Pegel : Bodenwerder Nr. 45300200
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 52.0 | 41.0 | 268 | 206 | 126 | 82.2 | 67.6 | 76.3 | 72.4 | 112 | 64.8 | 63.8 | 63.4 | 64.6 |
| 2. | 50.4 | 41.3 | 275 | 187 | 128 | 83.1 | 67.7 | 83.2 | 73.1 | 87.4 | 65.1 | 63.0 | 64.8 | 69.5 |
| 3. | 49.6 | 44.0 | 314 | 162 | 133 | 79.9 | 70.3 | 77.8 | 76.7 | 77.7 | 63.9 | 63.8 | 66.0 | 68.1 |
| 4. | 53.0 | 46.5 | 353 | 159 | 133 | 78.0 | 72.9 | 73.5 | 72.8 | 77.1 | 63.2 | 67.3 | 69.9 | 65.0 |
| 5. | 62.8 | 48.3 | 394 | 153 | 137 | 79.6 | 76.5 | 85.2 | 68.1 | 74.9 | 63.9 | 72.9 | 80.9 | 65.2 |
| 6. | 60.1 | 56.2 | 473 | 147 | 135 | 88.2 | 77.1 | 94.3 | 72.4 | 71.0 | 67.7 | 78.6 | 89.4 | 68.2 |
| 7. | 49.8 | 80.2 | 530 | 138 | 132 | 85.9 | 85.4 | 87.8 | 75.3 | 87.5 | 69.9 | 82.5 | 87.2 | 66.0 |
| 8. | 47.9 | 101 | 548 | 127 | 132 | 80.0 | 87.6 | 80.5 | 85.5 | 91.6 | 70.1 | 75.1 | 82.7 | 64.5 |
| 9. | 47.5 | 90.6 | 561 | 133 | 136 | 78.3 | 86.5 | 73.9 | 76.3 | 78.2 | 70.8 | 69.5 | 78.4 | 62.0 |
| 10. | 46.9 | 98.1 | 502 | 127 | 130 | 78.3 | 81.4 | 68.3 | 70.2 | 68.5 | 76.1 | 71.7 | 76.0 | 64.7 |
| 11. | 46.4 | 98.5 | 462 | 131 | 126 | 81.8 | 76.3 | 66.6 | 68.9 | 68.0 | 82.2 | 66.0 | 75.3 | 80.1 |
| 12. | 46.2 | 104 | 433 | 126 | 118 | 80.4 | 72.7 | 68.1 | 73.6 | 66.2 | 87.7 | 67.5 | 75.3 | 84.3 |
| 13. | 45.6 | 93.2 | 411 | 114 | 115 | 84.6 | 74.3 | 72.9 | 77.8 | 65.1 | 77.6 | 67.4 | 81.9 | 82.9 |
| 14. | 45.3 | 90.7 | 395 | 115 | 113 | 88.3 | 77.5 | 72.3 | 86.4 | 64.3 | 76.4 | 67.5 | 76.8 | 78.3 |
| 15. | 48.6 | 95.8 | 363 | 116 | 111 | 82.2 | 73.9 | 69.4 | 148 | 65.8 | 71.3 | 69.5 | 69.9 | 84.0 |
| 16. | 46.7 | 118 | 318 | 130 | 108 | 77.8 | 71.1 | 76.9 | 175 | 65.4 | 63.8 | 77.3 | 65.9 | 132 |
| 17. | 45.2 | 175 | 288 | 129 | 106 | 75.7 | 72.7 | 75.0 | 185 | 70.8 | 64.7 | 74.5 | 65.5 | 209 |
| 18. | 44.1 | 224 | 245 | 136 | 104 | 73.8 | 71.8 | 72.6 | 180 | 70.5 | 64.6 | 68.6 | 65.1 | 280 |
| 19. | 43.7 | 230 | 233 | 148 | 103 | 72.3 | 70.4 | 70.1 | 164 | 68.7 | 64.6 | 65.4 | 64.8 | 294 |
| 20. | 43.6 | 188 | 314 | 161 | 102 | 72.4 | 70.7 | 66.6 | 158 | 64.4 | 65.4 | 65.7 | 65.4 | 268 |
| 21. | 43.1 | 163 | 396 | 195 | 102 | 72.7 | 71.2 | 86.0 | 134 | 65.4 | 64.4 | 64.2 | 62.2 | 226 |
| 22. | 43.7 | 165 | 466 | 167 | 99.1 | 72.6 | 70.6 | 99.3 | 124 | 65.8 | 65.2 | 63.3 | 60.5 | 202 |
| 23. | 43.3 | 169 | 525 | 134 | 96.0 | 77.8 | 68.0 | 97.2 | 118 | 64.8 | 64.2 | 63.5 | 60.5 | 219 |
| 24. | 42.7 | 183 | 530 | 126 | 93.8 | 77.1 | 65.3 | 90.7 | 108 | 64.1 | 63.8 | 64.1 | 61.0 | 389 |
| 25. | 42.5 | 213 | 505 | 128 | 91.9 | 76.4 | 66.0 | 81.3 | 96.7 | 69.5 | 66.7 | 64.6 | 62.5 | 458 |
| 26. | 42.4 | 215 | 440 | 131 | 89.6 | 75.2 | 67.6 | 74.1 | 89.7 | 80.5 | 68.7 | 65.3 | 60.9 | 450 |
| 27. | 41.4 | 198 | 387 | 137 | 87.4 | 74.1 | 67.7 | 70.0 | 85.7 | 77.1 | 63.4 | 65.2 | 61.4 | 448 |
| 28. | 41.7 | 179 | 320 | 133 | 85.7 | 72.5 | 67.9 | 70.7 | 88.4 | 70.8 | 66.3 | 65.8 | 61.7 | 443 |
| 29. | 41.5 | 179 | 276 | 128 | 84.9 | 70.4 | 69.3 | 68.9 | 95.8 | 67.5 | 68.3 | 66.9 | 62.3 | 438 |
| 30. | 41.4 | 199 | 250 | | 82.7 | 68.8 | 69.0 | 74.8 | 93.5 | 67.0 | 66.5 | 64.6 | 62.5 | 428 |
| 31. | | 244 | 224 | | 83.8 | | 68.6 | | 110 | 65.6 | | 63.0 | | 403 |
| Tag | 27.+ | 1. | 31. | 13. | 30. | 30. | 24. | 11.+ | 5. | 24. | 4. | 2.+ | 22.+ | 9. |
| NQ | 41.4 | 41.0 | 224 | 114 | 82.7 | 68.8 | 65.3 | 66.6 | 68.1 | 64.1 | 63.2 | 63.0 | 60.5 | 62.0 |
| MQ | 46.6 | 135 | 387 | 142 | 110 | 78.0 | 72.8 | 77.5 | 103 | 72.7 | 68.4 | 68.0 | 69.3 | 205 |
| HQ | 56.0 | 253 | 577 | 217 | 137 | 89.6 | 88.7 | 104 | 195 | 123 | 92.1 | 86.2 | 93.0 | 469 |
| Tag | 5. | 31. | 9. | 1. | 5. | 6.+ | 8. | 21.+ | 17.+ | 1. | 12. | 7. | 6. | 25. |
| $h_N$ mm / $h_A$ mm | 8 | 23 | 65 | 22 | 19 | 13 | 12 | 13 | 17 | 12 | 11 | 11 | 11 | 34 |

## Hauptwerte

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1954 | 1972 | 1960 | 1954 | 1948 | 1943 | 1943 | 1947 | 1949 | 1949 | 1953 |
| NQ | 23.5 | 32.9 | 33.4 | 37.9 | 48.4 | 52.3 | 56.7 | 54.2 | 36.3 | 32.7 | 24.0 | 23.5 | 23.5 | 32.9 |
| MNQ | 78.0 | 97.9 | 113 | 129 | 130 | 123 | 90.9 | 81.4 | 74.3 | 70.8 | 68.7 | 67.9 | 77.4 | 97.4 |
| MQ | 128 | 180 | 218 | 228 | 229 | 190 | 127 | 111 | 103 | 89.6 | 85.0 | 95.0 | 124 | 181 |
| MHQ | 242 | 363 | 434 | 445 | 445 | 325 | 224 | 197 | 182 | 145 | 139 | 167 | 227 | 365 |
| HQ | 1160 | 916 | 1190 | 1860 | 1390 | 946 | 892 | 955 | 1110 | 648 | 946 | 939 | 1030 | 916 |
| Jahr | 1940 | 1947 | 1995 | 1946 | 1947 | 1994 | 1984 | 1984 | 1956 | 1981 | 2007 | 2007 | 1998 | 1947 |
| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
| $Mh_N$ mm / $Mh_A$ mm | 21 | 30 | 37 | 36 | 39 | 31 | 21 | 18 | 17 | 15 | 14 | 16 | 20 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 41.0 | am 01.12.2011 | 41.0 | 63.0 | 60.5 | am 22.11.2012 |
| MQ m³/s | 114 | | 151 | 77.2 | 122 | |
| HQ m³/s | 577 | am 09.01.2012 bei W= 478 cm | 577 | 195 | 577 | am 09.01.2012 bei W= 478 cm |
| Nq l/(s km²) | 2.57 | | 2.57 | 3.96 | 3.80 | |
| Mq l/(s km²) | 7.15 | | 9.47 | 4.84 | 7.64 | |
| Hq l/(s km²) | 36.2 | | 36.2 | 12.2 | 36.2 | |
| $h_N$ mm / $h_A$ mm | 225 | | 149 | 77 | 242 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 23.5 | am 25.10.1949 | 23.5 | 23.5 | 23.5 | am 25.10.1949 |
| MNQ m³/s | 51.2 | | 67.0 | 59.7 | 55.5 | |
| MQ m³/s | 148 | | 195 | 102 | 148 | |
| MHQ m³/s | 727 | | 687 | 330 | 728 | |
| HQ m³/s | 1860 | am 11.02.1946 bei W= 729 cm | 1860 | 1110 | 1860 | am 11.02.1946 bei W= 729 cm |
| $HQ_1$ m³/s | 582 | | 555 | 191 | 582 | |
| $HQ_5$ m³/s | 962 | | 941 | 454 | 962 | |
| MNq l/(s km²) | 3.22 | | 4.21 | 3.75 | 3.49 | |
| Mq l/(s km²) | 9.29 | | 12.2 | 6.41 | 9.29 | |
| MHq l/(s km²) | 45.7 | | 43.1 | 20.7 | 45.7 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 293 | | 193 | 102 | 294 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 20.1 | 1.26 | 14.10.1921 | 1860 | 117 | 729 | 11.02.1946 |
| 2 | 23.0 | 1.44 | 25.09.1934 | 1540 | 96.7 | 687 | 15.03.1947 |
| 3 | 23.5 | 1.48 | 25.10.1949 | 1500*) | 94.2 | 676 | 17.05.1943 |
| 4 | 24.0 | 1.51 | 22.09.1947 | 1500 | 94.2 | 680 | 02.01.1926 |
| 5 | 27.9 | 1.75 | 08.11.1943 | 1280 | 80.4 | 642 | 30.11.1939 |
| 6 | 28.5 | 1.79 | 19.09.1959 | 1210 | 76.0 | 627 | 01.02.1995 |
| 7 | 30.3 | 1.90 | 30.09.1929 | 1160 | 72.8 | 617 | 07.11.1940 |
| 8 | 30.9 | 1.94 | 15.09.1991 | 1120 | 70.3 | 610 | 21.03.1942 |
| 9 | 31.5 | 1.98 | 16.12.1920 | 1110 | 69.7 | 621 | 21.07.1956 |
| 10 | 32.8 | 2.06 | 08.09.1964 | 1090 | 68.5 | 602 | 13.03.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 561 | 561 | | | |
| 364 | 548 | 548 | 1770 | 830 | 196 |
| 363 | 548 | 548 | 1680 | 739 | 182 |
| 362 | 530 | 530 | 1530 | 673 | 177 |
| 361 | 525 | 525 | 1270 | 624 | 177 |
| 360 | 505 | 505 | 1270 | 591 | 165 |
| 359 | 502 | 502 | 1060 | 564 | 165 |
| 358 | 473 | 473 | 1010 | 540 | 146 |
| 357 | 466 | 466 | 916 | 519 | 143 |
| 356 | 462 | 462 | 866 | 497 | 141 |
| 350 | 394 | 438 | 714 | 415 | 119 |
| 340 | 275 | 363 | 596 | 339 | 109 |
| 330 | 213 | 275 | 489 | 294 | 103 |
| 320 | 180 | 206 | 445 | 261 | 101 |
| 300 | 137 | 137 | 362 | 214 | 95.5 |
| 270 | 116 | 116 | 306 | 169 | 78.6 |
| 240 | 91.6 | 88.3 | 252 | 140 | 70.2 |
| 210 | 82.5 | 82.5 | 211 | 121 | 63.8 |
| 183 | 77.3 | 77.5 | 191 | 107 | 61.4 |
| 150 | 72.8 | 73.6 | 170 | 93.0 | 58.2 |
| 130 | 70.8 | 71.3 | 157 | 85.9 | 49.1 |
| 120 | 70.1 | 70.5 | 152 | 82.9 | 45.4 |
| 110 | 68.9 | 69.9 | 149 | 80.4 | 44.2 |
| 100 | 68.1 | 68.8 | 143 | 77.7 | 41.1 |
| 90 | 67.6 | 68.2 | 141 | 75.5 | 39.4 |
| 80 | 66.3 | 67.6 | 137 | 73.5 | 38.8 |
| 70 | 65.6 | 66.5 | 131 | 71.1 | 37.6 |
| 60 | 64.8 | 65.8 | 128 | 68.7 | 34.5 |
| 50 | 64.2 | 65.3 | 127 | 65.9 | 33.3 |
| 40 | 63.4 | 65.0 | 123 | 62.6 | 30.9 |
| 30 | 50.4 | 64.5 | 121 | 58.9 | 29.1 |
| 25 | 47.9 | 64.2 | 120 | 56.6 | 28.5 |
| 20 | 46.4 | 63.9 | 118 | 53.5 | 27.9 |
| 15 | 44.1 | 63.4 | 117 | 49.4 | 26.7 |
| 10 | 43.3 | 63.0 | 114 | 43.5 | 26.1 |
| 9 | 43.1 | 62.5 | 113 | 42.0 | 26.1 |
| 8 | 42.7 | 62.3 | 113 | 40.6 | 24.5 |
| 7 | 42.5 | 62.2 | 113 | 39.4 | 24.5 |
| 6 | 42.4 | 62.0 | 112 | 38.2 | 24.0 |
| 5 | 41.7 | 61.7 | 112 | 37.1 | 24.0 |
| 4 | 41.5 | 61.4 | 110 | 36.3 | 24.0 |
| 3 | 41.5 | 61.0 | 110 | 34.4 | 24.0 |
| 2 | 41.4 | 60.9 | 107 | 32.8 | 24.0 |
| 1 | 41.3 | 60.9 | 106 | 29.7 | 24.0 |
| 0 | 41.0 | 60.5 | 104 | 23.5 | 23.5 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1921/2012
Extremwerte ab 1921
Wasserstände bis 1954 für Weser-Km 110,80; die Wasserstände sind durch Talsperrenbetrieb beeinflußt
*) durch Bruch der Edertalsperre (in der Statistik nicht berücksichtigt)
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 17618 km²
PNP : NN + 41.66 m
Lage: 184.0 km unterhalb von Werra und Fulda, links

# Q
m³/s

Pegel : Vlotho Nr. 45900208
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 60.5 | 46.0 | 272 | 241 | 153 | 96.0 | 78.9 | 76.7 | 82.5 | 118 | 70.6 | 71.8 | 69.4 | 68.7 |
| 2. | 59.7 | 45.7 | 302 | 221 | 149 | 94.7 | 77.5 | 82.2 | 79.4 | 115 | 70.1 | 69.3 | 69.2 | 69.8 |
| 3. | 58.5 | 46.9 | 321 | 198 | 149 | 95.0 | 75.9 | 88.4 | 79.2 | 96.0 | 70.3 | 69.2 | 70.7 | 74.0 |
| 4. | 57.5 | 52.2 | 353 | 178 | 152 | 93.5 | 78.3 | 86.6 | 81.9 | 87.4 | 69.7 | 74.5 | 71.7 | 74.2 |
| 5. | 58.5 | 55.9 | 413 | 171 | 152 | 91.3 | 81.9 | 85.8 | 78.8 | 86.4 | 69.1 | 83.9 | 75.6 | 73.7 |
| 6. | 65.8 | 56.6 | 505 | 163 | 154 | 92.7 | 83.9 | 96.9 | 75.2 | 84.1 | 69.2 | 85.6 | 84.9 | 74.0 |
| 7. | 64.8 | 67.1 | 552 | 154 | 151 | 99.5 | 85.4 | 99.6 | 78.2 | 80.2 | 71.6 | 88.2 | 93.5 | 74.9 |
| 8. | 56.9 | 99.3 | 595 | 147 | 151 | 97.6 | 92.1 | 95.5 | 82.3 | 94.5 | 75.3 | 88.7 | 93.3 | 72.8 |
| 9. | 56.9 | 113 | 619 | 139 | 153 | 93.3 | 94.4 | 87.3 | 89.7 | 97.1 | 75.4 | 81.7 | 90.0 | 71.6 |
| 10. | 56.3 | 106 | 588 | 141 | 153 | 91.5 | 95.1 | 82.0 | 82.7 | 85.0 | 75.4 | 76.3 | 85.1 | 71.2 |
| 11. | 55.1 | 109 | 526 | 137 | 149 | 91.2 | 95.4 | 76.5 | 78.8 | 77.6 | 80.9 | 77.1 | 83.2 | 78.5 |
| 12. | 53.1 | 109 | 482 | 135 | 143 | 93.2 | 87.2 | 74.0 | 77.5 | 76.1 | 88.5 | 72.0 | 82.7 | 88.9 |
| 13. | 51.9 | 114 | 460 | 132 | 136 | 93.0 | 82.8 | 75.0 | 82.2 | 73.2 | 91.5 | 73.8 | 81.7 | 91.7 |
| 14. | 51.3 | 110 | 436 | 130 | 132 | 96.0 | 82.4 | 78.3 | 86.3 | 71.9 | 83.3 | 74.0 | 86.7 | 90.0 |
| 15. | 51.3 | 112 | 407 | 134 | 130 | 98.6 | 84.8 | 78.9 | 99.9 | 70.8 | 82.4 | 74.1 | 82.5 | 93.2 |
| 16. | 53.9 | 123 | 364 | 140 | 127 | 93.8 | 84.5 | 78.3 | 157 | 72.4 | 77.1 | 75.5 | 76.1 | 114 |
| 17. | 52.9 | 185 | 322 | 147 | 125 | 89.9 | 81.6 | 82.8 | 182 | 72.2 | 70.7 | 83.2 | 73.2 | 169 |
| 18. | 49.6 | 226 | 291 | 149 | 122 | 87.4 | 81.2 | 81.8 | 199 | 75.7 | 70.1 | 80.9 | 72.3 | 241 |
| 19. | 48.7 | 249 | 266 | 158 | 120 | 85.4 | 80.1 | 79.1 | 186 | 76.5 | 70.3 | 74.3 | 71.3 | 288 |
| 20. | 48.7 | 239 | 302 | 171 | 118 | 84.2 | 79.3 | 76.0 | 175 | 74.3 | 70.0 | 70.5 | 70.2 | 294 |
| 21. | 48.7 | 204 | 380 | 183 | 116 | 84.0 | 78.8 | 75.2 | 161 | 70.9 | 70.3 | 70.8 | 70.8 | 262 |
| 22. | 47.3 | 196 | 472 | 206 | 115 | 84.0 | 78.5 | 92.4 | 140 | 72.0 | 70.0 | 70.0 | 68.0 | 230 |
| 23. | 49.5 | 197 | 565 | 174 | 112 | 83.8 | 77.9 | 102 | 133 | 71.6 | 70.0 | 69.3 | 65.5 | 239 |
| 24. | 48.7 | 207 | 585 | 156 | 109 | 87.6 | 75.7 | 101 | 126 | 70.3 | 70.6 | 69.2 | 65.4 | 339 |
| 25. | 47.7 | 221 | 567 | 154 | 107 | 87.3 | 72.7 | 97.8 | 116 | 69.7 | 69.9 | 69.1 | 68.2 | 461 |
| 26. | 47.2 | 239 | 516 | 157 | 104 | 86.3 | 72.3 | 89.6 | 105 | 74.6 | 73.2 | 68.7 | 68.3 | 486 |
| 27. | 47.2 | 232 | 449 | 155 | 102 | 85.1 | 73.4 | 82.4 | 98.7 | 84.4 | 74.4 | 70.5 | 66.7 | 483 |
| 28. | 47.0 | 213 | 386 | 158 | 99.8 | 84.0 | 73.9 | 78.3 | 99.4 | 81.8 | 69.6 | 70.0 | 68.7 | 479 |
| 29. | 46.5 | 198 | 323 | 157 | 98.5 | 82.4 | 73.9 | 78.6 | 104 | 76.4 | 71.7 | 70.1 | 68.8 | 470 |
| 30. | 46.5 | 210 | 288 | | 97.9 | 80.4 | 74.9 | 81.1 | 104 | 74.0 | 73.4 | 72.1 | 68.5 | 455 |
| 31. | | 246 | 263 | | 96.3 | | 75.5 | | 103 | 72.2 | | 71.4 | | 441 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29.+ | 2. | 31. | 14. | 31. | 30. | 26. | 12. | 6. | 25. | 5. | 26. | 24. | 1. |
| NQ | 46.5 | 45.7 | 263 | 130 | 96.3 | 80.4 | 72.3 | 74.0 | 75.2 | 69.7 | 69.1 | 68.7 | 65.4 | 68.7 |
| MQ | 52.9 | 149 | 425 | 162 | 128 | 90.1 | 81.0 | 84.7 | 110 | 80.7 | 73.8 | 74.7 | 75.4 | 213 |
| HQ | 66.9 | 264 | 625 | 251 | 156 | 100 | 99.4 | 104 | 202 | 123 | 92.8 | 90.4 | 94.4 | 488 |
| Tag | 6.+ | 31. | 9. | 1. | 1. | 7.+ | 11. | 6.+ | 18. | 1.+ | 13. | 8. | 7.+ | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 23 | 65 | 23 | 19 | 13 | 12 | 12 | 17 | 12 | 11 | 11 | 11 | 32 |

| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1959 | 1954 | 1954 | 1972 | 1960 | 1960 | 1954 | 1943 | 1964 | 1959 | 1959 | 1949 | 1959 |
| NQ | 33.4 | 37.3 | 37.4 | 44.1 | 50.5 | 55.4 | 59.1 | 60.7 | 48.2 | 40.4 | 32.1 | 31.1 | 33.4 | 37.3 |
| MNQ | 89.5 | 113 | 133 | 152 | 150 | 143 | 106 | 93.4 | 84.8 | 80.1 | 77.7 | 77.4 | 88.8 | 112 |
| MQ | 143 | 202 | 247 | 258 | 257 | 213 | 144 | 125 | 115 | 100 | 95.0 | 107 | 139 | 203 |
| MHQ | 256 | 384 | 463 | 476 | 478 | 347 | 239 | 206 | 188 | 150 | 144 | 177 | 241 | 385 |
| HQ | 1130 | 1010 | 1250 | 2000 | 1400 | 956 | 980 | 922 | 1090 | 591 | 741 | 842 | 1110 | 1010 |
| Jahr | 1940 | 1986 | 1995 | 1946 | 1947 | 1994 | 1943 | 1981 | 1956 | 1981 | 2007 | 1998 | 1998 | 1986 |

| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 31 | 38 | 37 | 39 | 31 | 22 | 18 | 17 | 15 | 14 | 16 | 20 | 31 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 45.7 | am 02.12.2011 | 45.7 | 68.7 | 65.4 | am 24.11.2012 |
| MQ m³/s | 126 | | 169 | 84.3 | 134 | |
| HQ m³/s | 625 | am 09.01.2012 bei W= 531 cm | 625 | 202 | 625 | am 09.01.2012 bei W= 531 cm |
| Nq l/(s km²) | 2.59 | | 2.59 | 3.90 | 3.71 | |
| Mq l/(s km²) | 7.17 | | 9.59 | 4.78 | 7.59 | |
| Hq l/(s km²) | 35.5 | | 35.5 | 11.5 | 35.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 226 | | 151 | 76 | 240 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 31.1 | am 21.10.1959 | 33.4 | 31.1 | 31.1 | am 21.10.1959 |
| MNQ m³/s | 59.6 | | 77.9 | 68.2 | 63.7 | |
| MQ m³/s | 167 | | 220 | 114 | 166 | |
| MHQ m³/s | 761 | | 725 | 343 | 767 | |
| HQ m³/s | 2000 | am 10.02.1946 bei W= 785 cm | 2000 | 1090 | 2000 | am 10.02.1946 bei W= 785 cm |
| $HQ_1$ m³/s | 593 | | 563 | 200 | 593 | |
| $HQ_5$ m³/s | 994 | | 981 | 458 | 994 | |
| MNq l/(s km²) | 3.38 | | 4.42 | 3.87 | 3.62 | |
| Mq l/(s km²) | 9.48 | | 12.5 | 6.47 | 9.42 | |
| MHq l/(s km²) | 43.2 | | 41.2 | 19.5 | 43.5 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 299 | | 196 | 103 | 298 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 26.3 | 1.49 | 01.12.1921 | 2000 | 114 | 785 | 10.02.1946 |
| 2 | 31.1 | 1.77 | 21.10.1959 | 1680 | 95.4 | 754 | 03.01.1926 |
| 3 | 31.9 | 1.81 | 04.10.1934 | 1400 | 79.5 | 733 | 16.03.1947 |
| 4 | 33.4 | 1.90 | 07.11.1949 | 1390 | 78.9 | 701 | 01.12.1939 |
| 5 | 37.2 | 2.11 | 16.09.1991 | 1260 | 71.5 | 677 | 01.02.1995 |
| 6 | 37.2 | 2.11 | 07.10.1964 | 1190 | 67.5 | 654 | 21.03.1942 |
| 7 | 37.4 | 2.12 | 10.01.1954 | 1170 | 66.4 | 657 | 14.03.1981 |
| 8 | 38.6 | 2.19 | 21.09.1947 | 1130 | 64.1 | 648 | 04.01.1987 |
| 9 | 40.1 | 2.28 | 03.11.1976 | 1130 | 64.1 | 650 | 08.11.1940 |
| 10 | 40.2 | 2.28 | 09.11.1943 | 1110 | 63.0 | 643 | 03.11.1998 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 619 | 619 | | | |
| 364 | 595 | 595 | 2000 | 907 | 253 |
| 363 | 588 | 588 | 1960 | 813 | 209 |
| 362 | 585 | 585 | 1920 | 747 | 198 |
| 361 | 567 | 567 | 1550 | 687 | 191 |
| 360 | 565 | 565 | 1440 | 645 | 180 |
| 359 | 552 | 552 | 1240 | 615 | 173 |
| 358 | 526 | 526 | 1160 | 588 | 166 |
| 357 | 516 | 516 | 1030 | 565 | 164 |
| 356 | 505 | 505 | 950 | 545 | 150 |
| 350 | 413 | 470 | 828 | 456 | 147 |
| 340 | 302 | 380 | 673 | 372 | 129 |
| 330 | 239 | 291 | 558 | 327 | 123 |
| 320 | 199 | 230 | 478 | 293 | 117 |
| 300 | 157 | 157 | 405 | 243 | 111 |
| 270 | 132 | 132 | 335 | 192 | 93.0 |
| 240 | 103 | 99.4 | 282 | 160 | 81.3 |
| 210 | 93.3 | 92.1 | 247 | 138 | 73.4 |
| 183 | 85.8 | 85.8 | 215 | 121 | 69.4 |
| 150 | 81.9 | 82.3 | 194 | 107 | 64.3 |
| 130 | 78.6 | 79.1 | 185 | 98.0 | 53.9 |
| 120 | 77.5 | 78.5 | 177 | 94.4 | 51.0 |
| 110 | 75.9 | 76.7 | 172 | 91.2 | 47.4 |
| 100 | 75.0 | 75.7 | 167 | 88.2 | 44.6 |
| 90 | 74.0 | 75.0 | 162 | 85.3 | 43.9 |
| 80 | 72.3 | 74.1 | 158 | 82.7 | 41.9 |
| 70 | 71.6 | 73.4 | 154 | 80.2 | 41.2 |
| 60 | 70.5 | 72.1 | 151 | 77.3 | 39.8 |
| 50 | 70.1 | 71.4 | 145 | 74.0 | 38.0 |
| 40 | 69.2 | 70.6 | 142 | 70.2 | 36.8 |
| 30 | 58.5 | 70.1 | 139 | 65.9 | 35.5 |
| 25 | 56.3 | 70.0 | 138 | 63.6 | 34.9 |
| 20 | 52.9 | 69.6 | 136 | 60.8 | 34.9 |
| 15 | 49.6 | 69.3 | 134 | 56.4 | 34.3 |
| 10 | 48.7 | 68.8 | 132 | 50.1 | 33.7 |
| 9 | 47.7 | 68.8 | 132 | 48.5 | 33.7 |
| 8 | 47.3 | 68.8 | 131 | 47.3 | 33.7 |
| 7 | 47.3 | 68.7 | 131 | 45.9 | 33.2 |
| 6 | 47.2 | 68.5 | 128 | 44.7 | 33.2 |
| 5 | 47.0 | 68.3 | 128 | 43.5 | 33.2 |
| 4 | 46.9 | 68.2 | 127 | 42.2 | 33.2 |
| 3 | 46.9 | 68.0 | 126 | 41.1 | 32.7 |
| 2 | 46.5 | 66.7 | 124 | 39.8 | 32.7 |
| 1 | 46.0 | 65.5 | 123 | 37.3 | 32.1 |
| 0 | 45.7 | 65.4 | 119 | 31.1 | 31.1 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Wasserstände bis 1960 für Weser-Km 182.97
Die Abflüsse sind durch Talsperrenbetrieb beeinflußt
HQ1, HQ5 : Jahresreihe 1921/2012
Extremwerte ab 1921
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 19162 km²
PNP : NN + 37.04 m
Lage: 198.4 km unterhalb von Werra und Fulda, rechts

# Q

m³/s

Pegel : Porta Nr. 47100100
Gewässer : Weser
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 69.9 | 57.3 | 285 | 257 | 169 | 109 | 89.8 | 92.5 | 93.8 | 123 | 80.6 | 80.9 | 80.8 | 79.9 |
| 2. | 69.0 | 60.1 | 330 | 236 | 165 | 107 | 88.4 | 92.3 | 90.3 | 123 | 79.5 | 78.5 | 81.7 | 81.9 |
| 3. | 68.1 | 63.1 | 346 | 213 | 165 | 108 | 87.7 | 98.6 | 89.4 | 106 | 79.0 | 79.0 | 82.8 | 85.8 |
| 4. | 67.2 | 71.7 | 373 | 192 | 167 | 109 | 88.8 | 102 | 91.4 | 97.4 | 78.3 | 99.1 | 84.2 | 86.8 |
| 5. | 67.2 | 73.1 | 470 | 184 | 167 | 105 | 93.9 | 104 | 88.8 | 95.6 | 77.9 | 108 | 87.4 | 88.9 |
| 6. | 73.6 | 72.3 | 560 | 175 | 168 | 104 | 96.3 | 107 | 85.0 | 95.2 | 77.7 | 109 | 94.5 | 86.5 |
| 7. | 73.8 | 85.2 | 588 | 166 | 164 | 111 | 96.1 | 110 | 87.7 | 90.7 | 79.6 | 108 | 103 | 86.5 |
| 8. | 66.7 | 118 | 645 | 160 | 170 | 109 | 101 | 105 | 92.2 | 100 | 82.7 | 101 | 103 | 84.2 |
| 9. | 65.9 | 131 | 666 | 153 | 170 | 104 | 104 | 98.0 | 99.3 | 106 | 82.9 | 94.3 | 100 | 83.0 |
| 10. | 65.5 | 121 | 636 | 154 | 167 | 105 | 105 | 91.8 | 93.1 | 95.6 | 83.0 | 87.7 | 95.5 | 95.6 |
| 11. | 64.5 | 118 | 567 | 150 | 162 | 104 | 128 | 87.4 | 91.6 | 87.5 | 88.2 | 88.9 | 93.9 | 96.9 |
| 12. | 62.8 | 118 | 521 | 147 | 157 | 105 | 103 | 86.2 | 94.2 | 85.3 | 97.5 | 83.5 | 92.6 | 101 |
| 13. | 61.4 | 130 | 506 | 145 | 150 | 104 | 95.5 | 89.1 | 98.8 | 83.5 | 98.6 | 86.0 | 91.4 | 104 |
| 14. | 61.0 | 130 | 470 | 144 | 146 | 107 | 94.2 | 88.6 | 100 | 82.0 | 92.0 | 85.8 | 95.3 | 102 |
| 15. | 61.4 | 130 | 435 | 152 | 143 | 109 | 96.9 | 88.6 | 110 | 80.6 | 90.3 | 84.4 | 92.5 | 120 |
| 16. | 62.8 | 150 | 391 | 155 | 140 | 104 | 98.0 | 90.7 | 155 | 83.4 | 86.4 | 85.0 | 86.6 | 135 |
| 17. | 63.2 | 233 | 347 | 161 | 138 | 101 | 93.2 | 94.1 | 195 | 83.0 | 79.8 | 91.0 | 83.6 | 183 |
| 18. | 60.4 | 243 | 315 | 163 | 136 | 98.3 | 91.7 | 91.1 | 208 | 84.5 | 78.8 | 89.3 | 82.7 | 244 |
| 19. | 60.2 | 260 | 301 | 177 | 134 | 96.6 | 90.7 | 88.8 | 199 | 85.1 | 78.8 | 84.8 | 83.0 | 293 |
| 20. | 60.0 | 255 | 347 | 184 | 131 | 96.4 | 89.7 | 86.6 | 187 | 83.2 | 78.5 | 81.3 | 81.5 | 299 |
| 21. | 59.8 | 231 | 407 | 189 | 129 | 95.5 | 89.1 | 85.6 | 170 | 80.5 | 79.0 | 81.3 | 81.6 | 272 |
| 22. | 58.9 | 216 | 517 | 211 | 127 | 97.3 | 89.0 | 97.1 | 149 | 81.4 | 78.3 | 80.1 | 79.3 | 245 |
| 23. | 60.4 | 220 | 622 | 187 | 125 | 95.9 | 88.3 | 108 | 140 | 80.8 | 78.5 | 79.6 | 77.2 | 283 |
| 24. | 59.5 | 232 | 635 | 171 | 122 | 99.2 | 86.1 | 109 | 134 | 79.8 | 84.1 | 79.0 | 79.3 | 380 |
| 25. | 58.7 | 246 | 610 | 177 | 119 | 99.7 | 83.1 | 111 | 124 | 79.8 | 83.4 | 79.2 | 79.9 | 477 |
| 26. | 58.6 | 255 | 561 | 174 | 116 | 98.5 | 82.9 | 103 | 114 | 83.1 | 83.8 | 78.9 | 80.0 | 509 |
| 27. | 58.0 | 247 | 490 | 170 | 114 | 96.2 | 83.6 | 93.3 | 108 | 92.1 | 86.6 | 80.5 | 80.1 | 515 |
| 28. | 58.1 | 228 | 424 | 173 | 112 | 97.1 | 83.8 | 89.5 | 115 | 90.8 | 81.8 | 79.3 | 81.0 | 510 |
| 29. | 57.9 | 210 | 357 | 172 | 110 | 94.2 | 83.8 | 98.9 | 114 | 85.4 | 81.1 | 80.1 | 80.6 | 487 |
| 30. | 57.8 | 231 | 316 | | 111 | 91.5 | 84.8 | 97.6 | 113 | 83.3 | 82.0 | 85.6 | 80.4 | 468 |
| 31. | | 262 | 285 | | 110 | | 85.4 | | 111 | 81.7 | | 84.3 | | 454 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 1.+ | 14. | 29.+ | 30. | 26. | 21. | 6. | 24.+ | 6. | 2. | 23. | 1. |
| NQ | 57.8 | 57.3 | 285 | 144 | 110 | 91.5 | 82.9 | 85.6 | 85.0 | 79.8 | 77.7 | 78.5 | 77.2 | 79.9 |
| MQ | 63.1 | 168 | 462 | 176 | 142 | 102 | 92.6 | 96.2 | 121 | 90.0 | 83.0 | 86.9 | 86.5 | 230 |
| HQ | 75.3 | 275 | 670 | 269 | 172 | 112 | 141 | 115 | 213 | 128 | 100 | 122 | 107 | 527 |
| Tag | 6.+ | 31. | 9. | 1. | 8. | 7. | 11. | 7. | 18. | 1.+ | 13. | 4. | 7. | 28. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 23 | 65 | 23 | 20 | 14 | 13 | 13 | 17 | 13 | 11 | 12 | 12 | 32 |

| | 1955/2011 | | 1956/2012 | | | | | | 57 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1959 | 1972 | 1972 | 1972 | 1960 | 1960 | 1996 | 1964 | 1964 | 1959 | 1959 | 1976 | 1959 |
| NQ | 42.5 | 40.2 | 53.2 | 54.4 | 56.9 | 62.6 | 68.1 | 64.6 | 57.0 | 42.4 | 35.2 | 36.3 | 42.5 | 40.2 |
| MNQ | 99.5 | 129 | 156 | 172 | 170 | 163 | 120 | 105 | 95.4 | 88.4 | 86.1 | 87.6 | 99.4 | 129 |
| MQ | 156 | 231 | 285 | 276 | 285 | 238 | 165 | 141 | 130 | 111 | 107 | 119 | 155 | 232 |
| MHQ | 273 | 433 | 533 | 511 | 519 | 381 | 270 | 231 | 218 | 172 | 170 | 208 | 272 | 436 |
| HQ | 1180 | 1240 | 1340 | 1370 | 1260 | 1000 | 961 | 957 | 1180 | 600 | 774 | 1000 | 1180 | 1240 |
| Jahr | 1998 | 1986 | 1995 | 1995 | 1981 | 1988 + | 1984 | 1984 | 1956 | 1981 | 2007 | 1998 | 1998 | 1986 |

| | 1955/2011 | | 1956/2012 | | | | | | 57 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 32 | 40 | 36 | 40 | 32 | 23 | 19 | 18 | 15 | 14 | 17 | 21 | 32 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 57.3 | am 01.12.2011 | 57.3 | 77.7 | 77.2 | am 23.11.2012 |
| MQ m³/s | 141 | | 187 | 94.9 | 148 | |
| HQ m³/s | 670 | am 09.01.2012 bei W= 511 cm | 670 | 213 | 670 | am 09.01.2012 bei W= 511 cm |
| Nq l/(s km²) | 2.99 | | 2.99 | 4.05 | 4.03 | |
| Mq l/(s km²) | 7.33 | | 9.74 | 4.95 | 7.71 | |
| Hq l/(s km²) | 35.0 | | 35.0 | 11.1 | 35.0 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 231 | | 153 | 79 | 244 | |
| | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
| NQ m³/s | 35.2 | am 21.09.1959 | 40.2 | 35.2 | 35.2 | am 21.09.1959 |
| MNQ m³/s | 67.6 | | 88.5 | 76.6 | 73.0 | |
| MQ m³/s | 187 | | 245 | 129 | 187 | |
| MHQ m³/s | 805 | | 775 | 382 | 814 | |
| HQ m³/s | 1370 | am 02.02.1995 bei W= 657 cm | 1370 | 1180 | 1370 | am 02.02.1995 bei W= 657 cm |
| $HQ_1$ m³/s | 645 | | 619 | 216 | 645 | |
| $HQ_5$ m³/s | 1090 | | 1077 | 518 | 1090 | |
| MNq l/(s km²) | 3.53 | | 4.62 | 4.00 | 3.81 | |
| Mq l/(s km²) | 9.76 | | 12.8 | 6.73 | 9.76 | |
| MHq l/(s km²) | 42.0 | | 40.4 | 19.9 | 42.5 | |
| | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 308 | | 201 | 107 | 309 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 35.0 | 1.83 | 07.11.1949 | 2300 | 120 | 790 | 10.02.1946 |
| 2 | 35.2 | 1.84 | 21.09.1959 | 1580 | 82.5 | 688 | 16.03.1947 |
| 3 | 39.5 | 2.06 | 22.09.1947 | 1500 | 78.3 | 678 | 02.12.1939 |
| 4 | 41.4 | 2.16 | 08.09.1964 | 1370 | 71.5 | 657 | 02.02.1995 |
| 5 | 42.2 | 2.20 | 15.09.1991 | 1290 | 67.3 | 643 | 02.01.1987 |
| 6 | 42.5 | 2.22 | 02.11.1976 | 1260 | 65.8 | 642 | 14.03.1981 |
| 7 | 44.2 | 2.31 | 09.01.1947 | 1230 | 64.2 | 634 | 08.11.1940 |
| 8 | 44.2 | 2.31 | 11.11.1943 | 1220 | 63.7 | 632 | 22.03.1942 |
| 9 | 44.4 | 2.32 | 07.12.1953 | 1180 | 61.6 | 622 | 03.11.1998 |
| 10 | 50.2 | 2.62 | 24.02.1954 | 1180 | 61.6 | 629 | 17.07.1956 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1956/2012 57 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 666 | 666 | | | |
| 364 | 645 | 645 | 1360 | 978 | 282 |
| 363 | 636 | 636 | 1350 | 884 | 227 |
| 362 | 635 | 635 | 1290 | 824 | 210 |
| 361 | 622 | 622 | 1250 | 766 | 209 |
| 360 | 610 | 610 | 1230 | 727 | 190 |
| 359 | 588 | 588 | 1150 | 688 | 187 |
| 358 | 567 | 567 | 1120 | 658 | 179 |
| 357 | 561 | 561 | 1060 | 637 | 176 |
| 356 | 560 | 560 | 1040 | 613 | 176 |
| 350 | 470 | 506 | 899 | 509 | 155 |
| 340 | 330 | 407 | 764 | 415 | 141 |
| 330 | 255 | 315 | 629 | 364 | 133 |
| 320 | 220 | 244 | 546 | 327 | 128 |
| 300 | 171 | 171 | 452 | 271 | 121 |
| 270 | 145 | 144 | 376 | 217 | 111 |
| 240 | 115 | 111 | 315 | 181 | 93.9 |
| 210 | 106 | 105 | 270 | 156 | 84.7 |
| 183 | 98.3 | 98.3 | 234 | 138 | 76.9 |
| 150 | 92.2 | 93.3 | 210 | 120 | 68.9 |
| 130 | 89.3 | 90.8 | 198 | 110 | 58.1 |
| 120 | 88.4 | 89.1 | 192 | 106 | 55.8 |
| 110 | 86.4 | 88.3 | 187 | 102 | 52.1 |
| 100 | 85.2 | 86.8 | 180 | 98.0 | 49.9 |
| 90 | 84.1 | 85.8 | 177 | 94.9 | 47.8 |
| 80 | 83.2 | 84.5 | 172 | 91.6 | 46.4 |
| 70 | 81.7 | 83.6 | 167 | 88.7 | 44.9 |
| 60 | 80.5 | 83.1 | 163 | 85.9 | 42.8 |
| 50 | 79.2 | 81.9 | 158 | 83.0 | 40.9 |
| 40 | 78.5 | 81.0 | 155 | 79.7 | 39.6 |
| 30 | 69.9 | 80.4 | 152 | 75.0 | 38.3 |
| 25 | 66.7 | 79.9 | 149 | 72.3 | 37.6 |
| 20 | 63.1 | 79.6 | 147 | 69.6 | 37.6 |
| 15 | 61.0 | 79.2 | 144 | 65.8 | 37.0 |
| 10 | 60.0 | 78.9 | 141 | 60.3 | 37.0 |
| 9 | 59.8 | 78.9 | 141 | 58.7 | 37.0 |
| 8 | 59.5 | 78.8 | 140 | 57.0 | 37.0 |
| 7 | 58.9 | 78.8 | 140 | 55.1 | 37.0 |
| 6 | 58.7 | 78.8 | 140 | 52.9 | 37.0 |
| 5 | 58.6 | 78.5 | 138 | 49.9 | 37.0 |
| 4 | 58.1 | 78.5 | 136 | 47.5 | 37.0 |
| 3 | 58.0 | 78.3 | 135 | 46.1 | 37.0 |
| 2 | 57.9 | 77.9 | 134 | 44.2 | 36.3 |
| 1 | 57.8 | 77.7 | 133 | 41.5 | 35.7 |
| 0 | 57.3 | 77.2 | 131 | 35.2 | 35.2 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1936/2012
Extremwerte ab 1936
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 19910 km²
PNP : NN + 20.00 m
Lage: 256.1 km unterhalb von Werra und Fulda, links

# Q
m³/s

Pegel : Liebenau Nr. 47500200
Gewässer : Weser
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 75.8 | 66.3 | 289 | 283 | 189 | 113 | 91.5 | 94.9 | 94.6 | 117 | 79.4 | 80.1 | 81.5 | 76.5 |
| 2. | 71.4 | 67.2 | 322 | 261 | 180 | 109 | 92.0 | 94.6 | 90.0 | 128 | 78.5 | 76.1 | 82.0 | 81.3 |
| 3. | 73.1 | 67.7 | 360 | 235 | 179 | 110 | 91.6 | 98.0 | 87.5 | 108 | 78.5 | 77.4 | 82.5 | 87.5 |
| 4. | 73.7 | 77.0 | 372 | 209 | 183 | 116 | 90.9 | 104 | 89.9 | 97.1 | 77.7 | 96.8 | 81.5 | 86.1 |
| 5. | 72.8 | 79.6 | 423 | 202 | 185 | 112 | 91.7 | 106 | 89.6 | 94.5 | 78.3 | 121 | 86.7 | 88.4 |
| 6. | 76.9 | 78.6 | 541 | 188 | 183 | 107 | 98.0 | 109 | 84.0 | 94.7 | 78.2 | 117 | 94.6 | 88.0 |
| 7. | 78.2 | 85.0 | 560 | 181 | 180 | 110 | 96.3 | 115 | 86.3 | 90.4 | 77.9 | 118 | 100 | 85.3 |
| 8. | 74.4 | 124 | 609 | 176 | 187 | 109 | 92.8 | 106 | 91.0 | 97.5 | 80.8 | 107 | 102 | 81.1 |
| 9. | 72.6 | 142 | 647 | 166 | 189 | 106 | 103 | 99.9 | 97.8 | 106 | 81.5 | 96.0 | 100 | 79.2 |
| 10. | 73.4 | 136 | 650 | 162 | 183 | 106 | 106 | 93.3 | 95.0 | 96.7 | 83.4 | 88.9 | 94.8 | 97.8 |
| 11. | 72.5 | 128 | 580 | 160 | 179 | 110 | 133 | 90.5 | 92.7 | 86.5 | 85.9 | 89.4 | 89.9 | 103 |
| 12. | 70.3 | 125 | 523 | 156 | 172 | 109 | 111 | 85.5 | 91.7 | 83.8 | 97.2 | 85.2 | 90.9 | 104 |
| 13. | 67.4 | 134 | 505 | 153 | 166 | 108 | 97.7 | 87.3 | 101 | 84.0 | 98.2 | 85.3 | 88.2 | 107 |
| 14. | 68.9 | 141 | 484 | 151 | 161 | 108 | 95.1 | 89.9 | 103 | 81.4 | 91.4 | 87.5 | 93.6 | 102 |
| 15. | 68.3 | 141 | 456 | 162 | 156 | 114 | 98.7 | 83.3 | 110 | 79.2 | 87.1 | 85.5 | 93.9 | 125 |
| 16. | 71.4 | 150 | 423 | 171 | 151 | 109 | 102 | 91.5 | 147 | 84.2 | 86.4 | 85.5 | 85.6 | 140 |
| 17. | 70.5 | 250 | 375 | 172 | 148 | 103 | 96.3 | 90.9 | 190 | 83.3 | 77.7 | 89.6 | 81.7 | 177 |
| 18. | 68.4 | 256 | 345 | 178 | 146 | 99.8 | 91.3 | 91.3 | 211 | 83.9 | 77.0 | 90.3 | 79.3 | 230 |
| 19. | 69.6 | 269 | 318 | 186 | 143 | 99.3 | 90.5 | 87.2 | 209 | 85.0 | 77.7 | 84.6 | 85.4 | 286 |
| 20. | 67.6 | 269 | 366 | 200 | 139 | 99.6 | 89.8 | 84.6 | 200 | 81.0 | 78.7 | 80.4 | 82.7 | 303 |
| 21. | 66.7 | 251 | 415 | 201 | 139 | 97.2 | 87.6 | 82.8 | 181 | 78.1 | 78.0 | 82.2 | 80.0 | 285 |
| 22. | 66.7 | 229 | 500 | 223 | 135 | 97.7 | 86.0 | 88.3 | 155 | 82.4 | 77.7 | 80.0 | 78.7 | 257 |
| 23. | 70.1 | 233 | 595 | 212 | 133 | 98.1 | 90.6 | 106 | 143 | 80.0 | 76.9 | 81.7 | 78.3 | 276 |
| 24. | 67.5 | 236 | 646 | 189 | 129 | 101 | 84.6 | 107 | 139 | 80.7 | 86.0 | 78.4 | 76.2 | 379 |
| 25. | 67.5 | 259 | 622 | 198 | 125 | 102 | 82.7 | 112 | 128 | 79.5 | 82.6 | 78.5 | 79.9 | 442 |
| 26. | 64.0 | 262 | 584 | 196 | 121 | 98.6 | 83.0 | 108 | 117 | 81.7 | 82.8 | 80.1 | 79.9 | 487 |
| 27. | 65.3 | 259 | 519 | 192 | 118 | 96.5 | 85.4 | 92.1 | 109 | 90.8 | 86.9 | 78.8 | 79.8 | 498 |
| 28. | 67.1 | 243 | 463 | 191 | 116 | 100 | 83.8 | 88.1 | 117 | 93.1 | 83.1 | 78.0 | 79.9 | 505 |
| 29. | 68.0 | 224 | 394 | 191 | 113 | 94.1 | 82.4 | 93.8 | 114 | 84.2 | 79.9 | 78.8 | 81.6 | 486 |
| 30. | 67.5 | 232 | 348 | | 114 | 92.3 | 82.4 | 97.2 | 117 | 83.7 | 80.0 | 85.7 | 80.7 | 472 |
| 31. | | 271 | 313 | | 112 | | 86.7 | | 110 | 79.6 | | 84.3 | | 461 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 1. | 1. | 14. | 31. | 30. | 29.+ | 21. | 6. | 21. | 23. | 2. | 24. | 1. |
| NQ | 64.0 | 66.3 | 289 | 151 | 112 | 92.3 | 82.4 | 82.8 | 84.0 | 78.1 | 76.9 | 76.1 | 76.2 | 76.5 |
| MQ | 70.3 | 177 | 469 | 191 | 153 | 105 | 93.4 | 95.9 | 122 | 89.5 | 82.2 | 88.0 | 85.7 | 228 |
| HQ | 92.2 | 280 | 658 | 303 | 200 | 131 | 165 | 137 | 219 | 140 | 115 | 148 | 115 | 511 |
| Tag | 7. | 31. | 9.+ | 1. | 1.+ | 4. | 11. | 25. | 19. | 2. | 13. | 5. | 8. | 28. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 24 | 63 | 24 | 21 | 14 | 13 | 12 | 16 | 12 | 11 | 12 | 11 | 31 |

| | 1953/2011 | | 1954/2012 – 59 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1959 | 1977 | 1972 | 1972 | 1960 | 1960 | 1964 | 1964 | 1964 | 1959 | 1959 | 1976 | 1959 |
| NQ | 37.2 | 40.6 | 46.2 | 48.4 | 53.5 | 57.2 | 64.2 | 58.1 | 46.3 | 30.5 | 27.0 | 23.6 | 37.2 | 40.6 |
| MNQ | 101 | 134 | 162 | 180 | 177 | 166 | 119 | 103 | 93.1 | 87.1 | 84.6 | 88.3 | 101 | 134 |
| MQ | 158 | 234 | 292 | 282 | 292 | 244 | 168 | 141 | 131 | 114 | 108 | 124 | 159 | 237 |
| MHQ | 267 | 421 | 525 | 495 | 521 | 385 | 267 | 232 | 221 | 183 | 174 | 220 | 268 | 428 |
| HQ | 1190 | 1120 | 1310 | 1270 | 1310 | 1070 | 872 | 912 | 1160 | 597 | 606 | 1160 | 1190 | 1120 |
| Jahr | 1998 | 1986 | 2003 | 1995 | 1981 | 1988 | 1984 | 1984 | 1956 | 1981 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 31 | 39 | 35 | 39 | 32 | 23 | 18 | 18 | 15 | 14 | 17 | 21 | 32 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 64.0 | am 26.11.2011 | 64.0 | 76.1 | 76.1 | am 02.10.2012 |
| MQ m³/s | 145 | | 195 | 95.3 | 151 | |
| HQ m³/s | 658 | am 10.01.2012 bei W= 539 cm | 658 | 219 | 658 | am 10.01.2012 bei W= 539 cm |
| Nq l/(s km²) | 3.21 | | 3.21 | 3.82 | 3.82 | |
| Mq l/(s km²) | 7.29 | | 9.82 | 4.79 | 7.57 | |
| Hq l/(s km²) | 33.0 | | 33.0 | 11.0 | 33.0 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 230 | | 154 | 76 | 239 | |
| | 1954/2012 (*) 59 Jahre | | | | 1954/2012 | |
| NQ m³/s | 23.6 | am 19.10.1959 | 37.2 | 23.6 | 23.6 | am 19.10.1959 |
| MNQ m³/s | 65.8 | | 88.7 | 73.5 | 70.2 | |
| MQ m³/s | 190 | | 250 | 131 | 191 | |
| MHQ m³/s | 778 | | 748 | 380 | 793 | |
| HQ m³/s | 1310 | am 15.03.1981 | 1310 | 1160 | 1310 | am 15.03.1981 |
| $HQ_1$ m³/s | 657 | | 617 | 233 | 657 | |
| $HQ_5$ m³/s | 1005 | | 991 | 552 | 1005 | |
| MNq l/(s km²) | 3.30 | | 4.46 | 3.69 | 3.53 | |
| Mq l/(s km²) | 9.54 | | 12.6 | 6.58 | 9.59 | |
| MHq l/(s km²) | 39.1 | | 37.6 | 19.1 | 39.8 | |
| | 1954/2012 (*) 59 Jahre | | | | 1954/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 301 | | 197 | 105 | 303 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 23.6 | 1.19 | 19.10.1959 | 1310 | 65.8 | 694 | 06.01.2003 |
| 2 | 30.5 | 1.53 | 30.08.1964 | 1310 | 65.8 | 695 | 15.03.1981 |
| 3 | 35.0 | 1.76 | 08.09.1991 | 1270 | 63.8 | 690 | 03.02.1995 |
| 4 | 35.5 | 1.78 | 14.09.1976 | 1220 | 61.3 | 687 | 03.01.1987 |
| 5 | 42.0 | 2.11 | 01.11.1991 | 1190 | 59.8 | 681 | 04.11.1998 |
| 6 | 44.9 | 2.26 | 19.11.1971 | 1160 | 58.3 | 696 | 18.07.1956 |
| 7 | 46.5 | 2.34 | 10.01.1954 | 1120 | 56.3 | 673 | 04.01.1994 |
| 8 | 46.8 | 2.35 | 22.11.1983 | 1100 | 55.2 | 673 | 29.03.1988 |
| 9 | 47.5 | 2.39 | 24.10.1990 | 1090 | 54.7 | 672 | 29.03.1987 |
| 10 | 47.8 | 2.40 | 07.10.1973 | 1050 | 52.7 | 661 | 28.02.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1954/2012 – 59 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 650 | 650 | | | |
| 364 | 647 | 647 | 1300 | 985 | 302 |
| 363 | 646 | 646 | 1270 | 872 | 251 |
| 362 | 622 | 622 | 1220 | 816 | 225 |
| 361 | 609 | 609 | 1200 | 768 | 212 |
| 360 | 595 | 595 | 1190 | 724 | 211 |
| 359 | 584 | 584 | 1160 | 689 | 202 |
| 358 | 580 | 580 | 1130 | 659 | 182 |
| 357 | 560 | 560 | 1120 | 629 | 180 |
| 356 | 541 | 541 | 1040 | 606 | 179 |
| 350 | 463 | 498 | 918 | 510 | 166 |
| 340 | 348 | 423 | 768 | 424 | 154 |
| 330 | 262 | 322 | 652 | 373 | 144 |
| 320 | 233 | 257 | 535 | 338 | 135 |
| 300 | 190 | 189 | 470 | 282 | 126 |
| 270 | 153 | 153 | 400 | 226 | 114 |
| 240 | 118 | 115 | 342 | 188 | 97.9 |
| 210 | 109 | 107 | 299 | 161 | 87.2 |
| 183 | 98.2 | 98.2 | 254 | 141 | 78.2 |
| 150 | 92.0 | 93.1 | 228 | 122 | 64.8 |
| 130 | 89.9 | 90.6 | 212 | 113 | 55.5 |
| 120 | 87.5 | 89.6 | 204 | 108 | 52.9 |
| 110 | 86.0 | 87.6 | 197 | 104 | 51.5 |
| 100 | 85.0 | 86.3 | 192 | 99.4 | 50.4 |
| 90 | 83.9 | 85.5 | 188 | 96.1 | 47.7 |
| 80 | 82.7 | 84.3 | 184 | 92.8 | 44.9 |
| 70 | 81.0 | 83.3 | 176 | 89.6 | 44.3 |
| 60 | 79.9 | 82.5 | 171 | 86.1 | 42.3 |
| 50 | 78.6 | 81.5 | 164 | 82.9 | 39.3 |
| 40 | 77.9 | 80.1 | 160 | 79.3 | 37.8 |
| 30 | 75.8 | 79.6 | 157 | 74.9 | 36.1 |
| 25 | 72.8 | 79.2 | 154 | 72.5 | 35.5 |
| 20 | 70.5 | 78.7 | 152 | 69.8 | 34.6 |
| 15 | 68.4 | 78.3 | 149 | 65.8 | 32.1 |
| 10 | 67.6 | 77.9 | 145 | 59.7 | 30.4 |
| 9 | 67.6 | 77.9 | 144 | 58.2 | 30.4 |
| 8 | 67.5 | 77.9 | 144 | 56.7 | 30.4 |
| 7 | 67.4 | 77.9 | 142 | 54.6 | 30.4 |
| 6 | 67.2 | 77.7 | 141 | 52.5 | 29.5 |
| 5 | 67.1 | 77.4 | 139 | 50.1 | 29.5 |
| 4 | 67.1 | 77.0 | 139 | 47.5 | 28.7 |
| 3 | 66.7 | 76.9 | 139 | 44.9 | 28.7 |
| 2 | 66.3 | 76.5 | 139 | 42.0 | 27.8 |
| 1 | 65.3 | 76.2 | 138 | 38.6 | 27.0 |
| 0 | 64.0 | 76.1 | 136 | 23.6 | 23.6 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1956/2012
Extremwerte ab 1954
die Abflüsse sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 22112 km²
PNP : NN + 7.99 m
Lage: 308.9 km unterhalb von Werra und Fulda, rechts

# Q

m³/s

Pegel : Dörverden Nr. 47900209
Gewässer : Weser
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 84.5 | 82.5 | 303 | 315 | 207 | 133 | 106 | 108 | 107 | 121 | 89.9 | 89.0 | 91.0 | 87.7 |
| 2. | 85.6 | 79.8 | 330 | 285 | 202 | 130 | 104 | 99.5 | 101 | 133 | 86.6 | 85.5 | 93.6 | 93.4 |
| 3. | 88.0 | 84.3 | 381 | 262 | 198 | 131 | 105 | 112 | 97.1 | 121 | 87.3 | 85.8 | 89.8 | 97.0 |
| 4. | 84.6 | 89.4 | 389 | 233 | 198 | 132 | 106 | 110 | 98.7 | 108 | 87.7 | 105 | 90.7 | 94.7 |
| 5. | 84.2 | 92.8 | 431 | 225 | 201 | 132 | 104 | 115 | 98.3 | 105 | 85.0 | 128 | 98.2 | 102 |
| 6. | 88.1 | 92.0 | 554 | 213 | 201 | 128 | 109 | 118 | 91.3 | 103 | 89.1 | 121 | 105 | 94.8 |
| 7. | 90.4 | 98.6 | 588 | 215 | 196 | 130 | 109 | 120 | 96.0 | 99.6 | 85.5 | 134 | 106 | 96.2 |
| 8. | 85.7 | 134 | 625 | 238 | 202 | 129 | 113 | 116 | 102 | 101 | 88.9 | 115 | 113 | 92.4 |
| 9. | 83.3 | 152 | 666 | 226 | 210 | 126 | 114 | 112 | 111 | 117 | 88.6 | 110 | 109 | 93.5 |
| 10. | 85.1 | 152 | 684 | 200 | 203 | 122 | 116 | 104 | 106 | 105 | 88.8 | 102 | 104 | 106 |
| 11. | 84.0 | 140 | 652 | 193 | 196 | 123 | 139 | 98.9 | 95.3 | 97.4 | 89.7 | 99.1 | 103 | 116 |
| 12. | 83.5 | 137 | 582 | 178 | 192 | 124 | 131 | 98.1 | 101 | 94.1 | 103 | 92.0 | 101 | 116 |
| 13. | 81.3 | 143 | 542 | 164 | 183 | 123 | 109 | 97.6 | 107 | 94.2 | 108 | 97.5 | 99.0 | 119 |
| 14. | 84.2 | 152 | 523 | 166 | 173 | 123 | 109 | 95.9 | 113 | 89.4 | 99.3 | 94.1 | 103 | 113 |
| 15. | 81.1 | 152 | 490 | 176 | 171 | 126 | 108 | 96.1 | 118 | 88.3 | 94.0 | 98.6 | 106 | 128 |
| 16. | 80.3 | 157 | 461 | 187 | 166 | 125 | 116 | 98.1 | 141 | 90.9 | 95.4 | 89.7 | 93.8 | 153 |
| 17. | 84.8 | 247 | 411 | 186 | 165 | 118 | 110 | 103 | 182 | 93.4 | 88.7 | 97.2 | 91.0 | 173 |
| 18. | 81.1 | 273 | 379 | 192 | 162 | 112 | 103 | 101 | 215 | 91.5 | 86.0 | 99.7 | 91.8 | 227 |
| 19. | 81.5 | 279 | 347 | 201 | 158 | 114 | 102 | 99.1 | 213 | 89.5 | 86.5 | 97.2 | 94.7 | 281 |
| 20. | 83.8 | 285 | 385 | 218 | 154 | 114 | 102 | 93.3 | 208 | 88.4 | 88.3 | 90.5 | 93.2 | 309 |
| 21. | 80.3 | 271 | 444 | 216 | 152 | 109 | 101 | 92.2 | 188 | 86.8 | 86.0 | 93.1 | 89.1 | 301 |
| 22. | 81.3 | 248 | 522 | 235 | 151 | 112 | 98.0 | 96.3 | 165 | 90.4 | 87.1 | 90.3 | 87.9 | 273 |
| 23. | 79.8 | 252 | 624 | 236 | 148 | 110 | 99.7 | 115 | 150 | 89.5 | 86.4 | 86.2 | 87.3 | 273 |
| 24. | 81.9 | 251 | 698 | 213 | 145 | 115 | 96.3 | 115 | 145 | 87.4 | 93.2 | 87.8 | 86.8 | 383 |
| 25. | 82.4 | 278 | 691 | 218 | 142 | 115 | 95.7 | 120 | 136 | 87.0 | 93.8 | 89.6 | 90.9 | 440 |
| 26. | 79.8 | 276 | 659 | 218 | 139 | 114 | 95.6 | 119 | 124 | 90.1 | 89.2 | 90.5 | 93.3 | 495 |
| 27. | 83.0 | 277 | 594 | 213 | 136 | 110 | 93.2 | 105 | 117 | 94.8 | 99.0 | 90.6 | 88.1 | 512 |
| 28. | 79.7 | 266 | 526 | 212 | 135 | 110 | 94.2 | 97.2 | 123 | 99.1 | 90.7 | 87.2 | 93.0 | 519 |
| 29. | 81.8 | 243 | 451 | 212 | 134 | 110 | 94.6 | 102 | 122 | 93.8 | 90.1 | 89.8 | 89.7 | 507 |
| 30. | 79.3 | 241 | 389 | | 136 | 105 | 94.9 | 107 | 126 | 92.0 | 88.6 | 94.4 | 93.0 | 493 |
| 31. | | 281 | 349 | | 134 | | 94.1 | | 115 | 88.9 | | 95.4 | | 478 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 2. | 1. | 13. | 29.+ | 30. | 27. | 21. | 6. | 21. | 5. | 2. | 24. | 1. |
| NQ | 79.3 | 79.8 | 303 | 164 | 134 | 105 | 93.2 | 92.2 | 91.3 | 86.8 | 85.0 | 85.5 | 86.8 | 87.7 |
| MQ | 83.1 | 191 | 505 | 215 | 171 | 120 | 106 | 105 | 129 | 97.8 | 90.7 | 97.6 | 95.9 | 238 |
| HQ | 104 | 293 | 704 | 334 | 223 | 150 | 172 | 142 | 229 | 152 | 129 | 157 | 143 | 523 |
| Tag | 3. | 20. | 24. | 1. | 1.+ | 1. | 11. | 25. | 20. | 3. | 13. | 5. | 5. | 28. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 23 | 61 | 24 | 21 | 14 | 13 | 12 | 16 | 12 | 11 | 12 | 11 | 29 |

| | 1973/2011 | | 1974/2012 | | | | | | 39 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1976 | 1977 | 1996 | 1996 | 1991 | 1976 | 1976 + | 1976 | 1976 | 1991 | 1976 | 1976 | 1976 |
| NQ | 27.6 | 49.7 | 49.7 | 86.6 | 99.6 | 94.8 | 79.3 | 67.6 | 59.6 | 37.8 | 37.2 | 30.4 | 27.6 | 49.7 |
| MNQ | 106 | 136 | 182 | 201 | 201 | 180 | 126 | 106 | 93.7 | 85.4 | 84.4 | 90.0 | 107 | 136 |
| MQ | 173 | 242 | 333 | 312 | 327 | 257 | 171 | 145 | 122 | 110 | 109 | 126 | 173 | 242 |
| MHQ | 302 | 437 | 585 | 549 | 565 | 408 | 279 | 258 | 222 | 185 | 180 | 228 | 302 | 441 |
| HQ | 1140 | 922 | 1300 | 1310 | 1320 | 1060 | 800 | 861 | 650 | 575 | 565 | 971 | 1140 | 922 |
| Jahr | 1998 | 1993 | 1987 | 1995 | 1981 | 1988 | 1984 | 1984 | 2002 | 1981 | 2007 | 1998 | 1998 | 1993 |
| | 1973/2011 | | 1974/2012 | | | | | | 39 Jahre | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 20 | 29 | 40 | 35 | 40 | 30 | 21 | 17 | 15 | 13 | 13 | 15 | 20 | 29 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 79.3 | am 30.11.2011 | 79.3 | 85.0 | 85.0 | am 05.09.2012 |
| MQ m³/s | 160 | | 215 | 104 | 165 | |
| HQ m³/s | 704 | am 24.01.2012 bei W= 648 cm | 704 | 229 | 704 | am 24.01.2012 bei W= 648 cm |
| Nq l/(s km²) | 3.59 | | 3.59 | 3.84 | 3.84 | |
| Mq l/(s km²) | 7.22 | | 9.74 | 4.73 | 7.45 | |
| Hq l/(s km²) | 31.8 | | 31.8 | 10.4 | 31.8 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 228 | | 153 | 75 | 236 | |
| | 1974/2012 (*) 39 Jahre | | | | 1974/2012 | |
| NQ m³/s | 27.6 | am 05.11.1976 | 27.6 | 30.4 | 27.6 | am 05.11.1976 |
| MNQ m³/s | 70.1 | | 95.7 | 76.9 | 75.1 | |
| MQ m³/s | 202 | | 274 | 130 | 202 | |
| MHQ m³/s | 807 | | 796 | 376 | 823 | |
| HQ m³/s | 1320 | am 15.03.1981 bei W= 855 cm | 1320 | 971 | 1320 | am 15.03.1981 bei W= 855 cm |
| $HQ_1$ m³/s | 692 | | 652 | 258 | 692 | |
| $HQ_5$ m³/s | 1007 | | 997 | 574 | 1007 | |
| MNq l/(s km²) | 3.17 | | 4.33 | 3.48 | 3.40 | |
| Mq l/(s km²) | 9.14 | | 12.4 | 5.88 | 9.14 | |
| MHq l/(s km²) | 36.5 | | 36.0 | 17.0 | 37.2 | |
| | 1974/2012 (*) 39 Jahre | | | | 1974/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 288 | | 195 | 93 | 289 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 23.8 | 1.08 | 04.10.1959 | 1320 | 59.7 | 855 | 15.03.1981 |
| 2 | 27.6 | 1.25 | 05.11.1976 | 1310 | 59.2 | 854 | 03.02.1995 |
| 3 | 37.2 | 1.68 | 11.09.1991 | 1300 | 58.8 | 851 | 04.01.1987 |
| 4 | 39.5 | 1.79 | 02.09.1964 | 1180 | 53.4 | 827 | 05.01.1994 |
| 5 | 46.7 | 2.11 | 01.11.1991 | 1160 | 52.5 | 809 | 17.01.2011 |
| 6 | 47.7 | 2.16 | 15.12.1953 | 1140 | 51.6 | 819 | 07.01.2003 |
| 7 | 47.8 | 2.16 | 08.10.1973 | 1140 | 51.6 | 820 | 05.11.1998 |
| 8 | 49.2 | 2.23 | 13.11.1983 | 1120 | 50.7 | 818 | 19.01.1968 |
| 9 | 50.3 | 2.27 | 10.08.1998 | 1110 | 50.2 | 815 | 27.02.1970 |
| 10 | 51.5 | 2.33 | 02.02.1972 | 1110 | 50.2 | 842 | 20.07.1956 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1974/2012 39 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 698 | 698 | | | |
| 364 | 691 | 691 | 1310 | 1050 | 403 |
| 363 | 684 | 684 | 1300 | 899 | 377 |
| 362 | 666 | 666 | 1300 | 847 | 366 |
| 361 | 659 | 659 | 1210 | 804 | 352 |
| 360 | 652 | 652 | 1200 | 756 | 341 |
| 359 | 625 | 625 | 1170 | 727 | 337 |
| 358 | 624 | 624 | 1120 | 698 | 332 |
| 357 | 594 | 594 | 1070 | 678 | 322 |
| 356 | 588 | 588 | 1040 | 658 | 300 |
| 350 | 522 | 522 | 895 | 546 | 283 |
| 340 | 381 | 444 | 812 | 446 | 260 |
| 330 | 279 | 349 | 715 | 392 | 228 |
| 320 | 248 | 273 | 619 | 356 | 202 |
| 300 | 213 | 212 | 485 | 301 | 168 |
| 270 | 166 | 166 | 371 | 241 | 127 |
| 240 | 135 | 131 | 319 | 200 | 103 |
| 210 | 119 | 117 | 283 | 171 | 87.1 |
| 183 | 111 | 111 | 270 | 148 | 79.3 |
| 150 | 104 | 105 | 243 | 126 | 69.6 |
| 130 | 99.0 | 101 | 229 | 116 | 64.0 |
| 120 | 97.5 | 98.9 | 221 | 112 | 60.6 |
| 110 | 95.9 | 97.4 | 215 | 108 | 57.2 |
| 100 | 94.4 | 96.0 | 208 | 105 | 53.1 |
| 90 | 93.3 | 94.8 | 201 | 102 | 52.1 |
| 80 | 90.9 | 94.0 | 195 | 98.1 | 49.7 |
| 70 | 89.9 | 93.3 | 189 | 95.0 | 49.7 |
| 60 | 89.1 | 91.5 | 183 | 92.1 | 46.2 |
| 50 | 88.3 | 90.5 | 177 | 89.1 | 46.2 |
| 40 | 86.8 | 89.7 | 174 | 85.6 | 43.3 |
| 30 | 85.6 | 88.9 | 168 | 82.0 | 41.5 |
| 25 | 84.6 | 88.4 | 166 | 79.7 | 40.6 |
| 20 | 84.0 | 87.8 | 164 | 77.1 | 39.6 |
| 15 | 82.5 | 87.3 | 161 | 73.6 | 38.8 |
| 10 | 81.5 | 86.8 | 157 | 69.1 | 38.8 |
| 9 | 81.3 | 86.6 | 157 | 67.8 | 37.8 |
| 8 | 81.3 | 86.5 | 155 | 66.4 | 37.8 |
| 7 | 81.1 | 86.4 | 151 | 64.8 | 35.9 |
| 6 | 81.1 | 86.2 | 151 | 62.6 | 35.1 |
| 5 | 80.3 | 86.2 | 150 | 59.0 | 35.1 |
| 4 | 80.3 | 86.0 | 148 | 54.8 | 35.1 |
| 3 | 80.3 | 85.8 | 148 | 50.0 | 33.2 |
| 2 | 79.8 | 85.8 | 148 | 46.6 | 32.2 |
| 1 | 79.7 | 85.5 | 147 | 41.9 | 30.4 |
| 0 | 79.3 | 85.0 | 146 | 27.6 | 27.6 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1956/2012
Extremwerte ab 1951
die Abflüsse sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 37720 km²
PNP : NN + 4.79 m
Lage: 331.3 km unterhalb v. Werra u. Fulda, links

# Q

m³/s

Pegel : Intschede Nr. 49100101
Gewässer : Weser
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 113 | 107 | 440 | 531 | 348 | 208 | 160 | 131 | 150 | 170 | 111 | 112 | 126 | 131 |
| 2. | 111 | 103 | 470 | 463 | 341 | 205 | 155 | 145 | 142 | 179 | 115 | 106 | 127 | 135 |
| 3. | 106 | 108 | 531 | 419 | 335 | 203 | 155 | 155 | 135 | 165 | 114 | 102 | 125 | 138 |
| 4. | 102 | 122 | 554 | 377 | 335 | 202 | 154 | 155 | 137 | 148 | 105 | 131 | 129 | 138 |
| 5. | 101 | 127 | 613 | 360 | 331 | 210 | 162 | 159 | 134 | 144 | 104 | 170 | 134 | 147 |
| 6. | 106 | 126 | 754 | 333 | 328 | 211 | 168 | 171 | 124 | 140 | 105 | 180 | 148 | 142 |
| 7. | 109 | 143 | 828 | 298 | 318 | 207 | 161 | 187 | 130 | 139 | 103 | 205 | 151 | 140 |
| 8. | 110 | 178 | 880 | 293 | 319 | 205 | 170 | 175 | 149 | 136 | 109 | 188 | 160 | 139 |
| 9. | 112 | 223 | 943 | 295 | 330 | 200 | 174 | 163 | 160 | 157 | 107 | 165 | 159 | 133 |
| 10. | 113 | 230 | 974 | 288 | 325 | 196 | 168 | 150 | 154 | 145 | 105 | 153 | 153 | 154 |
| 11. | 115 | 214 | 967 | 282 | 315 | 197 | 196 | 140 | 139 | 128 | 112 | 142 | 150 | 169 |
| 12. | 113 | 208 | 904 | 272 | 306 | 198 | 201 | 131 | 140 | 123 | 125 | 131 | 150 | 177 |
| 13. | 109 | 209 | 842 | 260 | 294 | 196 | 176 | 131 | 149 | 120 | 133 | 140 | 145 | 180 |
| 14. | 111 | 220 | 812 | 261 | 284 | 197 | 161 | 132 | 159 | 113 | 136 | 143 | 150 | 173 |
| 15. | 108 | 220 | 759 | 272 | 279 | 202 | 160 | 125 | 168 | 112 | 122 | 146 | 150 | 186 |
| 16. | 104 | 232 | 713 | 290 | 272 | 201 | 166 | 128 | 197 | 117 | 121 | 133 | 137 | 221 |
| 17. | 108 | 324 | 647 | 294 | 269 | 183 | 166 | 135 | 248 | 121 | 108 | 143 | 130 | 261 |
| 18. | 101 | 393 | 582 | 301 | 263 | 177 | 155 | 133 | 280 | 120 | 104 | 149 | 133 | 320 |
| 19. | 101 | 419 | 535 | 310 | 257 | 176 | 153 | 131 | 288 | 113 | 103 | 142 | 134 | 380 |
| 20. | 102 | 421 | 565 | 337 | 250 | 178 | 146 | 124 | 298 | 112 | 102 | 132 | 130 | 410 |
| 21. | 98.2 | 395 | 653 | 335 | 248 | 170 | 143 | 128 | 287 | 109 | 104 | 130 | 129 | 410 |
| 22. | 101 | 364 | 750 | 344 | 242 | 175 | 140 | 135 | 258 | 107 | 102 | 124 | 124 | 373 |
| 23. | 102 | 366 | 867 | 353 | 238 | 171 | 131 | 161 | 227 | 111 | 101 | 115 | 122 | 361 |
| 24. | 105 | 375 | 967 | 335 | 233 | 178 | 131 | 160 | 215 | 105 | 109 | 118 | 123 | 490 |
| 25. | 112 | 408 | 1000 | 344 | 225 | 181 | 125 | 162 | 200 | 106 | 119 | 118 | 125 | 603 |
| 26. | 108 | 415 | 1000 | 362 | 221 | 180 | 122 | 168 | 182 | 113 | 112 | 117 | 132 | 689 |
| 27. | 114 | 421 | 961 | 362 | 215 | 174 | 116 | 152 | 170 | 118 | 126 | 120 | 130 | 720 |
| 28. | 107 | 401 | 879 | 362 | 212 | 169 | 119 | 140 | 171 | 129 | 118 | 118 | 136 | 724 |
| 29. | 106 | 369 | 786 | 356 | 208 | 167 | 118 | 141 | 174 | 119 | 111 | 121 | 134 | 712 |
| 30. | 104 | 364 | 689 | | 209 | 158 | 119 | 152 | 179 | 114 | 114 | 124 | 135 | 689 |
| 31. | | 408 | 614 | | 208 | | 119 | | 164 | 108 | | 136 | | 663 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 21. | 2. | 1. | 13. | 29.+ | 30. | 27. | 20. | 6. | 24. | 23. | 3. | 23. | 1. |
| NQ | 98.2 | 103 | 440 | 260 | 208 | 158 | 116 | 124 | 124 | 105 | 101 | 102 | 122 | 131 |
| MQ | 107 | 278 | 757 | 334 | 276 | 189 | 151 | 147 | 184 | 127 | 112 | 137 | 137 | 333 |
| HQ | 143 | 431 | 1010 | 573 | 359 | 228 | 239 | 201 | 314 | 201 | 164 | 214 | 179 | 729 |
| Tag | 11. | 26. | 25.+ | 1. | 1.+ | 1. | 12. | 8. | 20. | 3. | 14. | 7. | 11. | 27. |
| $h_N$ mm / $h_A$ mm | 7 | 20 | 54 | 22 | 20 | 13 | 11 | 10 | 13 | 9 | 8 | 10 | 9 | 24 |
| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
| Jahr | 1949 | 1959 | 1977 | 1954 | 1972 | 1960 | 1960 | 1954 | 1954 | 1976 | 1959 | 1959 | 1949 | 1959 |
| NQ | 67.2 | 69.3 | 99.2 | 80.5 | 110 | 106 | 109 | 97.1 | 92.3 | 71.1 | 59.7 | 62.0 | 67.2 | 69.3 |
| MNQ | 183 | 236 | 286 | 321 | 314 | 293 | 208 | 176 | 157 | 145 | 143 | 151 | 182 | 234 |
| MQ | 281 | 391 | 490 | 509 | 506 | 420 | 281 | 236 | 213 | 188 | 178 | 203 | 274 | 390 |
| MHQ | 451 | 650 | 807 | 829 | 851 | 627 | 420 | 357 | 323 | 280 | 259 | 321 | 435 | 652 |
| HQ | 1970 | 1450 | 2290 | 3500 | 2400 | 1720 | 1010 | 1180 | 1440 | 792 | 752 | 1380 | 1970 | 1450 |
| Jahr | 1998 | 1954 + | 1987 | 1946 | 1981 | 1988 | 1984 | 1984 | 1956 | 1956 | 2007 | 1998 | 1998 | 1954 + |
| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
| $Mh_N$ mm / $Mh_A$ mm | 19 | 28 | 35 | 34 | 36 | 29 | 20 | 16 | 15 | 13 | 12 | 14 | 19 | 28 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 98.2 | am 21.11.2011 | 98.2 | 101 | 101 | am 23.09.2012 |
| MQ m³/s | 234 | | 325 | 143 | 241 | |
| HQ m³/s | 1010 | am 26.01.2012 bei W= 569 cm | 1010 | 314 | 1010 | am 26.01.2012 bei W= 569 cm |
| Nq l/(s km²) | 2.60 | | 2.60 | 2.68 | 2.68 | |
| Mq l/(s km²) | 6.20 | | 8.63 | 3.80 | 6.39 | |
| Hq l/(s km²) | 26.8 | | 26.8 | 8.32 | 26.8 | |
| $h_N$ mm / $h_A$ mm | 195 | | 136 | 60 | 202 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 59.7 | am 15.09.1959 | 67.2 | 59.7 | 59.7 | am 15.09.1959 |
| MNQ m³/s | 116 | | 162 | 126 | 123 | |
| MQ m³/s | 324 | | 433 | 217 | 323 | |
| MHQ m³/s | 1220 | | 1200 | 551 | 1250 | |
| HQ m³/s | 3500 | am 12.02.1946 bei W= 746 cm | 3500 | 1440 | 3500 | am 12.02.1946 bei W= 746 cm |
| $HQ_1$ m³/s | 964 | | 949 | 361 | 964 | |
| $HQ_5$ m³/s | 1609 | | 1605 | 718 | 1609 | |
| MNq l/(s km²) | 3.08 | | 4.29 | 3.34 | 3.26 | |
| Mq l/(s km²) | 8.59 | | 11.5 | 5.75 | 8.56 | |
| MHq l/(s km²) | 32.3 | | 31.8 | 14.6 | 33.1 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 271 | | 181 | 91 | 271 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 59.0 | 1.56 | 18.10.1921 | 3500 | 92.8 | 746 | 12.02.1946 |
| 2 | 59.2 | 1.57 | 01.10.1934 | 2400 | 63.6 | 720 | 16.03.1981 |
| 3 | 59.7 | 1.58 | 15.09.1959 | 2290 | 60.7 | 716 | 05.01.1987 |
| 4 | 67.2 | 1.78 | 06.11.1949 | 2290 | 60.7 | 730 | 05.01.1926 |
| 5 | 68.0 | 1.80 | 23.09.1947 | 2220 | 58.9 | 715 | 07.01.2003 |
| 6 | 71.1 | 1.88 | 26.08.1976 | 2220 | 58.9 | 757 | 18.03.1947 |
| 7 | 74.1 | 1.96 | 15.09.1964 | 1970 | 52.2 | 703 | 06.11.1998 |
| 8 | 74.2 | 1.97 | 11.09.1991 | 1940 | 51.4 | 701 | 03.02.1995 |
| 9 | 80.0 | 2.12 | 01.10.1929 | 1920 | 50.9 | 716 | 23.03.1942 |
| 10 | 80.5 | 2.13 | 03.02.1954 | 1890 | 50.1 | 697 | 07.01.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 1010 | 1010 | | | |
| 364 | 1000 | 1000 | 3300 | 1550 | 448 |
| 363 | 974 | 974 | 3200 | 1360 | 421 |
| 362 | 974 | 974 | 2760 | 1250 | 350 |
| 361 | 967 | 967 | 2580 | 1190 | 348 |
| 360 | 961 | 961 | 2320 | 1140 | 347 |
| 359 | 943 | 943 | 1960 | 1110 | 345 |
| 358 | 904 | 904 | 1870 | 1070 | 345 |
| 357 | 880 | 880 | 1730 | 1040 | 339 |
| 356 | 879 | 879 | 1640 | 1000 | 338 |
| 350 | 759 | 759 | 1490 | 867 | 301 |
| 340 | 565 | 663 | 1380 | 726 | 285 |
| 330 | 421 | 535 | 1230 | 641 | 262 |
| 320 | 369 | 377 | 1060 | 574 | 247 |
| 300 | 331 | 330 | 842 | 479 | 232 |
| 270 | 261 | 261 | 742 | 384 | 201 |
| 240 | 207 | 202 | 635 | 325 | 168 |
| 210 | 177 | 175 | 533 | 278 | 141 |
| 183 | 163 | 162 | 436 | 245 | 134 |
| 150 | 146 | 150 | 395 | 212 | 107 |
| 130 | 137 | 141 | 375 | 194 | 103 |
| 120 | 133 | 139 | 358 | 185 | 98.7 |
| 110 | 131 | 136 | 346 | 177 | 94.4 |
| 100 | 126 | 134 | 330 | 169 | 90.8 |
| 90 | 122 | 132 | 319 | 162 | 89.0 |
| 80 | 119 | 130 | 311 | 156 | 86.6 |
| 70 | 116 | 126 | 303 | 150 | 83.2 |
| 60 | 114 | 123 | 292 | 144 | 80.2 |
| 50 | 112 | 120 | 288 | 137 | 76.1 |
| 40 | 109 | 118 | 280 | 131 | 73.3 |
| 30 | 107 | 113 | 274 | 124 | 70.3 |
| 25 | 106 | 112 | 271 | 120 | 68.5 |
| 20 | 105 | 111 | 266 | 115 | 67.9 |
| 15 | 104 | 107 | 252 | 109 | 66.6 |
| 10 | 103 | 106 | 247 | 103 | 64.9 |
| 9 | 103 | 105 | 246 | 102 | 64.6 |
| 8 | 103 | 105 | 245 | 98.7 | 63.9 |
| 7 | 103 | 105 | 244 | 96.3 | 63.0 |
| 6 | 102 | 104 | 243 | 93.9 | 62.9 |
| 5 | 102 | 104 | 243 | 90.2 | 62.3 |
| 4 | 102 | 103 | 242 | 86.4 | 62.3 |
| 3 | 102 | 103 | 240 | 82.4 | 62.3 |
| 2 | 102 | 103 | 238 | 79.6 | 62.0 |
| 1 | 101 | 102 | 237 | 73.8 | 60.1 |
| 0 | 98.2 | 101 | 235 | 59.7 | 59.7 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Die Abflüsse sind durch Talsperrenbetrieb und Kanalspeisung beeinflußt
HQ1, HQ5 : Jahresreihe 1921/2012
Extremwerte ab 1921
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 51.20 km²
PNP : NHN+ 427.86 m
Lage : 283.00 km oberhalb der Mündung links

# Q

m³/s

Pegel : Eisfeld−Bahnbrücke Nr. 420001
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.360 | 0.207 | 2.95 | R 0.845 | 1.55 | 0.774 | 0.315 | 0.315 | 0.916 | 0.519 | 0.207 | 0.207 | 0.410 | 0.774 |
| 2. | 0.360 | 0.207 | 6.07 | R 0.845 | 1.81 | 0.774 | 0.463 | 0.238 | 0.641 | 0.463 | 0.207 | 0.207 | 0.519 | 0.707 |
| 3. | 0.360 | 0.238 | 6.23 | R 0.774 | 2.08 | 0.641 | 0.707 | 0.274 | 0.579 | 0.463 | 0.207 | 0.160 | 0.707 | 0.641 |
| 4. | 0.360 | 0.579 | 4.86 | R 0.707 | 2.17 | 0.774 | 0.579 | 0.360 | 0.519 | 0.410 | 0.160 | 0.207 | 0.774 | 0.579 |
| 5. | 0.360 | 1.89 | 5.75 | R 0.707 | 2.17 | 0.641 | 0.519 | 0.410 | 0.774 | 0.410 | 0.160 | 0.238 | 0.641 | 0.579 |
| 6. | 0.360 | 0.845 | 4.86 | R 0.641 | 1.98 | 0.641 | 0.641 | 0.315 | 0.579 | 0.410 | 0.160 | 0.238 | 0.641 | 0.519 |
| 7. | 0.360 | 0.991 | 3.95 | R 0.410 | 1.72 | 0.641 | 0.707 | 0.315 | 0.519 | 0.360 | 0.207 | 0.519 | 0.916 | 0.519 |
| 8. | 0.360 | 0.707 | 3.60 | R 0.641 | 1.63 | 0.579 | 0.579 | 0.274 | 0.519 | 0.360 | 0.207 | 0.315 | 0.845 | 0.463 |
| 9. | 0.315 | 1.63 | 3.26 | R 0.641 | 1.47 | 0.579 | 0.579 | 0.238 | 0.463 | 0.315 | 0.207 | 0.274 | 0.707 | 0.463 |
| 10. | 0.315 | 1.63 | 3.48 | R 0.641 | 1.38 | 0.641 | 0.463 | 0.238 | 0.410 | 0.315 | 0.160 | 0.238 | 0.707 | 0.463 |
| 11. | 0.315 | 1.38 | 3.05 | R 0.579 | 1.38 | 0.641 | 0.463 | 0.238 | 0.410 | 0.315 | 0.207 | 0.207 | 0.641 | 0.463 |
| 12. | 0.315 | 1.38 | 3.48 | R 2.17 | 1.38 | 0.579 | 0.463 | 0.238 | 0.410 | 0.315 | 0.315 | 0.207 | 0.641 | 0.410 |
| 13. | 0.315 | 1.38 | 4.07 | R 0.519 | 1.38 | 0.579 | 0.410 | 0.410 | 0.519 | 0.274 | 0.207 | 0.207 | 0.519 | 0.410 |
| 14. | 0.315 | 1.63 | 3.60 | R 0.519 | 1.38 | 0.519 | 0.410 | 0.579 | 1.15 | 0.274 | 0.160 | 0.207 | 0.519 | 0.410 |
| 15. | 0.315 | 1.55 | 2.85 | R 0.519 | 1.38 | 0.519 | 0.410 | 0.410 | 0.579 | 0.238 | 0.160 | 0.207 | 0.463 | 1.38 |
| 16. | 0.274 | 2.85 | 2.26 | R 0.519 | 1.47 | 0.463 | 0.410 | 0.315 | 0.519 | 0.274 | 0.160 | 0.207 | 0.463 | 3.05 |
| 17. | 0.238 | 3.48 | 1.81 | R 0.519 | 1.55 | 0.463 | 0.360 | 0.274 | 1.30 | 0.274 | 0.155 | 0.160 | 0.410 | 4.19 |
| 18. | 0.238 | 2.75 | 1.47 | R 0.579 | 1.63 | 0.410 | 0.360 | 0.274 | 1.81 | 0.238 | 0.160 | 0.160 | 0.410 | 5.44 |
| 19. | 0.207 | 2.17 | 2.45 | 1.81 | 1.72 | 0.410 | 0.315 | 0.274 | 1.55 | 0.238 | 0.238 | 0.160 | 0.410 | 4.19 |
| 20. | 0.207 | 1.72 | 2.95 | 0.845 | 1.47 | 0.410 | 0.274 | 0.991 | 1.30 | 0.207 | 0.160 | 0.160 | 0.360 | 3.05 |
| 21. | 0.207 | 1.47 | 2.65 | 0.707 | 1.38 | 0.410 | 0.274 | 1.55 | 1.38 | 0.160 | 0.155 | 0.160 | 0.360 | 2.45 |
| 22. | 0.207 | 1.15 | 3.48 | 0.707 | 1.30 | 0.463 | 0.274 | 1.22 | 1.15 | 0.238 | 0.160 | 0.160 | 0.410 | 2.08 |
| 23. | 0.160 | 1.55 | 3.71 | 0.641 | 1.22 | 0.410 | 0.274 | 1.07 | 0.916 | 0.160 | 0.160 | 0.160 | 0.410 | 6.07 |
| 24. | 0.207 | 3.48 | 3.05 | 0.991 | 1.22 | 0.410 | 0.238 | 0.991 | 0.845 | 0.315 | 0.155 | 0.160 | 0.410 | 10.6 |
| 25. | 0.207 | 3.16 | 2.45 | 1.72 | 1.22 | 0.410 | 0.238 | 0.991 | 0.916 | 0.274 | 0.155 | 0.160 | 0.410 | 7.94 |
| 26. | 0.160 | 3.37 | 2.08 | 1.22 | 1.15 | 0.360 | 0.238 | 0.845 | 0.845 | 0.274 | 0.160 | 0.160 | 0.410 | 6.56 |
| 27. | 0.160 | 3.48 | 1.72 | 0.991 | 0.991 | 0.360 | 0.207 | 0.774 | 0.707 | 0.274 | 0.360 | 0.207 | 0.579 | 7.59 |
| 28. | 0.160 | 3.48 | 1.47 | 0.991 | 0.991 | 0.360 | 0.207 | 0.707 | 0.774 | 0.207 | 0.274 | 0.238 | 0.579 | 9.05 |
| 29. | 0.160 | 3.05 | 1.30 | 1.47 | 0.916 | 0.315 | 0.207 | 0.641 | 0.707 | 0.207 | 0.238 | 0.207 | 1.47 | 5.91 |
| 30. | 0.160 | 2.85 | 1.15 | | 0.916 | 0.315 | 0.160 | 0.579 | 0.579 | 0.207 | 0.207 | 0.238 | 0.916 | 4.19 |
| 31. | | 2.36 | 0.991 | | 0.845 | | 0.207 | | 0.519 | 0.207 | | 0.315 | | 3.37 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23.+ | 1.+ | 31. | 7. | 31. | 29.+ | 30. | 2.+ | 10.+ | 21.+ | 17.+ | 3.+ | 20.+ | 12.+ |
| NQ | 0.160 | 0.207 | 0.991 | 0.410 | 0.845 | 0.315 | 0.160 | 0.238 | 0.410 | 0.160 | 0.155 | 0.160 | 0.360 | 0.410 |
| MQ | 0.268 | 1.89 | 3.13 | 0.858 | 1.45 | 0.516 | 0.386 | 0.545 | 0.800 | 0.297 | 0.194 | 0.215 | 0.589 | 3.05 |
| HQ | 0.360 | 5.44 | 7.59 | 3.16 | 2.26 | 0.916 | 2.08 | 4.07 | 2.85 | 0.579 | 1.15 | 0.641 | 1.72 | 11.2 |
| Tag | 1. | 16. | 2. | 25. | 5. | 4. | 2. | 20. | 17. | 24. | 11. | 7. | 29. | 27. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 14 | 99 | 164 | 42 | 76 | 26 | 20 | 28 | 42 | 16 | 10 | 11 | 30 | 159 |

| | 1960/2011 | | 1961/2012 | | | | | | 52 Kalenderjahre² | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1990 | 1990 | 1963 | 1963 | 1965 | 2011 | 2011 | 1976 | 1976 | 1976 | 1976 | 1976 | 1990 | 1990 |
| NQ | 0.010 | 0.100 | 0.130 | 0.120 | 0.060 | 0.160 | 0.100 | 0.050 | 0.020 | 0.010 | 0.030 | 0.070 | 0.010 | 0.100 |
| MNQ | 0.483 | 0.644 | 0.599 | 0.611 | 0.737 | 0.751 | 0.389 | 0.300 | 0.276 | 0.217 | 0.233 | 0.314 | 0.461 | 0.642 |
| MQ | 1.16 | 1.80 | 1.62 | 1.43 | 1.74 | 1.65 | 0.801 | 0.622 | 0.531 | 0.403 | 0.534 | 0.646 | 1.12 | 1.82 |
| MHQ | 3.62 | 6.69 | 6.19 | 4.34 | 5.43 | 4.55 | 2.04 | 2.49 | 2.66 | 1.63 | 2.26 | 2.11 | 3.57 | 6.82 |
| HQ | 16.3 | 37.6 | 26.1 | 20.4 | 19.0 | 18.9 | 9.80 | 19.2 | 10.0 | 6.15 | 22.8 | 9.24 | 16.3 | 37.6 |
| Jahr | 1998 | 1967 | 2002 | 2005 | 2006 | 1962 | 1970 | 1987 | 2005 | 1972 | 1998 | 1998 | 1998 | 1967 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 59 | 94 | 85 | 68 | 91 | 84 | 42 | 32 | 28 | 21 | 27 | 34 | 57 | 95 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.155 | am 17.09.2012 | 0.160 | 0.155 | 0.155 | am 17.09.2012 |
| MQ | m³/s | 0.884 | | 1.37 | 0.406 | 1.01 | |
| HQ | m³/s | 7.59 | am 02.01.2012 bei W = 109 cm | 7.59 | 4.07 | 11.2 | am 27.12.2012 bei W = 125 cm |
| Nq | l/(skm²) | 3.03 | | 3.13 | 3.03 | 3.03 | |
| Mq | l/(skm²) | 17.3 | | 26.7 | 7.94 | 19.7 | |
| Hq | l/(skm²) | 148 | | 148 | 79.5 | 219 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 546 | | 420 | 126 | 623 | |

| | | 1961/2012 (*) 52 Jahre² | | | | 1961/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.010 | am 22.08.1976 | 0.010 | 0.010 | 0.010 | am 22.08.1976 |
| MNQ | m³/s | 0.145 | | 0.292 | 0.159 | 0.149 | |
| MQ | m³/s | 1.08 | | 1.57 | 0.590 | 1.08 | |
| MHQ | m³/s | 12.4 | | 12.0 | 5.22 | 12.3 | |
| HQ | m³/s | 37.6 | am 24.12.1967 | 37.6 | 22.8 | 37.6 | am 24.12.1967 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.83 | | 5.71 | 3.11 | 2.90 | |
| Mq | l/(skm²) | 21.0 | | 30.6 | 11.5 | 21.0 | |
| MHq | l/(skm²) | 243 | | 234 | 102 | 241 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 663 | | 480 | 183 | 663 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.010 | 0.195 | 10.11.1990 | 37.6 | 734 | | 24.12.1967 |
| 2 | 0.010 | 0.195 | 22.08.1976 | 26.1 | 510 | 197 | 28.01.2002 |
| 3 | 0.050 | 0.977 | 21.08.1968 | 22.8 | 445 | 186 | 15.09.1998 |
| 4 | 0.060 | 1.17 | 13.03.1965 | 21.2 | 414 | 235 | 30.12.1986 |
| 5 | 0.070 | 1.37 | 15.07.1969 | 21.2 | 414 | | 19.12.1965 |
| 6 | 0.075 | 1.46 | 07.06.2011 | 20.4 | 398 | 173 | 12.02.2005 |
| 7 | 0.080 | 1.56 | 22.08.2003 | 20.1 | 393 | 170 | 03.01.2003 |
| 8 | 0.080 | 1.56 | 31.07.1994 | 19.2 | 375 | 225 | 24.06.1987 |
| 9 | 0.080 | 1.56 | 14.08.1971 | 19.0 | 371 | 172 | 31.03.2006 |
| 10 | 0.100 | 1.95 | 25.08.2009 | 18.9 | 369 | | 01.04.1962 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1961/2012 52 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 6.23 | 10.6 | 24.0 | 10.6 | 2.52 |
| 363 | 6.07 | 9.05 | 20.2 | 8.40 | 1.83 |
| 362 | 5.75 | 7.94 | 18.6 | 7.38 | 1.83 |
| 361 | 4.86 | 7.59 | 12.9 | 6.55 | 1.83 |
| 360 | 4.86 | 6.56 | 11.5 | 5.92 | 1.55 |
| 359 | 4.07 | 6.23 | 11.2 | 5.57 | 1.37 |
| 358 | 3.95 | 6.07 | 10.8 | 5.20 | 1.37 |
| 357 | 3.71 | 6.07 | 9.80 | 4.93 | 1.37 |
| 356 | 3.60 | 5.91 | 9.11 | 4.66 | 1.37 |
| 350 | 3.48 | 4.19 | 6.55 | 3.71 | 1.09 |
| 340 | 2.95 | 3.37 | 5.09 | 2.92 | 1.09 |
| 330 | 2.17 | 2.45 | 4.61 | 2.45 | 0.990 |
| 320 | 1.81 | 1.98 | 3.59 | 2.10 | 0.780 |
| 300 | 1.47 | 1.47 | 2.91 | 1.67 | 0.500 |
| 270 | 1.07 | 0.991 | 2.13 | 1.24 | 0.370 |
| 240 | 0.774 | 0.707 | 1.82 | 0.960 | 0.310 |
| 210 | 0.579 | 0.579 | 1.58 | 0.750 | 0.270 |
| 183 | 0.463 | 0.519 | 1.42 | 0.620 | 0.260 |
| 150 | 0.360 | 0.410 | 1.19 | 0.480 | 0.130 |
| 130 | 0.315 | 0.410 | 1.09 | 0.420 | 0.100 |
| 120 | 0.315 | 0.360 | 1.01 | 0.390 | 0.070 |
| 110 | 0.274 | 0.315 | 0.930 | 0.370 | 0.070 |
| 100 | 0.274 | 0.315 | 0.930 | 0.340 | 0.070 |
| 90 | 0.238 | 0.274 | 0.850 | 0.320 | 0.070 |
| 80 | 0.238 | 0.274 | 0.850 | 0.300 | 0.050 |
| 70 | 0.207 | 0.238 | 0.850 | 0.270 | 0.050 |
| 60 | 0.207 | 0.238 | 0.770 | 0.258 | 0.050 |
| 50 | 0.207 | 0.207 | 0.770 | 0.230 | 0.050 |
| 40 | 0.207 | 0.207 | 0.700 | 0.210 | 0.030 |
| 30 | 0.160 | 0.207 | 0.700 | 0.190 | 0.020 |
| 25 | 0.160 | 0.160 | 0.630 | 0.170 | 0.020 |
| 20 | 0.160 | 0.160 | 0.560 | 0.160 | 0.020 |
| 15 | 0.160 | 0.160 | 0.500 | 0.140 | 0.020 |
| 10 | 0.160 | 0.160 | 0.440 | 0.130 | 0.020 |
| 9 | 0.160 | 0.160 | 0.440 | 0.120 | 0.020 |
| 8 | 0.160 | 0.160 | 0.440 | 0.120 | 0.010 |
| 7 | 0.160 | 0.160 | 0.390 | 0.120 | 0.010 |
| 6 | 0.160 | 0.160 | 0.390 | 0.105 | 0.010 |
| 5 | 0.160 | 0.160 | 0.390 | 0.100 | 0.010 |
| 4 | 0.160 | 0.160 | 0.390 | 0.090 | 0.010 |
| 3 | 0.160 | 0.160 | 0.360 | 0.070 | 0.010 |
| 2 | 0.155 | 0.155 | 0.360 | 0.070 | 0.010 |
| 1 | 0.155 | 0.155 | 0.360 | 0.030 | 0.010 |
| 0 | 0.155 | 0.155 | 0.360 | 0.010 | 0.010 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Bis 1976 Standort in der Ortslage Eisfeld, ab 1976 an der Eisenbahnbrücke unterhalb Ortslage, Schreibpegel ab Juli 1990, Langjährige Reihe auf Messstelle Bahnbrücke umgestellt.
18 Tage Randeis
²Vorsicht: 5.7% Lücken im Zeitraum 1961/2012
²Ausgefallene Abflussjahre: 1981, 1982, 1983

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 220.80 km²
PNP : HN+ 355.00 m
Lage : 260.50 km oberhalb der Mündung rechts

Q
m³/s

Pegel : Ebenhards Nr. 420011
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.786 | 0.461 | 6.43 | 2.99 | 3.42 | 1.41 | 0.786 | 1.07 | 2.22 | 1.20 | 0.543 | 0.586 | 1.07 | 2.22 |
| 2. | 0.786 | 0.461 | 9.90 | R 2.69 | 3.75 | 1.34 | 0.890 | 0.734 | 1.48 | 1.07 | 0.543 | 0.543 | 1.07 | 1.87 |
| 3. | 0.786 | 0.501 | 11.0 | R 2.50 | 3.99 | 1.26 | 1.71 | 0.890 | 1.26 | 1.01 | 0.501 | 0.543 | 1.87 | 1.71 |
| 4. | 0.838 | 1.13 | 9.26 | R 2.40 | 4.10 | 1.48 | 1.20 | 1.26 | 1.07 | 0.947 | 0.461 | 0.586 | 2.89 | 1.71 |
| 5. | 0.838 | 5.61 | 13.6 | R 2.31 | 4.10 | 1.34 | 1.20 | 1.41 | 2.04 | 0.947 | 0.461 | 0.734 | 2.40 | 1.63 |
| 6. | 0.838 | 2.89 | 14.6 | R 2.13 | 3.75 | 1.20 | 1.79 | 1.01 | 1.71 | 0.947 | 0.501 | 0.682 | 2.50 | 1.48 |
| 7. | 0.786 | 3.20 | 10.2 | R 2.04 | 3.42 | 1.34 | 2.22 | 1.07 | 1.41 | 0.890 | 0.543 | 1.63 | 3.20 | 1.41 |
| 8. | 0.786 | 3.20 | 10.4 | R 1.87 | 3.75 | 1.13 | 1.55 | 0.890 | 1.20 | 0.838 | 0.501 | 1.13 | 3.20 | R 1.26 |
| 9. | 0.786 | 4.10 | 10.1 | R 1.71 | 3.31 | 1.13 | 1.34 | 0.734 | 1.07 | 0.838 | 0.461 | 0.838 | 2.40 | R 1.26 |
| 10. | 0.682 | 4.22 | 10.2 | R 1.55 | 2.89 | 1.34 | 1.41 | 0.682 | 1.01 | 0.786 | 0.461 | 0.682 | 2.13 | R 1.26 |
| 11. | 0.682 | 3.31 | 8.34 | R 1.48 | 2.79 | 1.34 | 1.13 | 0.682 | 1.01 | 0.734 | 0.543 | 0.682 | 2.13 | 1.20 |
| 12. | 0.734 | 3.31 | 7.88 | R 1.41 | 2.79 | 1.34 | 1.26 | 0.734 | 0.947 | 0.734 | 1.26 | 0.682 | 1.96 | 1.13 |
| 13. | 0.682 | 3.42 | 9.11 | R 1.41 | 2.69 | 1.34 | 1.07 | 1.20 | 1.20 | 0.734 | 0.734 | 0.682 | 1.71 | 1.13 |
| 14. | 0.682 | 3.64 | 8.19 | R 1.41 | 2.69 | 1.13 | 1.01 | 1.87 | 3.31 | 0.632 | 0.586 | 0.586 | 1.55 | 1.07 |
| 15. | 0.501 | 4.34 | 6.86 | R 1.41 | 2.59 | 1.07 | 1.01 | 1.41 | 2.22 | 0.632 | 0.501 | 0.632 | 1.48 | 4.46 |
| 16. | 0.586 | 8.34 | 5.75 | 1.34 | 2.59 | 1.01 | 1.13 | 1.07 | 1.87 | 0.838 | 0.501 | 0.586 | 1.41 | 11.0 |
| 17. | 0.543 | 11.2 | 4.83 | 1.55 | 2.69 | 0.947 | 1.01 | 0.890 | 2.99 | 0.734 | 0.501 | 0.543 | 1.41 | 15.1 |
| 18. | 0.543 | 7.00 | 4.10 | 1.87 | 2.79 | 0.947 | 0.947 | 0.838 | 5.22 | 0.632 | 0.543 | 0.586 | 1.34 | 18.0 |
| 19. | 0.543 | 5.35 | 6.86 | 10.2 | 2.89 | 0.947 | 0.890 | 0.734 | 3.53 | 0.586 | 0.838 | 0.543 | 1.26 | 11.2 |
| 20. | 0.543 | 4.34 | 10.5 | 3.09 | 2.59 | 0.947 | 0.786 | 2.99 | 2.79 | 0.543 | 0.632 | 0.586 | 1.13 | 8.34 |
| 21. | 0.501 | 3.87 | 7.00 | 1.96 | 2.40 | 0.947 | 0.786 | 5.88 | 3.75 | 0.586 | 0.543 | 0.543 | 1.13 | 6.72 |
| 22. | 0.501 | 3.87 | 11.0 | 1.96 | 2.31 | 1.13 | 0.786 | 3.87 | 2.79 | 0.734 | 0.586 | 0.501 | 1.07 | 5.48 |
| 23. | 0.501 | 4.46 | 12.5 | 1.87 | 2.22 | 0.890 | 0.734 | 2.79 | 2.13 | 0.632 | 0.501 | 0.501 | 1.01 | 16.9 |
| 24. | 0.501 | 7.44 | 8.95 | 2.59 | 2.13 | 0.947 | 0.682 | 2.31 | 1.79 | 1.01 | 0.501 | 0.501 | 1.01 | 23.4 |
| 25. | 0.501 | 7.44 | 7.15 | 3.64 | 1.96 | 1.07 | 0.632 | 2.31 | 1.71 | 1.01 | 0.543 | 0.501 | 0.947 | 15.9 |
| 26. | 0.543 | 6.72 | 6.02 | 3.09 | 1.87 | 0.947 | 0.586 | 1.96 | 1.63 | 0.786 | 0.682 | 0.543 | 0.947 | 12.9 |
| 27. | 0.501 | 6.58 | 5.22 | 2.40 | 1.71 | 0.890 | 0.632 | 1.63 | 1.48 | 0.838 | 1.34 | 0.632 | 1.34 | 14.4 |
| 28. | 0.501 | 6.29 | 4.59 | 2.31 | 1.63 | 0.838 | 0.586 | 1.48 | 1.71 | 0.586 | 1.07 | 0.586 | 1.41 | 19.7 |
| 29. | 0.501 | 5.88 | 4.10 | 3.09 | 1.48 | 0.838 | 0.586 | 1.34 | 1.63 | 0.586 | 0.734 | 0.586 | 3.99 | 13.1 |
| 30. | 0.501 | 6.58 | 3.64 | | 1.63 | 0.838 | 0.586 | 1.26 | 1.41 | 0.586 | 0.632 | 0.682 | 3.31 | 9.74 |
| 31. | | 5.75 | 3.31 | | 1.48 | | 0.586 | | 1.26 | 0.734 | | 0.890 | | 7.73 |
| Tag | 15.+ | 1.+ | 31. | 16. | 29.+ | 28.+ | 26.+ | 10.+ | 12. | 20. | 4.+ | 22.+ | 25.+ | 14. |
| NQ | 0.501 | 0.461 | 3.31 | 1.34 | 1.48 | 0.838 | 0.586 | 0.682 | 0.947 | 0.543 | 0.461 | 0.501 | 0.947 | 1.07 |
| MQ | 0.633 | 4.67 | 8.12 | 2.42 | 2.72 | 1.11 | 1.02 | 1.57 | 1.96 | 0.786 | 0.625 | 0.662 | 1.81 | 7.56 |
| HQ | 1.63 | 17.6 | 19.5 | 16.1 | 4.22 | 1.96 | 3.09 | 8.95 | 7.73 | 1.48 | 2.31 | 2.13 | 5.48 | 32.3 |
| Tag | 8. | 17. | 5. | 19. | 4. | 4. | 6. | 21. | 17. | 24. | 27. | 7. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 57 | 98 | 27 | 33 | 13 | 12 | 18 | 24 | 10 | 7 | 8 | 21 | 92 |

## Hauptwerte

| | 1991/2011 | | 1992/2012 21 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 2011 | 1996 | 2009 | 1996 | 2011 | 2011 | 2011 | 2008 | 1992 | 2009 | 2009 | 1993+ | 2011 |
| NQ | 0.430 | 0.461 | 0.480 | 0.682 | 0.740 | 0.682 | 0.352 | 0.288 | 0.288 | 0.150 | 0.288 | 0.352 | 0.480 | 0.461 |
| MNQ | 1.03 | 1.28 | 1.74 | 1.91 | 2.20 | 1.53 | 0.861 | 0.590 | 0.556 | 0.522 | 0.558 | 0.721 | 1.06 | 1.31 |
| MQ | 2.65 | 3.79 | 5.06 | 4.25 | 4.82 | 2.87 | 1.48 | 1.02 | 1.05 | 0.864 | 1.19 | 1.44 | 2.66 | 4.00 |
| MHQ | 10.1 | 15.8 | 25.0 | 17.1 | 15.5 | 10.6 | 5.12 | 3.82 | 5.27 | 2.79 | 6.64 | 5.01 | 10.2 | 16.6 |
| HQ | 60.2 | 48.0 | 89.6 | 61.2 | 49.0 | 49.0 | 27.6 | 11.0 | 14.9 | 6.43 | 56.4 | 22.5 | 60.2 | 48.0 |
| Jahr | 1998 | 2002 | 2003 | 2005 | 2006 | 2006 | 2004 | 2006 | 2007 | 2010 | 1998 | 1998 | 1998 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 31 | 46 | 61 | 47 | 58 | 34 | 18 | 12 | 13 | 10 | 14 | 18 | 31 | 49 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.461 | am 01.12.2011 | 0.461 | 0.461 | 0.461 | am 04.09.2012 |
| MQ | m³/s | 2.20 | | 3.32 | 1.10 | 2.54 | |
| HQ | m³/s | 19.5 | am 05.01.2012 bei W = 173 cm | 19.5 | 8.95 | 32.3 | am 24.12.2012 bei W = 222 cm |
| Nq | l/(skm²) | 2.09 | | 2.09 | 2.09 | 2.09 | |
| Mq | l/(skm²) | 9.98 | | 15.0 | 5.00 | 11.5 | |
| Hq | l/(skm²) | 88.3 | | 88.3 | 40.5 | 146 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 316 | | 236 | 79 | 364 | |

| | | 1992/2012 (*) 21 Jahre | | | | 1992/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.150 | am 17.08.1992 | 0.430 | 0.150 | 0.150 | am 17.08.1992 |
| MNQ | m³/s | 0.398 | | 0.771 | 0.409 | 0.399 | |
| MQ | m³/s | 2.53 | | 3.91 | 1.18 | 2.55 | |
| MHQ | m³/s | 39.8 | | 37.5 | 10.7 | 39.6 | |
| HQ | m³/s | 89.6 | am 03.01.2003 bei W = 287 cm | 89.6 | 56.4 | 89.6 | am 03.01.2003 bei W = 287 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 1.80 | | 3.49 | 1.85 | 1.81 | |
| Mq | l/(skm²) | 11.5 | | 17.7 | 5.32 | 11.6 | |
| MHq | l/(skm²) | 180 | | 170 | 48.5 | 179 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 362 | | 278 | 85 | 365 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.150 | 0.679 | 17.08.1992 | 89.6 | 406 | 287 | 03.01.2003 |
| 2 | 0.288 | 1.30 | 04.06.2011 | 61.2 | 277 | 260 | 13.02.2005 |
| 3 | 0.288 | 1.30 | 01.09.2009 | 60.2 | 273 | 256 | 01.11.1998 |
| 4 | 0.288 | 1.30 | 29.07.2008 | 58.3 | 264 | 254 | 28.01.2002 |
| 5 | 0.300 | 1.36 | 30.06.2000 | 56.4 | 255 | 252 | 15.09.1998 |
| 6 | 0.319 | 1.44 | 21.07.2010 | 55.4 | 251 | 254 | 14.01.2011 |
| 7 | 0.320 | 1.45 | 14.08.2003 | 54.5 | 247 | 250 | 23.01.1995 |
| 8 | 0.330 | 1.49 | 30.07.1994 | 49.0 | 222 | 247 | 31.03.2006 |
| 9 | 0.340 | 1.54 | 16.09.1999 | 49.0 | 222 | 247 | 21.01.2005 |
| 10 | 0.370 | 1.68 | 28.09.1997 | 48.0 | 217 | 245 | 31.12.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1992/2012 21 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 14.6 | 23.4 | 58.3 | 25.2 | 5.80 |
| 363 | 13.6 | 19.7 | 36.9 | 20.7 | 5.66 |
| 362 | 12.5 | 18.0 | 29.6 | 18.0 | 5.66 |
| 361 | 11.2 | 16.9 | 29.4 | 16.1 | 5.53 |
| 360 | 11.0 | 15.9 | 26.4 | 14.6 | 5.40 |
| 359 | 11.0 | 15.1 | 24.2 | 13.4 | 5.40 |
| 358 | 10.5 | 14.6 | 24.0 | 12.3 | 5.28 |
| 357 | 10.4 | 14.4 | 21.5 | 11.6 | 5.20 |
| 356 | 10.2 | 13.6 | 20.5 | 11.2 | 5.16 |
| 350 | 9.11 | 11.0 | 14.6 | 8.91 | 4.49 |
| 340 | 7.00 | 9.26 | 10.7 | 6.99 | 4.05 |
| 330 | 5.88 | 6.86 | 8.82 | 5.75 | 3.72 |
| 320 | 4.34 | 4.83 | 7.50 | 4.96 | 3.40 |
| 300 | 3.42 | 3.31 | 5.26 | 3.87 | 2.64 |
| 270 | 2.59 | 2.40 | 3.99 | 2.79 | 1.83 |
| 240 | 1.87 | 1.87 | 3.20 | 2.13 | 1.40 |
| 210 | 1.41 | 1.48 | 2.50 | 1.71 | 1.07 |
| 183 | 1.20 | 1.34 | 1.96 | 1.41 | 0.890 |
| 150 | 0.947 | 1.13 | 1.59 | 1.13 | 0.786 |
| 130 | 0.838 | 1.01 | 1.45 | 1.01 | 0.710 |
| 120 | 0.838 | 0.947 | 1.38 | 0.950 | 0.630 |
| 110 | 0.786 | 0.947 | 1.31 | 0.910 | 0.590 |
| 100 | 0.734 | 0.890 | 1.25 | 0.880 | 0.586 |
| 90 | 0.682 | 0.838 | 1.19 | 0.830 | 0.560 |
| 80 | 0.682 | 0.734 | 1.13 | 0.786 | 0.501 |
| 70 | 0.632 | 0.734 | 1.07 | 0.730 | 0.461 |
| 60 | 0.586 | 0.682 | 1.01 | 0.680 | 0.461 |
| 50 | 0.586 | 0.632 | 1.01 | 0.630 | 0.423 |
| 40 | 0.543 | 0.586 | 0.950 | 0.586 | 0.386 |
| 30 | 0.543 | 0.586 | 0.890 | 0.530 | 0.352 |
| 25 | 0.501 | 0.543 | 0.840 | 0.501 | 0.352 |
| 20 | 0.501 | 0.543 | 0.840 | 0.480 | 0.352 |
| 15 | 0.501 | 0.543 | 0.790 | 0.461 | 0.319 |
| 10 | 0.501 | 0.501 | 0.790 | 0.423 | 0.319 |
| 9 | 0.501 | 0.501 | 0.790 | 0.423 | 0.319 |
| 8 | 0.501 | 0.501 | 0.790 | 0.410 | 0.319 |
| 7 | 0.501 | 0.501 | 0.790 | 0.390 | 0.319 |
| 6 | 0.501 | 0.501 | 0.790 | 0.386 | 0.319 |
| 5 | 0.501 | 0.501 | 0.790 | 0.370 | 0.319 |
| 4 | 0.461 | 0.501 | 0.790 | 0.352 | 0.288 |
| 3 | 0.461 | 0.501 | 0.740 | 0.352 | 0.288 |
| 2 | 0.461 | 0.461 | 0.740 | 0.350 | 0.288 |
| 1 | 0.461 | 0.461 | 0.740 | 0.319 | 0.288 |
| 0 | 0.461 | 0.461 | 0.600 | 0.150 | 0.150 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Ersatz für den Pegel Grimmelshausen/Werra in Folge Talsperrenbau − mit neuer Statistik
17 Tage Randeis

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 1170.00 km²
PNP : NHN+ 281.65 m
Lage : 223.00 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Meiningen Nr. 420020
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.93 | 3.73 | 29.5 | 18.6 | 17.5 | 10.1 | 6.11 | 6.67 | 13.4 | 8.85 | 5.74 | 5.56 | 5.93 | 11.7 |
| 2. | 5.74 | 3.57 | 44.4 | R16.4 | 20.3 | 9.91 | 6.48 | 5.39 | 9.91 | 9.27 | 5.39 | 5.56 | 6.67 | 10.1 |
| 3. | 5.74 | 3.88 | 62.4 | R15.6 | 22.0 | 9.70 | 7.43 | 6.29 | 8.85 | 8.85 | 5.39 | 5.39 | 8.65 | 9.49 |
| 4. | 5.74 | 5.56 | 53.4 | R14.4 | 22.6 | 10.4 | 7.05 | 8.03 | 8.23 | 8.65 | 5.21 | 5.56 | 11.3 | 9.70 |
| 5. | 5.56 | 15.6 | 59.5 | R13.9 | 22.9 | 9.27 | 7.83 | 9.91 | 10.6 | 9.91 | 5.04 | 6.11 | 10.8 | 9.49 |
| 6. | 5.56 | 11.7 | 71.7 | R13.6 | 21.7 | 9.06 | 10.8 | 7.63 | 10.4 | 9.06 | 5.04 | 5.74 | 10.8 | 9.27 |
| 7. | 5.21 | 10.4 | 57.2 | R12.9 | 20.0 | 8.85 | 11.5 | 7.24 | 9.27 | 8.44 | 4.87 | 7.83 | 12.9 | 8.44 |
| 8. | 5.04 | 11.5 | 55.6 | R12.2 | 20.5 | 8.65 | 10.6 | 6.29 | 8.65 | 7.83 | 4.87 | 7.05 | 14.9 | 8.03 |
| 9. | 5.04 | 11.9 | 52.9 | R11.5 | 18.3 | 8.23 | 9.49 | 5.93 | 8.23 | 7.43 | 4.70 | 6.29 | 12.9 | 7.63 |
| 10. | 4.87 | 13.9 | 52.9 | R11.3 | 16.4 | 8.65 | 8.65 | 5.56 | 7.83 | 7.05 | 4.53 | 5.93 | 12.4 | 8.03 |
| 11. | 4.87 | 12.2 | 48.3 | R11.0 | 16.1 | 8.85 | 8.23 | 5.56 | 7.63 | 6.67 | 5.04 | 5.74 | 12.2 | 7.83 |
| 12. | 4.53 | 12.2 | 46.4 | R10.8 | 16.1 | 8.65 | 8.85 | 5.93 | 7.83 | 6.48 | 8.65 | 5.93 | 11.3 | 7.63 |
| 13. | 4.37 | 13.1 | 50.8 | R10.6 | 16.1 | 8.44 | 7.63 | 6.48 | 9.27 | 6.29 | 6.67 | 6.48 | 10.1 | 7.43 |
| 14. | 4.37 | 14.6 | 48.3 | R10.1 | 16.1 | 7.83 | 7.24 | 8.23 | 16.7 | 6.11 | 5.56 | 6.29 | 9.49 | 7.24 |
| 15. | 4.37 | 16.9 | 40.8 | R10.4 | 15.9 | 7.63 | 7.05 | 8.65 | 17.7 | 5.93 | 5.21 | 6.29 | 8.85 | 13.1 |
| 16. | 4.20 | 27.4 | 34.8 | R9.91 | 15.9 | 7.24 | 7.24 | 7.24 | 16.1 | 6.67 | 5.04 | 5.74 | 8.65 | 36.9 |
| 17. | 3.88 | 44.0 | 30.6 | R10.6 | 15.9 | 7.24 | 6.86 | 6.11 | 18.0 | 6.48 | 4.87 | 5.93 | 8.23 | 55.0 |
| 18. | 3.88 | 31.3 | 26.4 | R11.0 | 16.7 | 7.05 | 6.67 | 5.93 | 24.4 | 5.93 | 4.87 | 5.56 | 7.83 | 64.2 |
| 19. | 3.73 | 25.4 | 33.6 | 23.8 | 16.9 | 7.05 | 6.48 | 5.56 | 21.4 | 5.74 | 6.29 | 5.39 | 7.63 | 56.1 |
| 20. | 3.73 | 21.4 | 53.4 | 15.9 | 15.9 | 6.86 | 6.29 | 9.27 | 19.1 | 5.56 | 5.56 | 5.21 | 7.24 | 42.1 |
| 21. | 3.73 | 19.4 | 40.3 | 11.3 | 15.1 | 6.86 | 6.11 | 22.9 | 18.6 | 5.56 | 5.21 | 5.04 | 7.24 | 34.0 |
| 22. | 3.73 | 18.8 | 57.2 | 10.6 | 14.1 | 7.83 | 5.93 | 18.0 | 16.9 | 6.48 | 5.39 | 5.04 | 6.86 | 28.8 |
| 23. | 3.57 | 20.8 | 60.1 | 11.3 | 13.4 | 7.24 | 5.93 | 12.9 | 14.4 | 5.74 | 5.04 | 5.04 | 6.67 | 58.9 |
| 24. | 3.57 | 28.8 | 47.8 | 11.5 | 13.1 | 7.24 | 5.56 | 11.5 | 12.2 | 6.48 | 5.04 | 4.87 | 6.48 | 110 |
| 25. | 3.57 | 34.4 | 39.9 | 15.1 | 12.6 | 7.43 | 5.39 | 11.7 | 11.3 | 7.43 | 5.74 | 4.87 | 6.29 | 96.8 |
| 26. | 3.57 | 32.8 | 34.8 | 14.6 | 12.2 | 7.05 | 5.21 | 10.4 | 11.5 | 6.48 | 6.11 | 4.70 | 6.29 | 82.3 |
| 27. | 3.57 | 34.0 | 30.6 | 13.4 | 11.5 | 6.67 | 5.04 | 9.49 | 9.91 | 6.86 | 9.06 | 5.21 | 7.63 | 80.3 |
| 28. | 3.57 | 34.8 | 27.4 | 12.9 | 11.0 | 6.48 | 5.04 | 8.85 | 11.7 | 6.11 | 7.63 | 4.87 | 8.23 | 87.9 |
| 29. | 3.57 | 32.8 | 25.1 | 15.1 | 10.6 | 6.48 | 4.87 | 8.44 | 12.6 | 5.74 | 6.29 | 4.70 | 12.6 | 76.3 |
| 30. | 3.42 | 32.8 | 22.9 | | 11.3 | 6.29 | 4.70 | 9.27 | 10.6 | 5.93 | 5.74 | 4.87 | 14.4 | 63.6 |
| 31. | | 29.5 | 20.8 | | 10.6 | | 4.53 | | 9.49 | 6.48 | | 5.56 | | 51.8 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 2. | 31. | 16. | 29.+ | 30. | 31. | 2. | 11. | 20.+ | 10. | 26.+ | 1. | 14. |
| NQ | 3.42 | 3.57 | 20.8 | 9.91 | 10.6 | 6.29 | 4.53 | 5.39 | 7.63 | 5.56 | 4.53 | 4.70 | 5.93 | 7.24 |
| MQ | 4.41 | 20.3 | 43.9 | 13.1 | 16.1 | 7.97 | 6.99 | 8.71 | 12.7 | 6.98 | 5.66 | 5.62 | 9.38 | 37.4 |
| HQ | 6.29 | 54.5 | 76.9 | 32.8 | 23.5 | 12.6 | 14.1 | 32.8 | 27.0 | 13.4 | 13.4 | 9.06 | 16.7 | 115 |
| Tag | 1. | 17. | 6. | 19. | 4. | 4. | 6. | 21. | 18. | 5. | 27. | 7. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 46 | 100 | 28 | 37 | 18 | 16 | 19 | 29 | 16 | 13 | 13 | 21 | 86 |

| | 1919/2011 | | 1920/2012 93 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1921 | 1959 | 1949 | 1942 | 1963 | 1921 | 1960 | 1920 | 1922 | 1959 | 1959 | 1949 | 1921 | 1959 |
| NQ | 1.65 | 1.67 | 2.30 | 2.32 | 2.45 | 3.40 | 3.23 | 1.85 | 1.60 | 1.74 | 1.48 | 1.55 | 1.65 | 1.67 |
| MNQ | 6.82 | 8.20 | 9.85 | 10.4 | 11.3 | 11.7 | 7.02 | 5.55 | 4.91 | 4.33 | 4.49 | 5.07 | 6.86 | 8.14 |
| MQ | 13.1 | 18.3 | 21.8 | 20.4 | 22.6 | 20.5 | 11.5 | 9.21 | 8.39 | 6.93 | 7.38 | 9.35 | 13.0 | 18.4 |
| MHQ | 32.1 | 50.4 | 60.9 | 52.0 | 54.6 | 42.7 | 25.1 | 24.2 | 21.8 | 17.1 | 17.7 | 22.4 | 31.7 | 51.0 |
| HQ | 139 | 236 | 209 | 162 | 211 | 195 | 109 | 117 | 99.6 | 102 | 156 | 89.5 | 139 | 236 |
| Jahr | 1998 | 1967 | 1979 | 2005 | 1981 | 1994 | 1941 | 1933 | 1966 | 1981 | 1998 | 1960 | 1998 | 1967 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 29 | 42 | 50 | 42 | 52 | 45 | 26 | 20 | 19 | 16 | 16 | 21 | 29 | 42 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 3.42 | am 30.11.2011 | 3.42 | 4.53 | 4.53 | am 31.05.2012 |
| MQ m³/s | 12.8 | | 17.8 | 7.78 | 14.6 | |
| HQ m³/s | 76.9 | am 06.01.2012 bei W = 265 cm | 76.9 | 32.8 | 115 | am 24.12.2012 bei W = 316 cm |
| Nq l/(skm²) | 2.92 | | 2.92 | 3.87 | 3.87 | |
| Mq l/(skm²) | 10.9 | | 15.2 | 6.65 | 12.5 | |
| Hq l/(skm²) | 65.7 | | 65.7 | 28.0 | 98.3 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 345 | | 239 | 106 | 395 | |

| | 1920/2012 (*) 93 Jahre² | | | | 1920/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 1.48 | am 02.09.1959 | 1.65 | 1.48 | 1.48 | am 02.09.1959 |
| MNQ m³/s | 3.20 | | 5.07 | 3.44 | 3.30 | |
| MQ m³/s | 14.1 | | 19.4 | 8.80 | 14.1 | |
| MHQ m³/s | 105 | | 101 | 44.0 | 106 | |
| HQ m³/s | 236 | am 24.12.1967 bei W = 402 cm | 236 | 156 | 236 | am 24.12.1967 bei W = 402 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(skm²) | 2.73 | | 4.33 | 2.94 | 2.82 | |
| Mq l/(skm²) | 12.0 | | 16.6 | 7.52 | 12.0 | |
| MHq l/(skm²) | 90.1 | | 86.7 | 37.6 | 90.9 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 380 | | 260 | 120 | 380 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.48 | 1.26 | 02.09.1959 | 236 | 202 | 402 | 24.12.1967 |
| 2 | 1.55 | 1.32 | 21.10.1949 | 211 | 180 | 402 | 11.03.1981 |
| 3 | 1.58 | 1.35 | 02.09.1976 | 209 | 179 | 395 | 01.01.1979 |
| 4 | 1.60 | 1.37 | 11.07.1922 | 200 | 171 | 399 | 06.01.1982 |
| 5 | 1.65 | 1.41 | 27.11.1921 | 195 | 167 | 359 | 13.04.1994 |
| 6 | 1.65 | 1.41 | 02.07.1920 | 187 | 160 | 352 | 03.01.2003 |
| 7 | 1.83 | 1.56 | 07.07.1952 | 184 | 157 | 350 | 01.04.2006 |
| 8 | 1.83 | 1.56 | 21.09.1947 | 175 | 150 | 379 | 14.01.2011 |
| 9 | 1.91 | 1.63 | 05.07.1957 | 171 | 146 | 342 | 29.01.2002 |
| 10 | 1.95 | 1.67 | 05.09.1964 | 169 | 144 | 333 | 02.01.1987 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1920/2012 93 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 71.7 | 110 | 202 | 101 | 24.6 |
| 363 | 62.4 | 96.8 | 194 | 87.0 | 20.2 |
| 362 | 60.1 | 87.9 | 146 | 77.4 | 20.2 |
| 361 | 59.5 | 82.3 | 123 | 71.8 | 18.4 |
| 360 | 57.2 | 80.3 | 112 | 66.0 | 16.7 |
| 359 | 57.2 | 76.3 | 109 | 61.8 | 16.1 |
| 358 | 55.6 | 71.7 | 106 | 58.8 | 16.1 |
| 357 | 53.4 | 64.2 | 101 | 56.1 | 15.8 |
| 356 | 53.4 | 63.6 | 93.4 | 53.4 | 15.8 |
| 350 | 47.8 | 57.2 | 79.7 | 43.1 | 14.7 |
| 340 | 34.4 | 48.3 | 61.9 | 34.7 | 13.6 |
| 330 | 29.5 | 34.8 | 55.6 | 29.6 | 12.5 |
| 320 | 22.9 | 25.1 | 47.1 | 26.1 | 11.5 |
| 300 | 17.7 | 17.7 | 39.3 | 21.1 | 9.70 |
| 270 | 13.9 | 13.4 | 29.6 | 16.4 | 6.50 |
| 240 | 11.3 | 11.3 | 26.5 | 13.3 | 5.13 |
| 210 | 9.49 | 9.91 | 23.3 | 11.0 | 4.79 |
| 183 | 8.44 | 8.85 | 19.9 | 9.54 | 4.16 |
| 150 | 7.05 | 7.83 | 16.1 | 7.94 | 3.09 |
| 130 | 6.48 | 7.24 | 14.9 | 7.10 | 2.73 |
| 120 | 6.29 | 7.05 | 13.7 | 6.74 | 2.51 |
| 110 | 6.11 | 6.67 | 13.3 | 6.33 | 2.40 |
| 100 | 5.93 | 6.48 | 12.6 | 6.00 | 2.30 |
| 90 | 5.74 | 6.29 | 11.9 | 5.63 | 2.30 |
| 80 | 5.56 | 6.29 | 11.4 | 5.34 | 2.20 |
| 70 | 5.56 | 5.93 | 11.0 | 5.01 | 2.20 |
| 60 | 5.39 | 5.93 | 10.5 | 4.74 | 2.10 |
| 50 | 5.04 | 5.56 | 9.82 | 4.46 | 2.01 |
| 40 | 5.04 | 5.56 | 9.36 | 4.08 | 2.01 |
| 30 | 4.87 | 5.21 | 8.87 | 3.64 | 1.91 |
| 25 | 4.70 | 5.21 | 8.64 | 3.45 | 1.91 |
| 20 | 4.53 | 5.04 | 8.64 | 3.25 | 1.74 |
| 15 | 3.88 | 5.04 | 8.41 | 3.00 | 1.74 |
| 10 | 3.73 | 4.87 | 7.72 | 2.76 | 1.74 |
| 9 | 3.73 | 4.87 | 7.72 | 2.65 | 1.74 |
| 8 | 3.73 | 4.87 | 7.49 | 2.63 | 1.74 |
| 7 | 3.57 | 4.87 | 7.49 | 2.52 | 1.67 |
| 6 | 3.57 | 4.87 | 7.49 | 2.43 | 1.67 |
| 5 | 3.57 | 4.87 | 7.26 | 2.34 | 1.67 |
| 4 | 3.57 | 4.70 | 7.26 | 2.29 | 1.67 |
| 3 | 3.57 | 4.70 | 7.26 | 2.20 | 1.60 |
| 2 | 3.57 | 4.70 | 7.03 | 2.09 | 1.60 |
| 1 | 3.57 | 4.70 | 7.03 | 1.92 | 1.54 |
| 0 | 3.42 | 4.53 | 7.03 | 1.48 | 1.48 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Hochwasserscheitelwerte seit 1980 durch Talsperrenrückhaltung reduziert
17 Tage Randeis
²Vorsicht: 1.1% Lücken im Zeitraum 1920/2012
²Ausgefallenes Abflussjahr: 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 2246.00 km²
PNP : NN+ 222.72 m
Lage : 164.80 km oberhalb der Mündung links

# Q
m³/s

Pegel : Vacha
Gewässer : Werra
Gebiet : Werra

Nr. 420120

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 8.43 | 5.45 | 50.8 | 39.0 | 29.5 | 17.3 | 10.6 | K11.5 | K18.3 | K13.9 | 9.06 | 7.82 | 9.06 | 19.7 |
| 2. | 7.82 | 5.65 | 56.3 | R32.1 | 32.1 | 16.6 | 10.6 | K 9.38 | K17.0 | K13.9 | 7.82 | 7.82 | 9.69 | 16.6 |
| 3. | 7.82 | 5.85 | 63.2 | R28.8 | 34.9 | 16.3 | 12.9 | K 8.43 | K14.2 | K13.2 | 7.26 | 7.53 | 11.5 | 15.6 |
| 4. | 7.82 | 6.75 | 66.0 | R26.7 | 35.7 | 18.0 | 12.6 | K12.6 | K12.6 | K12.9 | 7.26 | 7.82 | 16.6 | 14.9 |
| 5. | 7.53 | 17.0 | 73.1 | R25.0 | 35.7 | 17.0 | 12.9 | K17.3 | K14.6 | K13.9 | 7.00 | 9.06 | 17.3 | 15.6 |
| 6. | 7.53 | 23.6 | 83.3 | R23.2 | 34.9 | 15.6 | 18.0 | K13.9 | K17.6 | K16.3 | 7.00 | 8.74 | 16.3 | 14.9 |
| 7. | 7.26 | 16.6 | 97.8 | R21.8 | 32.5 | 15.6 | 20.4 | K12.9 | K14.9 | K13.2 | 6.75 | 10.0 | 16.0 | 13.9 |
| 8. | 7.26 | 17.6 | 94.1 | R21.1 | 32.5 | 15.3 | 18.0 | K10.9 | K15.3 | K11.9 | 6.51 | 10.9 | 20.4 | 12.9 |
| 9. | 7.00 | 18.7 | 87.6 | R20.1 | 32.5 | 14.2 | 16.3 | K 9.69 | K13.2 | K10.9 | 6.51 | 9.38 | 18.3 | 11.2 |
| 10. | 7.00 | 22.9 | 85.4 | R19.0 | 28.5 | 14.2 | 14.9 | K 8.74 | K12.2 | K10.3 | 6.28 | 8.43 | 17.3 | 13.6 |
| 11. | 6.75 | 20.1 | 81.2 | R18.3 | 27.4 | 14.2 | 14.2 | K 8.74 | K12.9 | K 9.69 | 6.51 | 8.12 | 19.0 | 13.2 |
| 12. | 6.51 | 18.0 | 78.6 | R17.6 | 27.4 | 14.6 | 16.0 | K 9.69 | K12.2 | K 9.69 | 12.9 | 8.12 | 17.0 | 11.9 |
| 13. | 6.28 | 19.4 | 76.1 | R17.3 | 27.1 | 14.2 | 13.2 | K 9.06 | K13.9 | K 9.06 | 10.9 | 9.06 | 15.3 | 12.2 |
| 14. | 6.51 | 22.2 | 74.1 | R17.3 | 26.7 | 13.2 | 12.2 | K11.2 | K21.5 | K 8.43 | 8.43 | 9.06 | 14.2 | 11.5 |
| 15. | 6.51 | 27.1 | 73.1 | R17.3 | 26.4 | 12.9 | 11.9 | K12.2 | K30.7 | K 8.43 | 7.26 | 9.69 | 13.2 | 18.7 |
| 16. | 6.28 | 30.7 | 69.3 | R16.6 | 26.0 | 12.6 | 12.6 | K11.5 | K26.4 | K 9.38 | 7.26 | 9.06 | 12.6 | 41.7 |
| 17. | 6.28 | 53.5 | 62.3 | R18.0 | 25.7 | 12.2 | 11.9 | K10.6 | K25.3 | K10.3 | 6.75 | 8.43 | 12.2 | 56.3 |
| 18. | 6.06 | 50.3 | 55.8 | 24.3 | 25.7 | 11.9 | 10.9 | K 8.74 | K35.3 | K 8.43 | 6.75 | 7.82 | 11.5 | 60.9 |
| 19. | 6.06 | 44.4 | 56.3 | 36.1 | 26.7 | 11.9 | 10.6 | K 8.43 | K33.7 | K 7.82 | 8.12 | 7.82 | 11.2 | 65.0 |
| 20. | 5.85 | 38.2 | 70.2 | 38.2 | 25.7 | 11.9 | 10.3 | K11.9 | K30.7 | K 7.53 | 7.53 | 7.26 | 10.9 | 67.4 |
| 21. | 6.06 | 34.5 | 72.2 | 23.2 | 24.6 | 11.5 | 9.69 | K26.0 | K28.5 | K 7.82 | 6.75 | 7.26 | 10.6 | 67.4 |
| 22. | 6.06 | 32.9 | 82.8 | 20.4 | 23.6 | 12.9 | K 9.38 | K27.8 | K28.1 | K 8.43 | 7.00 | 7.00 | 10.3 | 61.3 |
| 23. | 5.85 | 37.8 | 86.5 | 21.1 | 22.2 | 12.6 | K 8.74 | K21.1 | K23.6 | K 8.74 | 7.00 | 7.00 | 10.0 | 72.6 |
| 24. | 5.85 | 44.8 | 91.9 | 22.5 | 21.1 | 12.9 | K 8.43 | K17.0 | K20.1 | K 9.69 | 6.51 | 6.75 | 9.69 | 93.0 |
| 25. | 5.65 | 51.2 | 87.0 | 27.1 | 20.4 | 12.6 | K 7.82 | K16.6 | K17.6 | K11.9 | 7.26 | 7.00 | 9.38 | 158 |
| 26. | 5.65 | 51.2 | 77.1 | 27.4 | 19.7 | 12.2 | K 7.53 | K16.0 | K17.6 | K10.0 | 8.74 | 6.75 | 9.38 | 147 |
| 27. | 5.65 | 50.8 | 68.3 | 25.7 | 19.0 | 11.5 | K 7.53 | K13.9 | K15.6 | K10.0 | 10.9 | 7.26 | 10.3 | 128 |
| 28. | 5.65 | 52.1 | 61.3 | 23.9 | 18.0 | 10.9 | K 7.26 | K13.2 | K16.6 | K 8.74 | 12.9 | 7.26 | 11.9 | 125 |
| 29. | 5.65 | 52.6 | 55.4 | 25.7 | 18.0 | 10.9 | K 7.26 | K12.2 | K22.5 | K 8.12 | 9.38 | 7.00 | 16.6 | 125 |
| 30. | 5.65 | 52.6 | 49.4 | | 18.3 | 10.6 | K 7.26 | K12.9 | K19.7 | K 8.12 | 8.12 | 7.53 | 25.0 | 110 |
| 31. | | 51.7 | 44.4 | | 18.7 | | K 7.53 | | K15.6 | K 8.43 | | 8.43 | | 94.1 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25.+ | 1. | 31. | 16. | 28.+ | 30. | 28.+ | 3.+ | 10.+ | 20. | 10. | 24.+ | 1. | 9. |
| NQ | 5.65 | 5.45 | 44.4 | 16.6 | 18.0 | 10.6 | 7.26 | 8.43 | 12.2 | 7.53 | 6.28 | 6.75 | 9.06 | 11.2 |
| MQ | 6.54 | 31.5 | 72.0 | 24.0 | 26.4 | 13.6 | 11.6 | 13.1 | 19.9 | 10.3 | 7.95 | 8.10 | 13.8 | 54.5 |
| HQ | 9.69 | 54.9 | 101 | 47.1 | 36.5 | 18.7 | 23.2 | 35.3 | 37.3 | 19.0 | 17.0 | 12.9 | 27.1 | 164 |
| Tag | 5. | 17. | 7. | 19. | 4. | 4. | 7. | 21. | 18. | 6. | 12. | 8. | 30. | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 38 | 86 | 27 | 31 | 16 | 14 | 15 | 24 | 12 | 9 | 10 | 16 | 65 |

| | 1921/2011 | | 1922/2012 91 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1954 | 1929 | 1929 | 1960 | 1960 | 1960 | 1922 | 1959 | 1959 | 1959 | 1959 | 1959 |
| NQ | 3.07 | 2.21 | 3.35 | 3.41 | 3.87 | 4.56 | 3.61 | 2.52 | 2.00 | 2.74 | 1.90 | 1.55 | 3.07 | 2.21 |
| MNQ | 11.5 | 13.3 | 16.3 | 18.5 | 20.5 | 20.5 | 12.9 | 10.4 | 8.78 | 7.83 | 7.86 | 8.47 | 11.5 | 13.4 |
| MQ | 20.9 | 28.9 | 34.3 | 34.9 | 38.8 | 34.7 | 20.0 | 16.7 | 14.5 | 12.0 | 12.1 | 15.0 | 21.0 | 29.4 |
| MHQ | 41.8 | 64.7 | 80.0 | 72.9 | 77.2 | 62.1 | 36.2 | 34.7 | 29.2 | 24.1 | 23.9 | 31.2 | 41.9 | 66.1 |
| HQ | 154 | 314 | 271 | 321 | 246 | 284 | 102 | 194 | 161 | 189 | 123 | 153 | 154 | 314 |
| Jahr | 1998 | 1967 | 1926+ | 1946 | 1981 | 1994 | 1941 | 1933 | 1956 | 1981 | 1924 | 1960 | 1998 | 1967 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 24 | 34 | 41 | 38 | 46 | 40 | 24 | 19 | 17 | 14 | 14 | 18 | 24 | 35 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 5.45 | am 01.12.2011 | 5.45 | 6.28 | 6.28 | am 10.09.2012 |
| MQ | m³/s | 20.5 | | 29.3 | 11.8 | 23.0 | |
| HQ | m³/s | 101 | am 07.01.2012 bei W = 251 cm | 101 | 37.3 | 164 | am 25.12.2012 bei W = 336 cm |
| Nq | l/(skm²) | 2.43 | | 2.43 | 2.80 | 2.80 | |
| Mq | l/(skm²) | 9.13 | | 13.0 | 5.28 | 10.3 | |
| Hq | l/(skm²) | 45.0 | | 45.0 | 16.6 | 73.0 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 289 | | 205 | 84 | 324 | |

| | | 1922/2012 (*) 91 Jahre² | | | | 1922/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.55 | am 05.10.1959 | 2.21 | 1.55 | 1.55 | am 05.10.1959 |
| MNQ | m³/s | 5.67 | | 8.61 | 6.16 | 5.81 | |
| MQ | m³/s | 23.5 | | 32.1 | 15.1 | 23.5 | |
| MHQ | m³/s | 137 | | 132 | 59.1 | 138 | |
| HQ | m³/s | 321 | am 10.02.1946 | 321 | 194 | 321 | am 10.02.1946 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.53 | | 3.83 | 2.74 | 2.59 | |
| Mq | l/(skm²) | 10.5 | | 14.3 | 6.70 | 10.5 | |
| MHq | l/(skm²) | 61.0 | | 58.7 | 26.3 | 61.6 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 330 | | 224 | 107 | 331 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.55 | 0.690 | 05.10.1959 | 321 | 143 | | 10.02.1946 |
| 2 | 2.00 | 0.890 | 10.07.1922 | 314 | 140 | | 25.12.1967 |
| 3 | 2.12 | 0.944 | 08.07.1960 | 284 | 126 | 400 | 14.04.1994 |
| 4 | 2.19 | 0.975 | 05.09.1929 | 271 | 121 | 399 | 15.01.2011 |
| 5 | 2.52 | 1.12 | 21.09.1947 | 271 | 121 | | 01.01.1926 |
| 6 | 2.72 | 1.21 | 15.10.1951 | 246 | 110 | | 12.03.1981 |
| 7 | 2.74 | 1.22 | 07.07.1957 | 244 | 109 | | 02.12.1939 |
| 8 | 2.96 | 1.32 | 02.06.1934 | 239 | 106 | | 29.12.1947 |
| 9 | 3.09 | 1.38 | 06.07.1925 | 237 | 106 | | 02.01.1979 |
| 10 | 3.31 | 1.47 | 05.07.1930 | 231 | 103 | | 07.01.1982 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1922/2012 91 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 97.8 | 158 | 302 | 151 | 36.6 |
| 363 | 94.1 | 147 | 241 | 136 | 31.0 |
| 362 | 91.9 | 128 | 202 | 121 | 31.0 |
| 361 | 87.6 | 125 | 200 | 109 | 30.9 |
| 360 | 87.0 | 125 | 174 | 101 | 28.8 |
| 359 | 86.5 | 110 | 166 | 95.6 | 27.7 |
| 358 | 85.4 | 97.8 | 160 | 91.1 | 27.7 |
| 357 | 83.3 | 94.1 | 153 | 86.7 | 26.8 |
| 356 | 82.8 | 94.1 | 150 | 83.3 | 25.7 |
| 350 | 73.1 | 85.4 | 128 | 70.2 | 23.6 |
| 340 | 56.3 | 72.6 | 97.4 | 58.6 | 21.4 |
| 330 | 51.2 | 62.3 | 83.9 | 50.3 | 20.5 |
| 320 | 38.2 | 49.4 | 78.7 | 44.2 | 20.0 |
| 300 | 28.8 | 28.8 | 65.9 | 35.7 | 15.3 |
| 270 | 23.6 | 23.2 | 56.7 | 28.1 | 11.8 |
| 240 | 18.0 | 18.0 | 50.6 | 22.8 | 9.32 |
| 210 | 16.0 | 16.3 | 43.8 | 19.0 | 7.58 |
| 183 | 13.2 | 13.9 | 37.8 | 16.2 | 6.00 |
| 150 | 11.9 | 12.6 | 30.1 | 13.6 | 4.56 |
| 130 | 10.3 | 11.9 | 27.9 | 12.2 | 4.00 |
| 120 | 9.69 | 11.2 | 26.5 | 11.5 | 3.86 |
| 110 | 9.06 | 10.6 | 25.1 | 10.9 | 3.73 |
| 100 | 8.74 | 10.3 | 23.9 | 10.3 | 3.61 |
| 90 | 8.43 | 9.69 | 22.6 | 9.80 | 3.32 |
| 80 | 8.12 | 9.38 | 21.2 | 9.32 | 3.07 |
| 70 | 7.82 | 8.74 | 20.4 | 8.74 | 2.96 |
| 60 | 7.53 | 8.43 | 18.8 | 8.20 | 2.74 |
| 50 | 7.26 | 8.12 | 17.5 | 7.65 | 2.52 |
| 40 | 7.00 | 7.82 | 16.0 | 7.12 | 2.41 |
| 30 | 6.75 | 7.53 | 15.3 | 6.51 | 2.31 |
| 25 | 6.51 | 7.26 | 14.7 | 6.12 | 2.21 |
| 20 | 6.51 | 7.26 | 14.0 | 5.68 | 2.21 |
| 15 | 6.28 | 7.00 | 13.6 | 5.18 | 2.12 |
| 10 | 5.85 | 7.00 | 13.1 | 4.65 | 2.03 |
| 9 | 5.85 | 6.75 | 13.1 | 4.56 | 1.96 |
| 8 | 5.85 | 6.75 | 13.1 | 4.43 | 1.96 |
| 7 | 5.85 | 6.75 | 13.1 | 4.37 | 1.96 |
| 6 | 5.65 | 6.75 | 12.6 | 4.23 | 1.96 |
| 5 | 5.65 | 6.75 | 12.6 | 4.01 | 1.90 |
| 4 | 5.65 | 6.75 | 12.6 | 3.83 | 1.90 |
| 3 | 5.65 | 6.51 | 12.6 | 3.47 | 1.90 |
| 2 | 5.65 | 6.51 | 12.4 | 3.07 | 1.80 |
| 1 | 5.65 | 6.51 | 12.4 | 2.74 | 1.80 |
| 0 | 5.45 | 6.28 | 12.2 | 1.55 | 1.55 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Ersatz für den Pegel Dorndorf1 / Werra mit Statistikfortschreibung
16 Tage Randeis, 102 Tage Verkrautung
²Vorsicht: 3.3% Lücken im Zeitraum 1922/2012
²Ausgefallene Abflussjahre: 1931, 1932, 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 3039.00 km²
PNP : NN+ 203.39 m
Lage : 137.80 km

# Q

m³/s

Pegel : Gerstungen Nr. 420170
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K11.3 | 7.90 | 61.0 | 46.6 | 37.8 | 21.4 | 14.6 | K15.2 | K21.0 | K17.2 | K11.6 | K 9.65 | K12.5 | K23.0 |
| 2. | K10.7 | 8.40 | 70.5 | 41.6 | 39.4 | 20.6 | 14.3 | K14.0 | K21.4 | K15.2 | K10.4 | K 9.40 | K12.8 | K18.0 |
| 3. | K10.4 | 8.15 | 83.5 | 36.2 | 41.6 | 20.2 | 15.5 | K11.9 | K17.2 | K16.1 | K 9.90 | K 9.40 | K14.6 | K17.6 |
| 4. | K10.4 | 9.65 | 78.6 | 35.0 | 42.5 | 23.0 | 15.2 | K15.5 | K16.1 | K14.6 | K 9.65 | K 9.65 | K21.8 | K16.4 |
| 5. | K10.4 | 24.2 | 90.7 | 33.0 | 42.5 | 22.6 | 15.2 | K23.0 | K17.2 | K16.4 | K 9.65 | K11.9 | K21.8 | K18.0 |
| 6. | K10.2 | 29.8 | 113 | 30.2 | 41.2 | 19.8 | 21.0 | K19.5 | K22.6 | K19.8 | K 9.65 | K11.3 | K20.2 | K17.2 |
| 7. | K 9.90 | 21.8 | 116 | 27.0 | 39.0 | 19.8 | 24.2 | K17.6 | K18.8 | K15.8 | K 9.40 | K13.4 | K19.5 | K16.1 |
| 8. | K 9.90 | 23.0 | 117 | 27.8 | 39.0 | 19.8 | 21.8 | K14.9 | K18.8 | K14.9 | K 8.90 | K14.9 | K23.4 | K14.3 |
| 9. | K 9.65 | 25.0 | 108 | 28.2 | 40.3 | 18.8 | 19.2 | K13.4 | K16.4 | K14.3 | K 9.15 | K12.2 | K21.8 | K13.1 |
| 10. | K 9.65 | 30.6 | 105 | 27.8 | 35.8 | 18.8 | 17.6 | K12.2 | K16.4 | K13.7 | K 8.90 | K11.0 | K20.2 | K15.5 |
| 11. | K 9.40 | 25.0 | 98.0 | 24.2 | 33.8 | 18.8 | 17.2 | K11.9 | K17.6 | K12.5 | K 8.90 | K10.4 | K23.8 | K15.8 |
| 12. | K 9.40 | 22.2 | 93.4 | 23.4 | 33.4 | 19.5 | 20.2 | K13.4 | K16.8 | K12.5 | K16.1 | K10.4 | K20.2 | 14.3 |
| 13. | K 9.15 | 23.0 | 92.1 | 24.2 | 32.6 | 19.2 | 16.1 | K12.5 | K18.8 | K11.9 | K14.0 | K11.3 | K18.4 | 14.0 |
| 14. | K 8.65 | 27.4 | 87.6 | 25.0 | 32.2 | 18.0 | 15.5 | K14.6 | K31.8 | K11.6 | K10.7 | K11.9 | K16.1 | 14.3 |
| 15. | K 8.90 | 37.8 | 84.9 | 27.4 | 31.8 | 17.2 | 15.2 | K15.5 | K42.1 | K11.3 | K 9.90 | K12.2 | K15.8 | 31.8 |
| 16. | K 9.15 | 40.3 | 80.4 | 25.8 | 31.0 | 16.4 | 16.1 | K14.9 | K34.6 | K12.5 | K 9.40 | K11.9 | K14.9 | 70.0 |
| 17. | K 8.65 | 70.0 | 72.7 | 26.2 | 30.6 | 15.5 | K15.8 | K14.9 | K34.2 | K14.0 | K 9.15 | K10.7 | K14.6 | 81.3 |
| 18. | K 8.65 | 60.6 | 65.1 | 33.4 | 30.2 | 16.4 | K14.9 | K11.9 | K44.8 | K11.9 | K10.4 | K10.4 | K14.0 | 79.9 |
| 19. | K 8.90 | 52.9 | 69.6 | 52.0 | 31.8 | 16.1 | K15.2 | K11.6 | K40.8 | K11.0 | K10.7 | K 9.90 | K13.7 | 80.4 |
| 20. | K 8.40 | 44.8 | 105 | 51.6 | 30.6 | 15.2 | K14.0 | K17.2 | K35.8 | K10.7 | K 9.65 | K 9.40 | K13.1 | 78.6 |
| 21. | K 8.65 | 40.3 | 92.5 | 31.8 | 29.0 | 16.1 | K13.7 | K27.8 | K33.8 | K10.2 | K 8.40 | K 9.40 | K12.8 | 78.1 |
| 22. | K 8.40 | 39.4 | 123 | 27.0 | 27.8 | 16.4 | K13.4 | K33.0 | K33.0 | K10.7 | K 9.15 | K 9.15 | K12.5 | 72.3 |
| 23. | K 8.40 | 48.9 | 110 | 26.6 | 26.6 | 17.2 | K12.8 | K26.6 | K27.8 | K11.6 | K 9.40 | K 9.15 | K11.9 | 96.1 |
| 24. | K 7.65 | 59.2 | 110 | 29.8 | 25.4 | 17.2 | K12.8 | K20.6 | K24.2 | K13.4 | K 8.15 | K 8.90 | K11.9 | 141 |
| 25. | K 7.15 | 65.1 | 104 | 36.6 | 25.0 | 17.2 | K11.9 | K19.8 | K20.6 | K15.2 | K 8.90 | K 9.15 | K11.6 | 157 |
| 26. | K 7.90 | 61.9 | 93.0 | 35.8 | 23.8 | 16.1 | K11.3 | K19.5 | K19.5 | K13.4 | K11.0 | K 9.15 | K11.3 | 176 |
| 27. | K 8.40 | 61.0 | 82.2 | 33.0 | 23.0 | 15.8 | K11.3 | K16.8 | K18.4 | K12.8 | K13.1 | K 9.90 | K12.2 | 159 |
| 28. | K 7.65 | 60.6 | 73.2 | 30.6 | 21.4 | 15.5 | K11.3 | K16.4 | K18.0 | K11.9 | K15.2 | K 9.90 | K13.4 | 157 |
| 29. | K 7.65 | 59.7 | 66.4 | 32.6 | 22.2 | 14.9 | K11.0 | K15.5 | K25.4 | K11.3 | K11.9 | K 9.15 | K16.4 | 145 |
| 30. | K 8.15 | 61.5 | 59.2 | | 21.8 | 14.6 | K10.4 | K15.8 | K25.4 | K11.3 | K10.2 | K 9.90 | K26.2 | 130 |
| 31. | | 61.0 | 53.4 | | 23.0 | | K11.0 | | K18.8 | K11.6 | | K12.2 | | 111 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 1. | 31. | 12. | 28. | 30. | 30. | 19. | 4. | 21. | 24. | 24. | 26. | 9. |
| NQ | 7.15 | 7.90 | 53.4 | 23.4 | 21.4 | 14.6 | 10.4 | 11.6 | 16.1 | 10.2 | 8.15 | 8.90 | 11.3 | 13.1 |
| MQ | 9.06 | 39.1 | 89.0 | 32.1 | 31.8 | 17.9 | 15.2 | 16.9 | 24.8 | 13.3 | 10.4 | 10.6 | 16.4 | 66.8 |
| HQ | 15.5 | 76.3 | 143 | 66.0 | 43.5 | 25.0 | 27.0 | 38.2 | 46.6 | 21.4 | 22.2 | 21.0 | 28.6 | 180 |
| Tag | 14. | 17. | 22. | 19. | 5. | 4. | 7. | 21. | 18. | 25. | 18. | 8. | 30. | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 34 | 78 | 26 | 28 | 15 | 13 | 14 | 22 | 12 | 9 | 9 | 14 | 59 |

| | 1931/2011 | | 1932/2012 | | | | | | 81 Kalenderjahre² | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1947 | 1947 | 1947 | 1963 | 1963 | 1933 | 1934 | 1934 | 1934 | 1934 | 1947 | 1947 | 1947 | 1947 |
| NQ | 1.78 | 4.62 | 5.14 | 4.79 | 4.99 | 9.80 | 5.00 | 3.70 | 2.10 | 3.40 | 2.04 | 3.05 | 1.78 | 4.62 |
| MNQ | 14.6 | 17.7 | 21.3 | 24.5 | 26.5 | 26.6 | 17.0 | 14.0 | 12.1 | 10.3 | 10.0 | 10.8 | 14.5 | 17.7 |
| MQ | 26.8 | 38.6 | 45.6 | 45.6 | 51.7 | 44.7 | 26.2 | 22.4 | 19.2 | 15.4 | 14.8 | 18.7 | 26.8 | 39.1 |
| MHQ | 61.4 | 89.4 | 109 | 95.8 | 109 | 84.4 | 53.2 | 52.3 | 43.7 | 34.4 | 32.5 | 43.3 | 61.5 | 91.2 |
| HQ | 254 | 342 | 312 | 300 | 400 | 268 | 184 | 342 | 237 | 222 | 154 | 205 | 254 | 342 |
| Jahr | 1940 | 1939 | 1982 | 1946 | 1942 | 1994 | 1941+ | 1941 | 1956 | 1981 | 2007 | 1960 | 1940 | 1939 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 23 | 34 | 40 | 37 | 46 | 38 | 23 | 19 | 17 | 14 | 13 | 16 | 23 | 34 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 7.15 | am 25.11.2011 | 7.15 | 8.15 | 8.15 | am 24.09.2012 |
| MQ | m³/s | 25.9 | | 36.8 | 15.2 | 28.9 | |
| HQ | m³/s | 143 | am 22.01.2012 bei W = 412 cm | 143 | 46.6 | 180 | am 26.12.2012 bei W = 454 cm |
| Nq | l/(skm²) | 2.35 | | 2.35 | 2.68 | 2.68 | |
| Mq | l/(skm²) | 8.53 | | 12.1 | 5.00 | 9.51 | |
| Hq | l/(skm²) | 47.1 | | 47.1 | 15.3 | 59.2 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 270 | | 190 | 79 | 301 | |

| | | 1932/2012 (*) 81 Jahre² | | | | 1932/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.78 | am 20.11.1947 | 1.78 | 2.04 | 1.78 | am 20.11.1947 |
| MNQ | m³/s | 7.76 | | 11.6 | 8.42 | 8.12 | |
| MQ | m³/s | 30.7 | | 42.2 | 19.5 | 30.8 | |
| MHQ | m³/s | 185 | | 177 | 84.8 | 184 | |
| HQ | m³/s | 400 | am 19.03.1942 | 400 | 342 | 400 | am 19.03.1942 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.55 | | 3.82 | 2.77 | 2.67 | |
| Mq | l/(skm²) | 10.1 | | 13.9 | 6.40 | 10.1 | |
| MHq | l/(skm²) | 60.9 | | 58.2 | 27.9 | 60.6 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 319 | | 217 | 102 | 320 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.78 | 0.586 | 20.11.1947 | 400 | 132 | | 19.03.1942 |
| 2 | 2.10 | 0.691 | 13.07.1934 | 342 | 113 | | 02.06.1941 |
| 3 | 3.22 | 1.06 | 26.07.1964 | 342 | 113 | | 02.12.1939 |
| 4 | 3.70 | 1.22 | 28.08.1976 | 338 | 111 | | 12.03.1981 |
| 5 | 4.19 | 1.38 | 16.10.1959 | 315 | 104 | | 25.03.1947 |
| 6 | 4.60 | 1.51 | 11.08.1935 | 312 | 103 | | 08.01.1982 |
| 7 | 4.79 | 1.58 | 26.02.1963 | 308 | 101 | 472 | 03.01.2003 |
| 8 | 4.79 | 1.58 | 27.07.1949 | 300 | 98.7 | | 28.12.1947 |
| 9 | 4.79 | 1.58 | 06.08.1946 | 300 | 98.7 | | 09.02.1946 |
| 10 | 4.94 | 1.63 | 18.09.1997 | 298 | 98.1 | 473 | 15.01.2011 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1932/2012 81 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 123 | 176 | 371 | 208 | 52.7 |
| 363 | 117 | 159 | 312 | 178 | 52.7 |
| 362 | 116 | 157 | 312 | 156 | 47.3 |
| 361 | 113 | 157 | 290 | 142 | 41.6 |
| 360 | 110 | 145 | 290 | 133 | 40.4 |
| 359 | 110 | 141 | 290 | 125 | 38.5 |
| 358 | 108 | 130 | 280 | 119 | 36.5 |
| 357 | 105 | 123 | 265 | 115 | 36.1 |
| 356 | 105 | 117 | 260 | 110 | 35.7 |
| 350 | 92.1 | 108 | 215 | 93.4 | 30.5 |
| 340 | 70.5 | 90.7 | 132 | 77.2 | 27.4 |
| 330 | 61.0 | 78.6 | 119 | 66.4 | 25.8 |
| 320 | 48.9 | 61.0 | 110 | 58.3 | 25.1 |
| 300 | 36.6 | 36.2 | 89.5 | 46.8 | 22.2 |
| 270 | 29.8 | 29.0 | 72.1 | 36.3 | 16.5 |
| 240 | 23.8 | 23.0 | 63.8 | 29.2 | 14.5 |
| 210 | 19.5 | 19.5 | 56.0 | 24.2 | 12.2 |
| 183 | 17.2 | 17.2 | 48.4 | 20.6 | 10.1 |
| 150 | 15.2 | 15.8 | 38.3 | 17.2 | 7.80 |
| 130 | 14.0 | 14.9 | 35.0 | 15.5 | 6.30 |
| 120 | 13.1 | 14.6 | 33.5 | 14.7 | 5.75 |
| 110 | 12.2 | 14.0 | 32.5 | 14.0 | 5.50 |
| 100 | 11.9 | 13.4 | 31.0 | 13.4 | 5.40 |
| 90 | 11.3 | 12.8 | 29.1 | 12.7 | 4.85 |
| 80 | 11.0 | 12.2 | 27.6 | 12.0 | 4.70 |
| 70 | 10.4 | 11.9 | 26.5 | 11.4 | 4.60 |
| 60 | 9.90 | 11.6 | 24.6 | 10.8 | 4.50 |
| 50 | 9.65 | 11.0 | 23.2 | 10.2 | 4.40 |
| 40 | 9.40 | 10.4 | 21.6 | 9.50 | 4.30 |
| 30 | 9.15 | 9.90 | 20.3 | 8.80 | 4.10 |
| 25 | 9.15 | 9.65 | 19.7 | 8.40 | 4.00 |
| 20 | 8.90 | 9.40 | 19.1 | 7.95 | 3.80 |
| 15 | 8.65 | 9.40 | 18.8 | 7.30 | 3.70 |
| 10 | 8.40 | 9.15 | 18.2 | 6.50 | 3.50 |
| 9 | 8.40 | 9.15 | 18.2 | 6.37 | 3.50 |
| 8 | 8.40 | 9.15 | 18.2 | 6.25 | 3.35 |
| 7 | 8.15 | 9.15 | 17.9 | 6.06 | 3.35 |
| 6 | 8.15 | 9.15 | 17.6 | 5.87 | 3.20 |
| 5 | 8.15 | 8.90 | 17.3 | 5.66 | 3.05 |
| 4 | 7.90 | 8.90 | 17.0 | 5.46 | 2.90 |
| 3 | 7.90 | 8.90 | 17.0 | 5.24 | 2.90 |
| 2 | 7.65 | 8.90 | 16.8 | 4.86 | 2.60 |
| 1 | 7.65 | 8.90 | 16.5 | 4.40 | 2.04 |
| 0 | 7.15 | 8.15 | 16.3 | 1.78 | 1.78 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
239 Tage Verkrautung
²Vorsicht: 1.2% Lücken im Zeitraum 1932/2012
²Ausgefallenes Abflussjahr: 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 4214.40 km²
PNP : NN+ 178.06 m
Lage : 90.50 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Frankenroda Nr. 420190
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 15.2 | 12.6 | 68.2 | 57.6 | 42.4 | 26.6 | 20.0 | K20.0 | K21.8 | K22.4 | K14.7 | K11.0 | 14.7 | 28.0 |
| 2. | 14.2 | 11.8 | 78.1 | R50.8 | 45.7 | 25.2 | 20.0 | K20.0 | K24.5 | K20.6 | K14.2 | K10.7 | 15.2 | 23.8 |
| 3. | 14.2 | 13.0 | 100 | R43.2 | 47.4 | 24.5 | 21.8 | K16.4 | K21.2 | K20.0 | K13.0 | K11.4 | 17.0 | 21.2 |
| 4. | 14.2 | 13.0 | 94.3 | R40.8 | 49.1 | 27.3 | K21.2 | K18.8 | K19.4 | K19.4 | K12.6 | K11.8 | 21.8 | 21.2 |
| 5. | 14.2 | 21.8 | 104 | R39.2 | 49.1 | 28.0 | K22.4 | K26.6 | K20.6 | K20.0 | K12.6 | K13.8 | 24.5 | 22.4 |
| 6. | 14.2 | 35.2 | 142 | R37.6 | 48.2 | 25.2 | K27.3 | K28.0 | K25.2 | K24.5 | K12.6 | K14.2 | 23.8 | 21.8 |
| 7. | 13.8 | 28.8 | 135 | R36.0 | 46.5 | 24.5 | K31.2 | K22.4 | K22.4 | K21.2 | K12.2 | K14.7 | 22.4 | 20.6 |
| 8. | 13.8 | 27.3 | 141 | R34.4 | 46.5 | 24.5 | K30.4 | K20.6 | K21.8 | K18.8 | K11.8 | K18.8 | 23.8 | 18.8 |
| 9. | 14.2 | 28.8 | 139 | R32.8 | 47.4 | 23.8 | K26.6 | K18.2 | K20.0 | K18.2 | K11.8 | K15.2 | 25.2 | 18.2 |
| 10. | 13.8 | 36.0 | 132 | R31.2 | 44.0 | 23.8 | K24.5 | K17.0 | K18.8 | K17.6 | K11.4 | K13.8 | 23.1 | 19.4 |
| 11. | 13.4 | 31.2 | 123 | R29.6 | 40.8 | 23.8 | K23.1 | K15.8 | K21.8 | K17.0 | K11.4 | K13.0 | 25.9 | 21.2 |
| 12. | 13.4 | 27.3 | 115 | R28.8 | 40.0 | 24.5 | K26.6 | K17.0 | K21.2 | K16.4 | K15.2 | K12.6 | 23.8 | 18.8 |
| 13. | 13.4 | 26.6 | 114 | R29.6 | 39.2 | 24.5 | K24.5 | K16.4 | K22.4 | K15.8 | K17.6 | K13.0 | 21.8 | 18.8 |
| 14. | 12.6 | 29.6 | 110 | 30.4 | 39.2 | 23.8 | K21.2 | K17.0 | K31.2 | K15.8 | K13.8 | K13.8 | 20.0 | 18.2 |
| 15. | 13.0 | 42.4 | 103 | 32.0 | 37.6 | 23.1 | K22.4 | K18.8 | K46.5 | K15.8 | K12.6 | K14.2 | 18.8 | 28.0 |
| 16. | 13.0 | 46.5 | 97.9 | 32.0 | 36.8 | 21.8 | K22.4 | K18.2 | K39.2 | K16.4 | K11.8 | K14.2 | 18.8 | 72.7 |
| 17. | 13.0 | 81.7 | 88.0 | 31.2 | 36.0 | 21.8 | K22.4 | K18.2 | K36.8 | K18.2 | K12.6 | K13.4 | 17.6 | 97.9 |
| 18. | 12.6 | 73.6 | 78.1 | 38.4 | 36.0 | 21.2 | K22.4 | K15.8 | K46.5 | K17.0 | K13.4 | K13.0 | 17.0 | 93.4 |
| 19. | 12.6 | 62.8 | 79.0 | 50.8 | 36.8 | 21.8 | K21.8 | K14.7 | K46.5 | K14.7 | K12.6 | K12.2 | 16.4 | 94.3 |
| 20. | 12.6 | 54.2 | 133 | 62.8 | 36.8 | 21.2 | K21.8 | K22.4 | K40.0 | K14.7 | K13.4 | K11.4 | 16.4 | 90.7 |
| 21. | 12.6 | 48.2 | 119 | 42.4 | 35.2 | 21.2 | K20.6 | K28.8 | K38.4 | K14.2 | K11.0 | K11.0 | 15.8 | 88.9 |
| 22. | 12.6 | 46.5 | 146 | 33.6 | 33.6 | 21.8 | K20.0 | K37.6 | K36.8 | K14.2 | K11.0 | K11.8 | 15.8 | 83.5 |
| 23. | 12.6 | 51.6 | 146 | 32.8 | 32.8 | 23.1 | K19.4 | K31.2 | K32.8 | K15.2 | K11.8 | K11.4 | 15.2 | 102 |
| 24. | 12.6 | 65.5 | 140 | 34.4 | 31.2 | 22.4 | K18.8 | K24.5 | K28.8 | K17.0 | K11.4 | K11.4 | 14.7 | 186 |
| 25. | 11.0 | 75.4 | 134 | 40.8 | 30.4 | 22.4 | K18.2 | K22.4 | K25.2 | K20.0 | K10.7 | K11.4 | 14.7 | 180 |
| 26. | 12.6 | 71.8 | 119 | 42.4 | 29.6 | 22.4 | K17.0 | K22.4 | K23.8 | K17.6 | K12.6 | K11.4 | 14.2 | 192 |
| 27. | 11.4 | 69.1 | 105 | 40.0 | 28.8 | 21.2 | K16.4 | K20.6 | K23.1 | K15.8 | K14.2 | K11.8 | 14.7 | 198 |
| 28. | 12.6 | 67.3 | 92.5 | 37.6 | 28.0 | 20.6 | K16.4 | K20.0 | K22.4 | K15.8 | K17.6 | K12.6 | 16.4 | 188 |
| 29. | 11.8 | 66.4 | 83.5 | 37.6 | 26.6 | 20.6 | K15.2 | K18.8 | K27.3 | K14.2 | K14.2 | K11.8 | 19.4 | 181 |
| 30. | 11.8 | 70.0 | 72.7 | | 25.9 | 20.0 | K14.7 | K18.8 | K31.2 | K14.2 | K12.6 | K12.2 | 27.3 | 166 |
| 31. | | 70.9 | 64.6 | | 27.3 | | K14.7 | | K25.2 | K14.7 | | K13.8 | | 143 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 2. | 31. | 12. | 30. | 30. | 30.+ | 19. | 10. | 21.+ | 25. | 2. | 26. | 9.+ |
| NQ | 11.0 | 11.8 | 64.6 | 28.8 | 25.9 | 20.0 | 14.7 | 14.7 | 18.8 | 14.2 | 10.7 | 10.7 | 14.2 | 18.2 |
| MQ | 13.1 | 45.4 | 110 | 38.3 | 37.9 | 23.2 | 21.5 | 20.9 | 28.5 | 17.3 | 12.9 | 12.8 | 19.2 | 79.9 |
| HQ | 18.2 | 90.7 | 155 | 71.8 | 49.9 | 30.4 | 33.6 | 40.8 | 49.9 | 27.3 | 21.8 | 22.4 | 31.2 | 201 |
| Tag | 1. | 17. | 22. | 19. | 6. | 4. | 7. | 22. | 18. | 6. | 12. | 8. | 30. | 27. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 29 | 70 | 23 | 24 | 14 | 14 | 13 | 18 | 11 | 8 | 8 | 12 | 51 |

| | 1935/2011 | | 1936/2012 77 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1964 | 1953 | 1963 | 1954 | 1963 | 1959 | 1953 | 1976 | 1976 | 1964 | 1947 | 1959 | 1964 | 1953 |
| NQ | 6.52 | 7.90 | 7.64 | 7.46 | 7.94 | 13.7 | 12.2 | 8.60 | 5.92 | 5.21 | 5.00 | 4.61 | 6.52 | 7.90 |
| MNQ | 19.6 | 24.5 | 28.2 | 31.9 | 34.6 | 35.8 | 23.7 | 20.3 | 17.8 | 15.3 | 14.5 | 15.4 | 19.7 | 24.6 |
| MQ | 34.4 | 49.6 | 58.2 | 59.1 | 65.1 | 58.1 | 35.9 | 31.3 | 26.6 | 22.1 | 20.7 | 24.8 | 34.4 | 50.3 |
| MHQ | 71.6 | 110 | 133 | 120 | 129 | 106 | 69.2 | 63.1 | 52.4 | 44.6 | 39.7 | 49.8 | 71.3 | 112 |
| HQ | 297 | 432 | 358 | 450 | 363 | 372 | 224 | 271 | 370 | 355 | 242 | 176 | 297 | 432 |
| Jahr | 1940 | 1947 | 2011 | 1946 | 1942 | 1994 | 2004 | 1961 | 1956 | 1981 | 2007 | 1960 | 1940 | 1947 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 32 | 37 | 34 | 41 | 36 | 23 | 19 | 17 | 14 | 13 | 16 | 21 | 32 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 10.7 | am 25.09.2012 | 11.0 | 10.7 | 10.7 | am 25.09.2012 |
| MQ | m³/s | 31.9 | | 44.9 | 19.0 | 35.3 | |
| HQ | m³/s | 155 | am 22.01.2012 bei W = 265 cm | 155 | 49.9 | 201 | am 27.12.2012 bei W = 309 cm |
| Nq | l/(skm²) | 2.54 | | 2.61 | 2.54 | 2.54 | |
| Mq | l/(skm²) | 7.57 | | 10.7 | 4.51 | 8.38 | |
| Hq | l/(skm²) | 36.8 | | 36.8 | 11.8 | 47.7 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 239 | | 168 | 72 | 265 | |

| | | 1936/2012 (*) 77 Jahre² | | | | 1936/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 4.61 | am 11.10.1959 | 6.52 | 4.61 | 4.61 | am 11.10.1959 |
| MNQ | m³/s | 11.1 | | 16.4 | 12.2 | 11.7 | |
| MQ | m³/s | 40.4 | | 54.1 | 26.9 | 40.4 | |
| MHQ | m³/s | 218 | | 207 | 107 | 216 | |
| HQ | m³/s | 450 | am 09.02.1946 | 450 | 370 | 450 | am 09.02.1946 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.64 | | 3.88 | 2.90 | 2.77 | |
| Mq | l/(skm²) | 9.58 | | 12.8 | 6.38 | 9.60 | |
| MHq | l/(skm²) | 51.8 | | 49.2 | 25.5 | 51.2 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 302 | | 201 | 101 | 303 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 4.61 | 1.09 | 11.10.1959 | 450 | 107 | | 09.02.1946 |
| 2 | 4.80 | 1.14 | 23.10.1947 | 432 | 103 | | 29.12.1947 |
| 3 | 5.21 | 1.24 | 29.08.1964 | 372 | 88.3 | 415 | 16.04.1994 |
| 4 | 5.40 | 1.28 | 11.09.1949 | 370 | 87.8 | | 16.07.1956 |
| 5 | 5.92 | 1.40 | 10.07.1976 | 363 | 86.1 | | 19.03.1942 |
| 6 | 6.60 | 1.57 | 22.09.1991 | 358 | 84.9 | 434 | 16.01.2011 |
| 7 | 6.60 | 1.57 | 07.10.1973 | 357 | 84.7 | | 13.03.1981 |
| 8 | 7.02 | 1.67 | 28.08.1952 | 355 | 84.2 | | 11.08.1981 |
| 9 | 7.38 | 1.75 | 22.09.1944 | 353 | 83.8 | | 03.12.1939 |
| 10 | 7.46 | 1.77 | 23.02.1954 | 348 | 82.6 | 405 | 04.01.2003 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1936/2012 77 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 146 | 198 | 443 | 234 | 69.2 |
| 363 | 146 | 192 | 398 | 209 | 64.1 |
| 362 | 142 | 188 | 366 | 192 | 60.6 |
| 361 | 141 | 186 | 310 | 181 | 53.1 |
| 360 | 140 | 181 | 284 | 173 | 50.6 |
| 359 | 139 | 180 | 264 | 163 | 49.8 |
| 358 | 135 | 166 | 258 | 156 | 49.8 |
| 357 | 134 | 146 | 258 | 149 | 48.0 |
| 356 | 133 | 146 | 250 | 142 | 47.1 |
| 350 | 114 | 135 | 195 | 120 | 39.8 |
| 340 | 83.5 | 105 | 176 | 98.4 | 36.6 |
| 330 | 70.0 | 92.5 | 147 | 85.3 | 35.0 |
| 320 | 54.2 | 72.7 | 134 | 74.4 | 30.3 |
| 300 | 42.4 | 42.4 | 116 | 59.5 | 24.6 |
| 270 | 35.2 | 34.4 | 94.2 | 46.6 | 21.2 |
| 240 | 28.8 | 28.0 | 82.0 | 38.4 | 19.8 |
| 210 | 24.5 | 23.8 | 70.5 | 32.6 | 17.1 |
| 183 | 22.4 | 22.4 | 60.1 | 28.5 | 15.2 |
| 150 | 20.0 | 20.6 | 51.6 | 24.2 | 10.8 |
| 130 | 18.2 | 19.4 | 47.2 | 21.9 | 9.30 |
| 120 | 17.0 | 18.8 | 45.4 | 20.9 | 8.94 |
| 110 | 16.4 | 18.2 | 44.6 | 20.0 | 8.60 |
| 100 | 15.2 | 17.0 | 43.0 | 19.0 | 8.60 |
| 90 | 14.7 | 16.4 | 41.4 | 18.2 | 8.28 |
| 80 | 14.2 | 15.8 | 39.1 | 17.3 | 7.98 |
| 70 | 13.8 | 15.2 | 37.4 | 16.4 | 7.70 |
| 60 | 13.4 | 14.7 | 36.6 | 15.5 | 7.38 |
| 50 | 12.6 | 14.2 | 34.2 | 14.7 | 7.10 |
| 40 | 12.6 | 13.4 | 32.1 | 13.8 | 6.69 |
| 30 | 12.6 | 12.6 | 29.8 | 12.8 | 6.46 |
| 25 | 11.8 | 12.6 | 29.1 | 12.2 | 6.46 |
| 20 | 11.8 | 11.8 | 27.9 | 11.4 | 6.20 |
| 15 | 11.4 | 11.8 | 27.3 | 10.6 | 6.00 |
| 10 | 11.4 | 11.4 | 26.7 | 9.32 | 5.80 |
| 9 | 11.4 | 11.4 | 26.1 | 9.08 | 5.80 |
| 8 | 11.4 | 11.4 | 25.4 | 8.90 | 5.80 |
| 7 | 11.4 | 11.4 | 25.4 | 8.56 | 5.80 |
| 6 | 11.4 | 11.4 | 24.8 | 8.19 | 5.80 |
| 5 | 11.0 | 11.4 | 24.2 | 7.90 | 5.80 |
| 4 | 11.0 | 11.0 | 24.2 | 7.64 | 5.80 |
| 3 | 11.0 | 11.0 | 24.2 | 7.20 | 5.40 |
| 2 | 11.0 | 11.0 | 24.2 | 6.92 | 5.00 |
| 1 | 11.0 | 11.0 | 23.0 | 6.46 | 5.00 |
| 0 | 10.7 | 10.7 | 23.0 | 4.61 | 4.61 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Durchflusskorrektur der Hochwasser von 1981 auf Basis von Gewässerlängsschnittanalysen
12 Tage Randeis, 181 Tage Verkrautung
²Vorsicht: 1.3% Lücken im Zeitraum 1936/2012
²Ausgefallenes Abflussjahr: 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 4302 km²
PNP : NN + 168.02 m
Lage: 77.3 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Heldra Nr. 41700105
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 16.0 | 11.6 | 70.6 | 60.4 | 41.8 | 24.5 | 18.4 | 17.9 | 21.9 | 22.0 | 14.6 | 11.1 | 14.6 | 29.2 |
| 2. | 14.4 | 10.7 | 78.6 | 53.3 | 44.7 | 22.8 | 18.1 | 19.4 | 25.4 | 20.0 | 14.0 | 9.75 | 15.2 | 24.4 |
| 3. | 14.7 | 12.3 | 99.6 | 46.8 | 46.7 | 22.3 | 19.2 | 15.7 | 21.3 | 19.9 | 12.8 | 11.1 | 16.8 | 21.3 |
| 4. | 14.7 | 12.4 | 94.7 | 45.8 | 48.2 | 24.4 | 19.9 | 17.5 | 18.7 | 19.3 | 12.4 | 11.3 | 21.7 | 22.3 |
| 5. | 14.5 | 20.1 | 102 | 43.5 | 48.0 | 25.9 | 20.3 | 25.9 | 20.2 | 19.3 | 12.2 | 13.8 | 25.1 | 22.4 |
| 6. | 14.4 | 37.5 | 144 | 39.8 | 47.2 | 22.5 | 25.0 | 30.0 | 25.2 | 24.2 | 12.1 | 15.1 | 23.8 | 21.9 |
| 7. | 13.9 | 32.3 | 139 | 35.1 | 45.1 | 21.5 | 29.0 | 23.3 | 22.7 | 21.9 | 12.1 | 15.0 | 22.7 | 20.9 |
| 8. | 13.9 | 29.7 | 147 | 35.1 | 44.0 | 21.7 | 28.8 | 21.7 | 21.5 | 18.5 | 11.5 | 19.6 | 23.9 | 19.1 |
| 9. | 13.7 | 30.7 | 142 | 35.7 | 45.3 | 21.1 | 25.1 | 18.4 | 19.8 | 18.1 | 11.2 | 16.4 | 26.2 | 17.8 |
| 10. | 13.3 | 38.7 | 133 | 34.3 | 42.0 | 20.7 | 22.9 | 17.2 | 18.4 | 17.4 | 10.8 | 13.8 | 23.9 | 18.2 |
| 11. | 12.6 | 35.7 | 125 | 32.7 | 38.3 | 20.7 | 21.6 | 16.1 | 21.6 | 16.7 | 10.9 | 13.0 | 26.4 | 20.4 |
| 12. | 12.5 | 30.7 | 116 | 30.8 | 37.2 | 21.8 | 24.8 | 17.4 | 20.8 | 16.1 | 14.7 | 12.3 | 25.5 | 18.7 |
| 13. | 12.5 | 29.1 | 114 | 29.6 | 36.9 | 21.9 | 24.1 | 17.1 | 22.4 | 17.4 | 19.9 | 12.9 | 22.6 | 17.9 |
| 14. | 11.8 | 31.1 | 110 | 30.1 | 36.3 | 21.1 | 20.0 | 18.1 | 30.9 | 15.9 | 15.0 | 14.1 | 20.7 | 17.7 |
| 15. | 11.8 | 43.1 | 103 | 31.6 | 35.7 | 20.1 | 21.4 | 20.3 | 46.3 | 15.5 | 12.5 | 14.9 | 19.0 | 25.8 |
| 16. | 12.2 | 47.7 | 97.2 | 32.4 | 34.9 | 19.5 | 21.4 | 20.0 | 41.5 | 16.0 | 11.6 | 14.2 | 18.5 | 67.5 |
| 17. | 12.3 | 78.9 | 88.5 | 30.8 | 34.1 | 19.1 | 21.7 | 20.0 | 37.9 | 18.4 | 11.8 | 13.6 | 17.7 | 94.3 |
| 18. | 12.0 | 75.9 | 79.9 | 38.3 | 33.6 | 18.6 | 21.3 | 17.0 | 46.7 | 17.3 | 13.5 | 12.8 | 17.3 | 90.7 |
| 19. | 11.8 | 65.9 | 78.5 | 48.4 | 34.0 | 19.5 | 20.6 | 15.3 | 48.0 | 14.9 | 12.9 | 11.6 | 16.6 | 92.4 |
| 20. | 12.1 | 58.2 | 131 | 64.4 | 34.3 | 18.9 | 20.9 | 23.4 | 41.9 | 14.2 | 13.7 | 10.5 | 16.3 | 88.6 |
| 21. | 11.9 | 51.9 | 121 | 44.3 | 32.1 | 18.4 | 19.1 | 30.3 | 40.3 | 13.7 | 11.0 | 10.2 | 15.4 | 86.9 |
| 22. | 11.9 | 49.5 | 153 | 34.0 | 30.7 | 19.7 | 19.0 | 41.0 | 38.6 | 13.6 | 10.6 | 10.8 | 15.1 | 83.0 |
| 23. | 11.8 | 53.1 | 149 | 32.1 | 29.4 | 20.6 | 18.2 | 34.5 | 35.0 | 14.6 | 11.3 | 10.7 | 14.6 | 96.5 |
| 24. | 11.8 | 65.6 | 143 | 33.3 | 28.1 | 20.4 | 17.5 | 27.1 | 30.4 | 15.2 | 10.9 | 10.6 | 14.1 | 184 |
| 25. | 10.0 | 75.3 | 135 | 39.5 | 27.3 | 20.6 | 16.8 | 24.4 | 26.3 | 20.0 | 9.84 | 10.6 | 13.7 | 182 |
| 26. | 11.5 | 73.2 | 121 | 42.9 | 26.1 | 20.2 | 15.4 | 24.3 | 23.6 | 18.5 | 12.2 | 10.6 | 13.3 | 192 |
| 27. | 10.2 | 71.2 | 106 | 40.0 | 25.5 | 19.0 | 14.7 | 22.0 | 23.1 | 16.2 | 14.8 | 11.0 | 13.4 | 201 |
| 28. | 11.5 | 70.1 | 94.0 | 37.2 | 24.8 | 19.2 | 14.3 | 20.5 | 22.2 | 16.2 | 18.7 | 12.0 | 15.5 | 192 |
| 29. | 10.6 | 69.5 | 84.8 | 36.4 | 24.1 | 19.5 | 13.6 | 19.2 | 26.8 | 14.6 | 15.5 | 11.4 | 18.4 | 186 |
| 30. | 10.7 | 72.2 | 75.9 | | 24.1 | 18.7 | 13.1 | 18.9 | 32.0 | 14.7 | 12.8 | 11.8 | 27.1 | 169 |
| 31. | | 73.8 | 68.2 | | 25.0 | | 12.8 | | 25.4 | 15.1 | | 13.7 | | 144 |
| Tag | 25. | 2. | 31. | 13. | 29.+ | 21. | 31. | 19. | 10. | 22. | 25. | 2. | 26. | 14. |
| NQ | 10.0 | 10.7 | 68.2 | 29.6 | 24.1 | 18.4 | 12.8 | 15.3 | 18.4 | 13.6 | 9.84 | 9.75 | 13.3 | 17.7 |
| MQ | 12.6 | 47.0 | 111 | 39.3 | 35.7 | 20.8 | 20.0 | 21.8 | 28.9 | 17.3 | 12.9 | 12.6 | 19.2 | 79.6 |
| HQ | 18.1 | 90.7 | 169 | 70.8 | 49.4 | 27.4 | 31.7 | 45.3 | 51.0 | 26.6 | 23.4 | 25.2 | 32.8 | 202 |
| Tag | 1. | 17. | 22. | 20. | 5. | 4.+ | 8. | 22. | 18. | 6. | 13. | 8. | 30. | 27. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 29 | 69 | 23 | 22 | 13 | 12 | 13 | 18 | 11 | 8 | 8 | 12 | 50 |

## Hauptwerte

| | 1950/2011 | | 1951/2012 | | | | | | | 62 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1953 | 1953 | 1954 | 1972 | 1972 | 1960 | 1954 | 1954 | 1960 | 1953 | 1953 | 1959 | 1953 | 1953 |
| NQ | 4.90 | 4.50 | 5.60 | 7.52 | 9.34 | 13.3 | 7.70 | 6.70 | 5.26 | 2.50 | 3.00 | 2.70 | 4.90 | 4.50 |
| MNQ | 18.6 | 24.0 | 29.3 | 33.6 | 36.6 | 37.7 | 25.3 | 20.1 | 16.7 | 14.0 | 13.3 | 14.3 | 18.6 | 23.9 |
| MQ | 32.7 | 49.6 | 58.8 | 57.2 | 65.0 | 59.8 | 37.8 | 31.1 | 25.9 | 20.8 | 19.3 | 23.3 | 31.8 | 49.9 |
| MHQ | 68.2 | 109 | 132 | 115 | 126 | 109 | 74.0 | 63.2 | 52.2 | 43.9 | 41.7 | 48.9 | 66.7 | 110 |
| HQ | 241 | 309 | 386 | 295 | 364 | 368 | 243 | 261 | 344 | 358 | 314 | 157 | 241 | 309 |
| Jahr | 1998 | 1967 | 2011 | 1995 | 1981 | 1994 | 1961 | 1961 | 1956 | 1981 | 2007 | 2007 | 1998 | 1967 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 20 | 31 | 37 | 33 | 40 | 36 | 24 | 19 | 16 | 13 | 12 | 14 | 19 | 31 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 9.75 | am 02.10.2012 | 10.0 | 9.75 | 9.75 | am 02.10.2012 |
| MQ m³/s | 31.8 | | 44.8 | 18.9 | 35.1 | |
| HQ m³/s | 169 | am 22.01.2012 bei W= 352 cm | 169 | 51.0 | 202 | am 27.12.2012 bei W= 384 cm |
| Nq l/(s km²) | 2.27 | | 2.32 | 2.27 | 2.27 | |
| Mq l/(s km²) | 7.39 | | 10.4 | 4.40 | 8.15 | |
| Hq l/(s km²) | 39.3 | | 39.3 | 11.9 | 47.0 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 233 | | 164 | 70 | 258 | |
| | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
| NQ m³/s | 2.50 | am 18.08.1953 | 4.50 | 2.50 | 2.50 | am 18.08.1953 |
| MNQ m³/s | 10.0 | | 16.1 | 11.0 | 10.6 | |
| MQ m³/s | 40.0 | | 53.9 | 26.4 | 40.0 | |
| MHQ m³/s | 207 | | 196 | 108 | 212 | |
| HQ m³/s | 386 | am 16.01.2011 bei W= 469 cm | 386 | 358 | 386 | am 16.01.2011 bei W= 469 cm |
| $HQ_1$ m³/s | 168 | | 155 | 63.4 | 168 | |
| $HQ_5$ m³/s | 277 | | 263 | 162 | 277 | |
| MNq l/(s km²) | 2.32 | | 3.74 | 2.56 | 2.46 | |
| Mq l/(s km²) | 9.30 | | 12.5 | 6.14 | 9.30 | |
| MHq l/(s km²) | 48.1 | | 45.6 | 25.1 | 49.3 | |
| | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 293 | | 197 | 98 | 294 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.50 | 0.581 | 18.08.1953 | 386 | 89.7 | 469 | 16.01.2011 |
| 2 | 2.70 | 0.628 | 11.10.1959 | 368 | 85.5 | 461 | 16.04.1994 |
| 3 | 4.86 | 1.13 | 07.10.1973 | 364 | 84.6 | 459 | 14.03.1981 |
| 4 | 5.26 | 1.22 | 02.07.1960 | 358 | 83.2 | 457 | 12.08.1981 |
| 5 | 5.70 | 1.32 | 31.07.1976 | 344 | 80.0 | 452 | 16.07.1956 |
| 6 | 6.22 | 1.45 | 18.07.1964 | 342 | 79.5 | 450 | 04.01.2003 |
| 7 | 6.50 | 1.51 | 29.08.1952 | 325 | 75.5 | 445 | 09.01.1982 |
| 8 | 6.70 | 1.56 | 03.09.1991 | 313 | 72.8 | 440 | 04.01.1987 |
| 9 | 6.70 | 1.56 | 20.06.1954 | 309 | 71.8 | 439 | 27.12.1967 |
| 10 | 6.80 | 1.58 | 02.11.1951 | 301 | 70.0 | 431 | 31.01.1995 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1951/2012 Obere Hüllwerte | 62 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 153 | 201 | | | |
| 364 | 149 | 201 | 362 | 241 | 63.4 |
| 363 | 147 | 192 | 349 | 208 | 61.1 |
| 362 | 144 | 186 | 332 | 190 | 54.5 |
| 361 | 143 | 184 | 315 | 176 | 50.3 |
| 360 | 142 | 182 | 285 | 167 | 49.6 |
| 359 | 139 | 169 | 269 | 159 | 48.3 |
| 358 | 135 | 153 | 266 | 151 | 47.6 |
| 357 | 133 | 149 | 257 | 144 | 46.9 |
| 356 | 131 | 147 | 248 | 138 | 43.9 |
| 350 | 110 | 135 | 200 | 117 | 35.4 |
| 340 | 79.9 | 103 | 158 | 95.9 | 34.6 |
| 330 | 71.2 | 88.6 | 138 | 83.2 | 33.0 |
| 320 | 53.3 | 68.2 | 124 | 73.6 | 31.9 |
| 300 | 43.5 | 43.5 | 109 | 60.8 | 29.2 |
| 270 | 34.5 | 34.1 | 85.6 | 47.9 | 24.4 |
| 240 | 29.0 | 26.2 | 69.6 | 39.3 | 21.3 |
| 210 | 23.1 | 23.3 | 61.9 | 33.2 | 16.0 |
| 183 | 20.9 | 21.5 | 55.0 | 28.7 | 14.2 |
| 150 | 19.3 | 19.8 | 49.3 | 24.0 | 9.98 |
| 130 | 18.2 | 18.9 | 45.9 | 21.5 | 9.10 |
| 120 | 17.2 | 18.5 | 44.2 | 20.4 | 8.97 |
| 110 | 16.1 | 17.9 | 42.9 | 19.4 | 8.51 |
| 100 | 15.1 | 17.3 | 40.3 | 18.4 | 8.50 |
| 90 | 14.7 | 16.3 | 38.2 | 17.5 | 8.20 |
| 80 | 14.1 | 15.5 | 35.8 | 16.4 | 7.90 |
| 70 | 13.7 | 15.0 | 34.6 | 15.6 | 7.70 |
| 60 | 12.9 | 14.6 | 31.3 | 14.7 | 7.40 |
| 50 | 12.4 | 13.8 | 29.8 | 13.8 | 7.10 |
| 40 | 12.0 | 13.0 | 28.3 | 12.9 | 6.80 |
| 30 | 11.8 | 12.3 | 25.8 | 11.8 | 6.20 |
| 25 | 11.4 | 12.0 | 25.3 | 11.3 | 5.90 |
| 20 | 11.1 | 11.4 | 25.0 | 10.6 | 5.40 |
| 15 | 10.9 | 11.1 | 24.5 | 9.92 | 5.00 |
| 10 | 10.7 | 10.9 | 23.9 | 9.03 | 5.00 |
| 9 | 10.7 | 10.8 | 23.8 | 8.82 | 4.90 |
| 8 | 10.7 | 10.7 | 23.8 | 8.61 | 4.90 |
| 7 | 10.7 | 10.7 | 23.7 | 8.41 | 4.50 |
| 6 | 10.6 | 10.7 | 23.6 | 8.12 | 4.20 |
| 5 | 10.5 | 10.7 | 23.4 | 7.92 | 3.60 |
| 4 | 10.5 | 10.6 | 22.1 | 7.71 | 3.50 |
| 3 | 10.2 | 10.5 | 21.7 | 7.46 | 3.50 |
| 2 | 10.0 | 10.2 | 21.4 | 7.00 | 3.50 |
| 1 | 9.84 | 9.84 | 20.9 | 6.30 | 3.00 |
| 0 | 9.75 | 9.75 | 20.8 | 2.50 | 2.50 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1951/2012
Extremwerte ab 1951

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 5166 km²
PNP : NN + 143.52 m
Lage: 40.7 km oberhalb der Mündung, rechts

# Q
m³/s

Pegel : Allendorf Nr. 41900104
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 19.4 | 14.1 | 76.5 | 71.3 | 50.9 | 34.5 | 21.7 | K 20.9 | K 24.8 | K 28.1 | K 17.7 | K 16.1 | K 18.8 | 33.4 |
| 2. | 17.5 | 14.2 | 82.3 | 64.5 | 54.4 | 32.6 | K 21.4 | K 22.9 | K 28.8 | K 26.0 | K 17.4 | K 13.7 | 19.3 | 29.2 |
| 3. | 17.4 | 14.0 | 103 | R 57.1 | 56.1 | 31.7 | K 21.0 | K 20.7 | K 26.7 | K 24.0 | K 16.4 | K 14.5 | 21.7 | 25.6 |
| 4. | 17.5 | 15.2 | 102 | R 56.7 | 57.8 | 33.9 | K 21.8 | K 20.9 | K 23.6 | K 24.3 | K 15.6 | K 15.6 | 25.1 | 25.4 |
| 5. | 17.2 | 20.4 | 112 | R 53.3 | 58.1 | 36.6 | K 22.6 | K 25.9 | K 24.6 | K 23.0 | K 15.2 | K 16.9 | 30.3 | 25.4 |
| 6. | 17.3 | 36.2 | 161 | R 49.8 | 57.2 | 33.2 | K 27.1 | K 32.6 | K 28.7 | K 28.3 | K 15.2 | K 19.9 | 28.8 | 25.2 |
| 7. | 16.8 | 37.3 | 156 | R 44.2 | 56.0 | 31.4 | K 30.3 | K 26.2 | K 28.6 | K 27.6 | K 15.2 | K 18.5 | 27.6 | 24.2 |
| 8. | 16.6 | 33.5 | 164 | R 46.8 | 55.2 | 31.3 | K 31.4 | K 26.0 | K 26.1 | K 22.9 | K 14.7 | K 21.5 | 27.0 | 22.8 |
| 9. | 16.7 | 34.4 | 161 | R 47.4 | 55.9 | 30.9 | K 28.7 | K 22.1 | K 24.9 | K 22.1 | K 14.6 | K 21.4 | 30.3 | 21.0 |
| 10. | 16.8 | 40.1 | 149 | R 45.8 | 54.3 | 30.6 | K 26.6 | K 21.0 | K 23.3 | K 21.0 | K 14.4 | K 18.2 | 28.5 | 21.7 |
| 11. | 16.5 | 40.4 | 139 | R 44.5 | 50.4 | 30.3 | K 24.9 | K 20.1 | K 25.0 | K 20.3 | K 14.5 | K 17.3 | 29.7 | 24.5 |
| 12. | 16.2 | 34.7 | 128 | R 40.5 | 49.0 | 30.7 | K 25.7 | K 20.1 | K 26.5 | K 19.4 | K 16.4 | K 17.1 | 30.8 | 22.9 |
| 13. | 16.0 | 32.7 | 126 | R 40.3 | 48.5 | 32.4 | K 26.9 | K 20.7 | K 26.9 | K 20.0 | K 23.2 | K 16.8 | 27.3 | 21.5 |
| 14. | 15.6 | 34.0 | 122 | R 40.3 | 47.3 | 30.5 | K 23.0 | K 20.2 | 43.1 | K 19.2 | K 19.3 | K 17.9 | 25.2 | 21.4 |
| 15. | 14.8 | 44.0 | 114 | R 41.3 | 46.7 | 28.8 | K 22.6 | K 22.4 | 52.7 | K 18.3 | K 16.6 | K 19.7 | 23.7 | 28.4 |
| 16. | 15.2 | 53.5 | 108 | R 43.0 | 45.9 | 27.8 | K 22.4 | 23.2 | 52.1 | K 18.4 | K 15.5 | K 18.8 | 22.9 | 63.4 |
| 17. | 15.5 | 78.3 | 98.6 | R 41.6 | 44.8 | 27.1 | K 22.8 | 22.5 | 49.9 | K 20.0 | K 15.3 | K 18.1 | 22.0 | 98.9 |
| 18. | 14.9 | 81.4 | 88.6 | 47.5 | 44.2 | 26.3 | K 21.9 | 21.1 | 54.5 | K 20.2 | K 17.2 | K 17.0 | 21.3 | 98.9 |
| 19. | 14.8 | 71.4 | 88.6 | 54.3 | 44.1 | 27.4 | K 21.4 | 19.3 | 57.7 | K 17.9 | K 16.5 | K 16.3 | 20.7 | 99.4 |
| 20. | 15.2 | 64.4 | 137 | 71.7 | 44.2 | 26.8 | K 21.2 | 27.6 | 51.7 | K 17.0 | K 16.6 | K 15.1 | 20.2 | 94.1 |
| 21. | 14.7 | 59.0 | 140 | 58.0 | 42.9 | 25.9 | K 20.0 | 31.3 | 49.2 | K 16.5 | K 15.4 | K 14.5 | 19.7 | 91.4 |
| 22. | 14.9 | 56.9 | 170 | 45.5 | 41.8 | 27.6 | K 19.6 | 42.0 | 46.5 | K 16.0 | K 13.8 | K 14.8 | 19.2 | 89.1 |
| 23. | 14.8 | 58.9 | 177 | 42.9 | 40.7 | 27.2 | K 19.0 | 39.2 | 43.2 | K 16.3 | K 14.8 | K 14.9 | 19.0 | 109 |
| 24. | 14.7 | 69.4 | 166 | 43.5 | 39.1 | 27.3 | K 18.1 | 31.8 | 37.7 | K 18.2 | K 15.0 | K 14.9 | 18.7 | 201 |
| 25. | 13.9 | 78.8 | 157 | 48.8 | 37.4 | 27.1 | K 17.7 | 28.1 | 33.7 | K 22.5 | K 14.0 | K 15.0 | 18.4 | 207 |
| 26. | 13.1 | 78.3 | 141 | 53.6 | 36.0 | 26.6 | K 16.8 | 27.5 | 30.3 | K 22.5 | K 14.7 | K 15.0 | 18.0 | 208 |
| 27. | 13.7 | 75.7 | 123 | 51.2 | 35.4 | 25.5 | K 16.4 | 25.9 | 29.7 | K 20.2 | K 18.6 | K 15.4 | 18.0 | 216 |
| 28. | 14.4 | 74.3 | 108 | 48.5 | 34.5 | 24.5 | K 16.7 | 24.1 | 29.2 | K 19.2 | K 20.7 | K 16.1 | 19.3 | 210 |
| 29. | 13.6 | 73.1 | 96.6 | 47.2 | 33.6 | 23.5 | K 16.8 | K 23.3 | 32.5 | K 17.8 | K 21.1 | K 15.8 | 21.3 | 203 |
| 30. | 13.1 | 77.6 | 87.0 | | 33.9 | 22.3 | K 16.6 | K 22.3 | 37.4 | K 17.6 | K 17.5 | K 15.8 | 28.0 | 186 |
| 31. | | 80.0 | 78.3 | | 33.9 | | K 16.7 | | 33.0 | K 18.0 | | K 17.2 | | 161 |
| Tag | 26.+ | 3. | 1. | 13.+ | 29. | 30. | 27. | 19. | 10. | 22. | 22. | 2. | 26.+ | 9. |
| NQ | 13.1 | 14.0 | 76.5 | 40.3 | 33.6 | 22.3 | 16.4 | 19.3 | 23.3 | 16.0 | 13.8 | 13.7 | 18.0 | 21.0 |
| MQ | 15.6 | 50.8 | 125 | 49.7 | 46.1 | 29.1 | 21.9 | 25.1 | 35.6 | 20.7 | 16.4 | 16.8 | 23.4 | 87.4 |
| HQ | 20.5 | 93.1 | 196 | 75.7 | 59.5 | 37.4 | 33.0 | 47.6 | 59.5 | 31.7 | 24.8 | 25.6 | 32.6 | 222 |
| Tag | 1. | 17. | 22.+ | 20. | 5. | 5. | 8. | 22. | 19. | 6. | 13. | 8. | 5. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 26 | 65 | 24 | 24 | 15 | 11 | 13 | 18 | 11 | 8 | 9 | 12 | 45 |

## Hauptwerte

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1972 | 1972 | 1960 | 1954 | 1954 | 1952 | 1943 | 1953 | 1949 | 1949 | 1953 |
| NQ | 5.05 | 7.70 | 8.60 | 9.04 | 11.0 | 16.1 | 12.7 | 9.70 | 8.60 | 6.40 | 6.90 | 6.50 | 5.05 | 7.70 |
| MNQ | 22.8 | 29.1 | 35.1 | 40.9 | 44.3 | 44.6 | 29.8 | 24.5 | 20.1 | 17.5 | 16.3 | 17.6 | 22.7 | 29.0 |
| MQ | 37.9 | 56.7 | 66.5 | 71.0 | 77.0 | 68.5 | 43.3 | 36.8 | 30.3 | 25.0 | 22.7 | 27.2 | 37.7 | 57.2 |
| MHQ | 74.3 | 118 | 137 | 137 | 147 | 116 | 79.2 | 72.1 | 56.0 | 47.2 | 42.9 | 52.6 | 73.7 | 119 |
| HQ | 258 | 431 | 425 | 585 | 553 | 347 | 233 | 357 | 342 | 290 | 329 | 190 | 258 | 431 |
| Jahr | 1998 | 1947 | 1948 | 1946 | 1947 | 1994 | 1961 | 1981 | 1956 | 1981 | 2007 | 1941 | 1998 | 1947 |
| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 19 | 29 | 35 | 34 | 40 | 34 | 22 | 18 | 16 | 13 | 11 | 14 | 19 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 13.1 | am 26.11.2011 | 13.1 | 13.7 | 13.7 | am 02.10.2012 |
| MQ m³/s | 37.8 | | 53.0 | 22.8 | 41.5 | |
| HQ m³/s | 196 | am 22.01.2012 bei W= 337 cm | 196 | 59.5 | 222 | am 24.12.2012 bei W= 359 cm |
| Nq l/(s km²) | 2.54 | | 2.54 | 2.65 | 2.65 | |
| Mq l/(s km²) | 7.32 | | 10.3 | 4.41 | 8.04 | |
| Hq l/(s km²) | 37.9 | | 37.9 | 11.5 | 43.0 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 231 | | 161 | 70 | 254 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| NQ m³/s | 5.05 | am 01.11.1949 | 5.05 | 6.40 | 5.05 | am 01.11.1949 |
| MNQ m³/s | 12.7 | | 19.2 | 14.1 | 13.4 | |
| MQ m³/s | 46.4 | | 62.6 | 30.4 | 45.6 | |
| MHQ m³/s | 233 | | 223 | 111 | 233 | |
| HQ m³/s | 585 | am 11.02.1946 | 585 | 357 | 585 | am 11.02.1946 |
| $HQ_1$ m³/s | 187 | | 167 | 63.5 | 187 | |
| $HQ_5$ m³/s | 310 | | 300 | 170 | 310 | |
| MNq l/(s km²) | 2.46 | | 3.72 | 2.73 | 2.59 | |
| Mq l/(s km²) | 8.98 | | 12.1 | 5.88 | 8.83 | |
| MHq l/(s km²) | 45.1 | | 43.2 | 21.5 | 45.1 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 283 | | 191 | 94 | 279 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 5.05 | 0.978 | 01.11.1949 | 585 | 113 | | 11.02.1946 |
| 2 | 6.40 | 1.24 | 10.08.1943 | 553 | 107 | | 16.03.1947 |
| 3 | 6.90 | 1.34 | 06.09.1953 | 521 | 101 | | 20.03.1942 |
| 4 | 7.40 | 1.43 | 01.10.1959 | 431 | 83.4 | | 31.12.1947 |
| 5 | 7.40 | 1.43 | 29.08.1952 | 392 | 75.9 | 447 | 17.01.2011 |
| 6 | 7.40 | 1.43 | 05.11.1947 | 389 | 75.3 | | 06.11.1940 |
| 7 | 8.88 | 1.72 | 28.10.1971 | 358 | 69.3 | 434 | 26.03.1987 |
| 8 | 9.04 | 1.75 | 01.02.1972 | 357 | 69.1 | 434 | 04.06.1981 |
| 9 | 9.30 | 1.80 | 08.07.1954 | 347 | 67.2 | 431 | 16.04.1994 |
| 10 | 9.34 | 1.81 | 29.08.1976 | 342 | 66.2 | | 17.07.1956 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 177 | 216 | | | |
| 364 | 170 | 210 | 548 | 268 | 65.0 |
| 363 | 166 | 208 | 537 | 237 | 62.0 |
| 362 | 164 | 207 | 481 | 220 | 59.8 |
| 361 | 164 | 203 | 399 | 208 | 57.5 |
| 360 | 161 | 201 | 384 | 195 | 55.8 |
| 359 | 157 | 186 | 318 | 184 | 55.3 |
| 358 | 156 | 177 | 302 | 174 | 55.2 |
| 357 | 149 | 170 | 291 | 168 | 54.0 |
| 356 | 141 | 166 | 291 | 161 | 52.0 |
| 350 | 123 | 156 | 231 | 135 | 44.0 |
| 340 | 96.6 | 114 | 181 | 111 | 40.9 |
| 330 | 77.6 | 98.6 | 167 | 96.2 | 40.1 |
| 320 | 64.4 | 76.5 | 147 | 85.7 | 38.5 |
| 300 | 53.5 | 53.6 | 128 | 70.8 | 35.6 |
| 270 | 44.1 | 44.1 | 111 | 56.4 | 28.9 |
| 240 | 34.5 | 33.4 | 100 | 46.4 | 24.5 |
| 210 | 29.2 | 28.8 | 83.3 | 39.1 | 19.2 |
| 183 | 26.3 | 26.7 | 72.1 | 33.8 | 16.7 |
| 150 | 22.6 | 23.5 | 62.6 | 28.2 | 12.9 |
| 130 | 21.0 | 22.3 | 58.7 | 25.4 | 11.7 |
| 120 | 20.2 | 21.5 | 56.9 | 24.1 | 11.7 |
| 110 | 19.4 | 21.1 | 55.1 | 23.0 | 11.4 |
| 100 | 18.3 | 20.3 | 51.4 | 21.6 | 11.4 |
| 90 | 17.7 | 19.9 | 48.1 | 20.5 | 11.2 |
| 80 | 17.3 | 19.3 | 45.1 | 19.5 | 10.4 |
| 70 | 16.8 | 18.4 | 42.7 | 18.5 | 9.90 |
| 60 | 16.5 | 17.9 | 40.7 | 17.4 | 9.30 |
| 50 | 16.0 | 17.1 | 38.0 | 16.4 | 9.06 |
| 40 | 15.3 | 16.7 | 36.3 | 15.3 | 8.10 |
| 30 | 15.0 | 16.1 | 33.2 | 14.4 | 7.70 |
| 25 | 14.9 | 15.6 | 32.8 | 13.7 | 7.70 |
| 20 | 14.8 | 15.3 | 32.2 | 13.0 | 7.30 |
| 15 | 14.6 | 15.1 | 31.6 | 12.2 | 7.10 |
| 10 | 14.2 | 14.8 | 31.0 | 11.5 | 6.90 |
| 9 | 14.1 | 14.8 | 30.9 | 11.3 | 6.90 |
| 8 | 14.1 | 14.7 | 30.9 | 11.1 | 6.90 |
| 7 | 14.0 | 14.6 | 30.9 | 11.0 | 6.70 |
| 6 | 13.9 | 14.6 | 30.8 | 10.7 | 6.70 |
| 5 | 13.8 | 14.6 | 30.3 | 10.5 | 6.50 |
| 4 | 13.8 | 14.5 | 29.8 | 10.3 | 6.50 |
| 3 | 13.7 | 14.4 | 29.1 | 9.80 | 6.30 |
| 2 | 13.6 | 14.0 | 28.6 | 9.30 | 5.50 |
| 1 | 13.6 | 13.8 | 27.6 | 8.30 | 5.35 |
| 0 | 13.1 | 13.7 | 26.4 | 5.05 | 5.05 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1940; AJ 1941;

HQ1, HQ5 : Jahresreihe 1941/2012
Extremwerte ab 1941; Beobachtungen vor 1971 am Pegel Ludwigstein
Verkrautung vom 02.05-14.06.,29.06-13.07.,01.08.-1.11.
15 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 5487 km²
PNP : NN + 117.40 m
Lage: 2.3 km oberhalb der Mündung, rechts

# Q
m³/s

Pegel : Letzter Heller Nr. 41900206
Gewässer : Werra
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 19.5 | 15.4 | 85.9 | 76.1 | 49.2 | 36.1 | 22.6 | 21.2 | 26.7 | 30.9 | 18.4 | 17.1 | 19.4 | 33.1 |
| 2. | 18.6 | 15.3 | 89.9 | 68.8 | 52.5 | 33.9 | 22.1 | 23.6 | 29.0 | 28.4 | 18.3 | 15.4 | 20.0 | 30.3 |
| 3. | 17.5 | 14.6 | 108 | 67.6 | 54.9 | 32.7 | 22.0 | 23.1 | 29.4 | 26.1 | 17.7 | 14.8 | 21.5 | 26.4 |
| 4. | 17.8 | 16.5 | 105 | 59.1 | 57.6 | 34.6 | 23.4 | 21.0 | 25.5 | 26.2 | 16.8 | 16.2 | 25.8 | 25.6 |
| 5. | 17.5 | 18.4 | 110 | 54.3 | 59.0 | 37.6 | 23.8 | 26.0 | 26.3 | 24.6 | 16.5 | 17.8 | 30.3 | 25.5 |
| 6. | 17.5 | 32.2 | 143 | 51.2 | 59.2 | 34.7 | 28.0 | 31.9 | 28.6 | 28.7 | 16.4 | 20.0 | 30.4 | 26.3 |
| 7. | 17.3 | 40.9 | 144 | 45.7 | 58.5 | 31.9 | 30.9 | 29.1 | 31.1 | 30.5 | 16.2 | 20.2 | 29.4 | 25.2 |
| 8. | 16.8 | 36.7 | 147 | 46.4 | 57.5 | 31.2 | 33.0 | 26.8 | 27.9 | 25.6 | 15.9 | 20.3 | 28.5 | 23.8 |
| 9. | 16.8 | 36.7 | 156 | 45.2 | 57.5 | 31.0 | 30.8 | 23.7 | 26.9 | 23.9 | 15.4 | 23.5 | 31.1 | 22.4 |
| 10. | 16.7 | 42.0 | 144 | 46.8 | 56.8 | 30.5 | 28.5 | 22.0 | 25.0 | 22.7 | 15.0 | 19.7 | 30.4 | 22.3 |
| 11. | 16.6 | 45.8 | 136 | 44.2 | 53.3 | 29.9 | 29.1 | 20.6 | 26.1 | 21.1 | 15.4 | 18.2 | 30.3 | 24.6 |
| 12. | 15.9 | 41.3 | 128 | 39.6 | 50.9 | 29.8 | 28.6 | 20.3 | 29.5 | 19.8 | 16.6 | 17.9 | 32.2 | 24.4 |
| 13. | 16.0 | 39.2 | 128 | 40.4 | 49.3 | 32.8 | 28.0 | 20.7 | 29.7 | 19.9 | 21.9 | 17.6 | 28.7 | 22.5 |
| 14. | 21.1 | 39.7 | 127 | 39.8 | 47.8 | 30.4 | 25.1 | 20.1 | 42.8 | 21.8 | 21.7 | 18.5 | 26.5 | 22.0 |
| 15. | 15.4 | 45.2 | 119 | 41.2 | 48.2 | 28.8 | 23.2 | 21.8 | 50.2 | 20.1 | 18.4 | 20.4 | 24.9 | 28.7 |
| 16. | 15.6 | 56.3 | 112 | 42.1 | 47.1 | 27.8 | 23.7 | 23.3 | 52.2 | 18.9 | 16.9 | 20.3 | 24.0 | 59.1 |
| 17. | 16.4 | 75.7 | 101 | 42.0 | 46.3 | 26.8 | 23.7 | 23.0 | 50.9 | 19.8 | 16.0 | 19.3 | 23.1 | 103 |
| 18. | 16.8 | 91.4 | 94.9 | 46.1 | 45.6 | 26.0 | 23.0 | 23.0 | 52.1 | 21.1 | 17.4 | 18.4 | 22.6 | 110 |
| 19. | 16.5 | 79.4 | 93.5 | 49.0 | 45.5 | 26.5 | 22.7 | 19.7 | 56.5 | 19.3 | 18.2 | 17.8 | 21.8 | 108 |
| 20. | 16.7 | 69.9 | 133 | 65.9 | 46.0 | 26.5 | 22.3 | 25.5 | 51.9 | 17.9 | 17.4 | 16.6 | 21.3 | 102 |
| 21. | 15.9 | 63.5 | 148 | 58.2 | 44.3 | 25.2 | 21.6 | 32.0 | 48.2 | 17.4 | 17.3 | 15.7 | 21.1 | 99.1 |
| 22. | 15.6 | 61.8 | 162 | 45.9 | 43.2 | 27.0 | 20.6 | 40.7 | 46.2 | 16.9 | 15.1 | 15.7 | 20.7 | 97.3 |
| 23. | 15.4 | 63.6 | 181 | 43.1 | 41.6 | 26.6 | 19.8 | 42.3 | 43.8 | 16.3 | 14.9 | 15.9 | 20.3 | 114 |
| 24. | 14.9 | 73.2 | 162 | 43.5 | 40.6 | 27.7 | 19.1 | 35.3 | 39.4 | 18.9 | 16.1 | 15.6 | 20.2 | 199 |
| 25. | 14.9 | 85.3 | 158 | 47.6 | 39.1 | 27.0 | 19.2 | 30.3 | 36.1 | 22.5 | 15.6 | 15.6 | 19.8 | 218 |
| 26. | 13.4 | 87.1 | 148 | 53.3 | 38.0 | 26.5 | 18.0 | 28.9 | 33.0 | 24.3 | 14.6 | 15.9 | 18.6 | 212 |
| 27. | 15.1 | 83.5 | 130 | 52.5 | 36.8 | 25.7 | 17.4 | 27.9 | 31.7 | 21.9 | 17.8 | 16.1 | 18.1 | 222 |
| 28. | 13.8 | 81.7 | 115 | 50.3 | 35.8 | 24.8 | 17.9 | 25.8 | 34.0 | 20.1 | 20.0 | 16.9 | 18.4 | 218 |
| 29. | 15.4 | 80.8 | 103 | 48.0 | 34.8 | 23.9 | 18.5 | 25.0 | 33.0 | 19.4 | 22.7 | 17.1 | 20.4 | 208 |
| 30. | 15.4 | 86.2 | 89.9 | | 34.9 | 23.5 | 17.5 | 23.6 | 37.4 | 18.3 | 19.1 | 17.0 | 24.9 | 194 |
| 31. | | 89.9 | 83.7 | | 34.5 | | 17.7 | | 36.0 | 18.3 | | 17.8 | | 169 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 3. | 31. | 12. | 31. | 30. | 27. | 19. | 10. | 23. | 26. | 3. | 27. | 14. |
| NQ | 13.4 | 14.6 | 83.7 | 39.6 | 34.5 | 23.5 | 17.4 | 19.7 | 25.0 | 16.3 | 14.6 | 14.8 | 18.1 | 22.0 |
| MQ | 16.4 | 55.1 | 125 | 50.1 | 47.3 | 29.2 | 23.3 | 25.9 | 36.7 | 22.0 | 17.3 | 17.7 | 24.2 | 90.8 |
| HQ | 36.4 | 98.8 | 212 | 125 | 62.1 | 39.1 | 34.4 | 46.6 | 65.0 | 38.6 | 25.5 | 25.9 | 33.4 | 228 |
| Tag | 14. | 18. | 23. | 17. | 4.+ | 5. | 8. | 22. | 19. | 1. | 13. | 9. | 12. | 24.+ |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 27 | 61 | 23 | 23 | 14 | 11 | 12 | 18 | 11 | 8 | 9 | 11 | 44 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1963 | 1963 | 1960 | 1954 | 1960 | 1952 | 1943 | 1959 | 1949 | 1949 | 1953 |
| NQ | 5.10 | 9.20 | 8.00 | 11.9 | 12.2 | 17.0 | 14.7 | 11.4 | 9.80 | 7.40 | 9.85 | 7.00 | 5.10 | 9.20 |
| MNQ | 25.3 | 31.1 | 38.2 | 43.9 | 47.6 | 47.6 | 32.3 | 26.7 | 22.2 | 19.3 | 18.2 | 19.5 | 25.2 | 31.0 |
| MQ | 42.4 | 60.4 | 71.4 | 75.2 | 81.7 | 72.7 | 46.4 | 39.9 | 33.1 | 27.2 | 24.8 | 29.6 | 41.1 | 61.0 |
| MHQ | 88.9 | 131 | 155 | 152 | 166 | 130 | 88.3 | 79.9 | 63.1 | 52.3 | 47.2 | 59.5 | 83.9 | 133 |
| HQ | 393 | 477 | 453 | 605 | 563 | 392 | 279 | 464 | 360 | 317 | 319 | 280 | 324 | 477 |
| Jahr | 1940 | 1947 | 2011 | 1946 | 1947 | 1994 | 2004 | 1981 | 1956 | 1981 | 2007 | 2007 | 1998 | 1947 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 20 | 29 | 35 | 34 | 40 | 34 | 23 | 19 | 16 | 13 | 12 | 14 | 19 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 13.4 | am 26.11.2011 | 13.4 | 14.6 | 14.6 | am 26.09.2012 |
| MQ m³/s | 39.0 | | 54.3 | 23.8 | 42.7 | |
| HQ m³/s | 212 | am 23.01.2012 bei W= 356 cm | 212 | 65.0 | 228 | am 24.12.2012 bei W= 368 cm |
| Nq l/(s km²) | 2.44 | | 2.44 | 2.66 | 2.66 | |
| Mq l/(s km²) | 7.11 | | 9.90 | 4.35 | 7.77 | |
| Hq l/(s km²) | 38.6 | | 38.6 | 11.8 | 41.6 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 224 | | 156 | 69 | 246 | |

| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 5.10 | am 02.11.1949 | 5.10 | 7.00 | 5.10 | am 02.11.1949 |
| MNQ m³/s | 14.6 | | 21.4 | 15.9 | 15.4 | |
| MQ m³/s | 50.3 | | 67.3 | 33.5 | 50.2 | |
| MHQ m³/s | 266 | | 255 | 127 | 265 | |
| HQ m³/s | 605 | am 10.02.1946 | 605 | 464 | 605 | am 10.02.1946 |
| $HQ_1$ m³/s | 212 | | 194 | 73.3 | 212 | |
| $HQ_5$ m³/s | 358 | | 347 | 186 | 358 | |
| MNq l/(s km²) | 2.66 | | 3.90 | 2.90 | 2.81 | |
| Mq l/(s km²) | 9.17 | | 12.3 | 6.11 | 9.15 | |
| MHq l/(s km²) | 48.5 | | 46.5 | 23.1 | 48.3 | |

| | 1941/2012 (*) 72 Jahre | | | 1941/2012 |
|---|---|---|---|---|
| $Mh_N$ mm | | | | |
| $Mh_A$ mm | 289 | 193 | 97 | 289 |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 5.10 | 0.929 | 02.11.1949 | 605 | 110 | | 10.02.1946 |
| 2 | 7.40 | 1.35 | 10.08.1943 | 563 | 103 | | 16.03.1947 |
| 3 | 8.00 | 1.46 | 07.01.1954 | 528 | 96.2 | | 20.03.1942 |
| 4 | 8.40 | 1.53 | 20.12.1938 | 477 | 86.9 | | 30.12.1947 |
| 5 | 8.80 | 1.60 | 03.08.1952 | 477 | 86.9 | | 04.12.1939 |
| 6 | 9.31 | 1.70 | 13.10.1959 | 464 | 84.6 | | 05.06.1981 |
| 7 | 9.92 | 1.81 | 04.10.1964 | 453 | 82.6 | 518 | 17.01.2011 |
| 8 | 10.1 | 1.84 | 31.12.1976 | 440 | 80.2 | 512 | 05.01.2003 |
| 9 | 10.4 | 1.90 | 08.10.1973 | 431 | 78.5 | | 27.03.1987 |
| 10 | 10.4 | 1.90 | 18.10.1938 | 410 | 74.7 | | 03.03.1956 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 181 | 222 | | | |
| 364 | 181 | 222 | 553 | 293 | 66.0 |
| 363 | 162 | 218 | 542 | 253 | 63.8 |
| 362 | 158 | 212 | 486 | 233 | 63.3 |
| 361 | 156 | 208 | 404 | 218 | 62.2 |
| 360 | 156 | 199 | 389 | 203 | 59.0 |
| 359 | 148 | 194 | 342 | 191 | 57.9 |
| 358 | 147 | 181 | 339 | 183 | 54.3 |
| 357 | 147 | 169 | 335 | 175 | 51.8 |
| 356 | 144 | 169 | 331 | 169 | 49.4 |
| 350 | 128 | 147 | 250 | 141 | 47.4 |
| 340 | 94.9 | 119 | 194 | 117 | 43.2 |
| 330 | 83.7 | 103 | 173 | 102 | 40.9 |
| 320 | 67.6 | 83.7 | 152 | 90.7 | 39.2 |
| 300 | 53.3 | 53.3 | 133 | 75.2 | 36.7 |
| 270 | 45.5 | 44.3 | 116 | 60.1 | 31.1 |
| 240 | 36.8 | 34.7 | 103 | 50.1 | 26.8 |
| 210 | 30.8 | 30.4 | 86.9 | 42.6 | 21.7 |
| 183 | 26.9 | 27.7 | 75.7 | 37.1 | 18.7 |
| 150 | 23.6 | 24.9 | 65.5 | 30.8 | 14.4 |
| 130 | 21.9 | 23.2 | 60.6 | 27.7 | 13.0 |
| 120 | 20.7 | 22.6 | 59.0 | 26.4 | 12.8 |
| 110 | 20.1 | 22.0 | 55.9 | 25.2 | 12.7 |
| 100 | 19.4 | 21.2 | 52.8 | 23.8 | 12.4 |
| 90 | 18.5 | 20.4 | 51.3 | 22.6 | 12.2 |
| 80 | 18.0 | 20.1 | 47.9 | 21.5 | 12.0 |
| 70 | 17.7 | 19.4 | 44.6 | 20.5 | 11.6 |
| 60 | 17.4 | 18.5 | 42.5 | 19.4 | 11.0 |
| 50 | 16.9 | 18.1 | 40.2 | 18.3 | 10.6 |
| 40 | 16.5 | 17.7 | 38.1 | 17.2 | 9.80 |
| 30 | 16.0 | 17.0 | 36.8 | 16.1 | 8.60 |
| 25 | 15.7 | 16.8 | 36.3 | 15.5 | 8.20 |
| 20 | 15.6 | 16.3 | 35.7 | 14.5 | 7.80 |
| 15 | 15.6 | 16.0 | 35.4 | 13.6 | 7.60 |
| 10 | 15.3 | 15.7 | 34.7 | 12.8 | 7.40 |
| 9 | 15.1 | 15.7 | 34.6 | 12.5 | 7.40 |
| 8 | 15.0 | 15.6 | 34.5 | 12.3 | 7.40 |
| 7 | 15.0 | 15.6 | 34.4 | 12.1 | 7.20 |
| 6 | 15.0 | 15.6 | 34.3 | 11.9 | 7.20 |
| 5 | 14.9 | 15.4 | 32.9 | 11.7 | 7.00 |
| 4 | 14.8 | 15.1 | 32.8 | 11.3 | 7.00 |
| 3 | 14.8 | 15.0 | 32.0 | 11.0 | 6.80 |
| 2 | 14.6 | 14.9 | 31.7 | 10.7 | 5.85 |
| 1 | 13.8 | 14.8 | 31.7 | 10.1 | 5.55 |
| 0 | 13.4 | 14.6 | 31.0 | 5.10 | 5.10 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5 : Jahresreihe 1936/2012
Wasserstände bis 1988 bei Km 5,09 oberhalb der Mündung
Ablesungen sind nicht mit denen früherer Jahre vergleichbar
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 256.00 km²
PNP : NN+ 355.16 m
Lage : 9.00 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Rappelsdorf Nr. 421510
Gewässer : Schleuse
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.96 | 1.09 | 10.9 | 4.95 | 5.12 | 3.19 | 1.56 | 1.65 | 3.04 | 2.74 | K 2.07 | 2.32 | 1.96 | 3.35 |
| 2. | 1.85 | 1.09 | 17.7 | 4.13 | 6.69 | 3.04 | 1.65 | 1.47 | 2.32 | 3.19 | K 2.07 | 2.19 | 2.45 | 2.74 |
| 3. | 1.85 | 1.16 | 21.4 | R 3.81 | 7.81 | 3.04 | 1.65 | 1.85 | 2.19 | 3.19 | K 2.07 | 2.19 | 3.19 | 2.74 |
| 4. | 1.85 | 1.96 | 20.2 | R 3.66 | 8.19 | 3.19 | 1.85 | 2.07 | 2.07 | 3.19 | K 1.96 | 2.32 | 3.81 | 2.74 |
| 5. | 1.75 | 4.79 | 22.0 | R 3.66 | 8.38 | 2.89 | 2.45 | 2.74 | 2.59 | 3.66 | K 1.96 | 2.59 | 3.81 | 2.74 |
| 6. | 1.75 | 3.66 | 21.4 | R 3.50 | 8.00 | 2.74 | 3.19 | 1.96 | 2.45 | 3.35 | K 1.96 | 2.45 | 3.97 | 2.59 |
| 7. | 1.75 | 3.66 | 18.3 | R 3.35 | 7.43 | 2.74 | 3.81 | 1.65 | 2.45 | 2.89 | K 1.85 | 2.89 | 5.81 | 2.45 |
| 8. | 1.75 | 3.81 | 17.7 | R 3.35 | 7.24 | 2.59 | 4.29 | 1.56 | 2.19 | 2.59 | K 1.85 | 2.59 | 5.63 | 2.19 |
| 9. | 1.75 | 4.79 | 16.9 | R 3.35 | 5.81 | 2.59 | 3.50 | 1.47 | 2.19 | 2.32 | K 1.85 | 2.45 | 5.12 | 2.07 |
| 10. | 1.75 | 4.79 | 17.2 | R 3.35 | 5.12 | 2.45 | 2.89 | 1.39 | 2.19 | 2.32 | K 1.85 | 2.45 | 4.95 | 2.19 |
| 11. | 1.56 | 4.62 | 16.7 | R 3.19 | 5.12 | 2.45 | 2.74 | 1.39 | 1.75 | 2.19 | K 2.07 | 2.45 | 4.79 | 2.19 |
| 12. | 1.56 | 5.29 | 16.9 | R 3.04 | 5.29 | 2.32 | 2.59 | 1.39 | 1.85 | 2.19 | K 2.89 | 2.89 | 4.29 | 2.19 |
| 13. | 1.56 | 5.46 | 18.0 | R 2.89 | 5.29 | 2.32 | 2.45 | 1.65 | 2.19 | 2.07 | K 2.45 | 3.04 | 3.81 | 1.96 |
| 14. | 1.56 | 5.63 | 17.5 | R 2.89 | 5.46 | 2.32 | 2.32 | 2.32 | 5.29 | 2.07 | K 2.07 | 2.89 | 3.35 | 1.96 |
| 15. | 1.47 | 5.98 | 14.9 | 2.89 | 5.46 | 2.19 | 1.96 | 2.19 | 5.29 | 1.96 | K 1.96 | 2.89 | 3.19 | 4.62 |
| 16. | 1.47 | 9.37 | 13.2 | 2.74 | 5.46 | 2.07 | 1.96 | 1.65 | 5.12 | 2.19 | K 1.85 | 2.89 | 3.04 | 10.2 |
| 17. | 1.47 | 12.5 | 11.6 | 2.74 | 5.63 | 2.07 | 1.85 | 1.47 | 7.06 | 2.07 | K 1.85 | 2.74 | 2.59 | 14.4 |
| 18. | 1.39 | 11.6 | 10.0 | 2.89 | 5.81 | 2.07 | 1.85 | 1.47 | 8.00 | 2.07 | K 1.96 | 2.59 | 2.45 | 18.0 |
| 19. | 1.39 | 9.58 | 13.5 | 4.29 | 5.81 | 1.96 | 1.75 | 1.39 | 7.81 | 1.96 | K 2.19 | 2.32 | 2.45 | 17.2 |
| 20. | 1.39 | 8.19 | 15.1 | 3.04 | 5.63 | 1.96 | 1.65 | 1.85 | 6.87 | 1.96 | K 2.07 | 2.19 | 2.32 | 14.2 |
| 21. | 1.31 | 7.24 | 14.2 | 2.74 | 5.46 | 2.07 | 1.56 | 4.29 | 6.51 | K 1.96 | K 1.96 | 2.19 | 2.32 | 11.3 |
| 22. | 1.23 | 6.69 | 15.9 | 2.89 | 4.79 | 2.07 | K 1.39 | 3.50 | 5.81 | K 2.19 | K 2.07 | 2.07 | 2.07 | 9.79 |
| 23. | 1.16 | 6.87 | 15.9 | 2.74 | 4.62 | 1.96 | K 1.47 | 2.59 | 4.79 | K 1.96 | K 1.96 | 2.07 | 2.07 | 18.8 |
| 24. | 1.16 | 9.79 | 13.0 | 3.19 | 4.46 | 1.96 | K 1.39 | 2.45 | 3.66 | K 2.19 | K 2.07 | 2.07 | 2.07 | 32.1 |
| 25. | 1.09 | 11.3 | 11.6 | 3.81 | 4.29 | 2.07 | K 1.31 | 2.59 | 3.50 | K 2.32 | K 2.07 | 1.96 | 1.96 | 28.7 |
| 26. | 1.09 | 12.5 | 10.2 | 3.50 | 3.97 | 1.96 | K 1.23 | 2.32 | 3.35 | K 2.45 | K 2.07 | 1.85 | 1.96 | 26.5 |
| 27. | 1.09 | 13.5 | 8.97 | 3.35 | 3.66 | 1.85 | K 1.23 | 2.32 | 3.04 | K 2.59 | K 3.66 | 1.96 | 2.19 | 25.9 |
| 28. | 1.09 | 14.2 | 8.19 | 3.50 | 3.50 | 1.85 | K 1.23 | 2.19 | 3.50 | K 2.32 | K 2.74 | 1.85 | 2.32 | 25.9 |
| 29. | 1.09 | 13.2 | 7.24 | 4.46 | 3.35 | 1.75 | K 1.23 | 2.07 | 3.19 | K 2.19 | K 2.32 | 1.75 | 3.97 | 22.9 |
| 30. | 1.09 | 13.0 | 6.51 | | 3.50 | 1.65 | K 1.16 | 2.32 | 2.89 | K 2.19 | K 2.32 | 1.65 | 3.97 | 20.0 |
| 31. | | 10.9 | 5.81 | | 3.35 | | K 1.23 | | 2.45 | K 2.19 | | 1.75 | | 16.1 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25.+ | 1.+ | 31. | 16.+ | 29.+ | 30. | 30. | 10.+ | 11. | 15.+ | 7.+ | 30. | 1.+ | 13.+ |
| NQ | 1.09 | 1.09 | 5.81 | 2.74 | 3.35 | 1.65 | 1.16 | 1.39 | 1.75 | 1.96 | 1.85 | 1.65 | 1.96 | 1.96 |
| MQ | 1.47 | 7.36 | 14.5 | 3.38 | 5.47 | 2.31 | 2.01 | 2.04 | 3.79 | 2.41 | 2.14 | 2.34 | 3.26 | 11.3 |
| HQ | 2.19 | 14.4 | 23.2 | 5.46 | 8.58 | 3.97 | 4.79 | 6.51 | 10.2 | 6.16 | 5.12 | 3.50 | 7.24 | 33.3 |
| Tag | 2. | 28. | 2. | 19. | 4. | 4. | 7. | 20. | 17. | 5. | 27. | 7. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 15 | 77 | 151 | 33 | 57 | 23 | 21 | 21 | 40 | 25 | 22 | 24 | 33 | 118 |

| | 1950/2011 | | 1951/2012 62 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1971 | 1962 | 1963 | 1963 | 1972 | 1960 | 1974+ | 2000 | 1976 | 1976 | 1973 | 1973 | 1971 | 1962 |
| NQ | 0.300 | 0.170 | 0.550 | 0.550 | 0.540 | 1.05 | 0.880 | 0.530 | 0.200 | 0.170 | 0.230 | 0.290 | 0.300 | 0.170 |
| MNQ | 2.11 | 2.64 | 2.84 | 2.90 | 2.99 | 3.32 | 1.79 | 1.37 | 1.29 | 1.10 | 1.25 | 1.65 | 2.11 | 2.65 |
| MQ | 4.48 | 6.64 | 6.91 | 5.97 | 7.33 | 6.88 | 3.33 | 2.51 | 2.40 | 1.82 | 2.29 | 3.23 | 4.35 | 6.71 |
| MHQ | 10.4 | 18.2 | 18.7 | 13.9 | 19.2 | 16.1 | 6.99 | 7.14 | 7.06 | 4.84 | 6.30 | 7.74 | 10.1 | 18.3 |
| HQ | 35.5 | 58.0 | 65.9 | 50.2 | 80.6 | 82.4 | 21.1 | 35.6 | 33.6 | 19.9 | 49.0 | 31.6 | 35.5 | 58.0 |
| Jahr | 1998 | 1978 | 1987 | 1967 | 1981 | 1970 | 1965 | 1966 | 2007 | 1981 | 1998 | 1960 | 1998 | 1978 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 45 | 70 | 72 | 57 | 77 | 70 | 35 | 25 | 25 | 19 | 23 | 34 | 44 | 70 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.09 | am 25.11.2011 | 1.09 | 1.16 | 1.16 | am 30.05.2012 |
| MQ | m³/s | 4.13 | | 5.81 | 2.46 | 4.61 | |
| HQ | m³/s | 23.2 | am 02.01.2012 bei W = 176 cm | 23.2 | 10.2 | 33.3 | am 24.12.2012 bei W = 209 cm |
| Nq | l/(skm²) | 4.26 | | 4.26 | 4.53 | 4.53 | |
| Mq | l/(skm²) | 16.1 | | 22.7 | 9.61 | 18.0 | |
| Hq | l/(skm²) | 90.6 | | 90.6 | 39.8 | 130 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 510 | | 357 | 153 | 569 | |

| | | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.170 | am 27.12.1962 | 0.170 | 0.170 | 0.170 | am 27.12.1962 |
| MNQ | m³/s | 0.780 | | 1.44 | 0.839 | 0.800 | |
| MQ | m³/s | 4.48 | | 6.38 | 2.60 | 4.47 | |
| MHQ | m³/s | 35.5 | | 34.2 | 14.0 | 35.8 | |
| HQ | m³/s | 82.4 | am 20.04.1970 bei W = 267 cm | 82.4 | 49.0 | 82.4 | am 20.04.1970 bei W = 267 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.05 | | 5.64 | 3.28 | 3.13 | |
| Mq | l/(skm²) | 17.5 | | 24.9 | 10.1 | 17.5 | |
| MHq | l/(skm²) | 139 | | 134 | 54.6 | 140 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 552 | | 390 | 161 | 551 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.170 | 0.664 | 29.08.1976 | 82.4 | 322 | 267 | 20.04.1970 |
| 2 | 0.170 | 0.664 | 27.12.1962 | 80.6 | 315 | 269 | 10.03.1981 |
| 3 | 0.230 | 0.898 | 19.09.1973 | 70.0 | 273 | 270 | 14.04.1994 |
| 4 | 0.300 | 1.17 | 03.11.1971 | 65.9 | 257 | 268 | 02.01.1987 |
| 5 | 0.360 | 1.41 | 05.10.1959 | 59.6 | 233 | 253 | 06.01.1982 |
| 6 | 0.400 | 1.56 | 18.08.1982 | 58.0 | 227 | 248 | 31.12.1978 |
| 7 | 0.400 | 1.56 | 28.08.1964 | 57.2 | 223 | 268 | 24.12.1967 |
| 8 | 0.420 | 1.64 | 15.08.1975 | 57.2 | 223 | 268 | 19.12.1965 |
| 9 | 0.430 | 1.68 | 03.07.1957 | 56.7 | 221 | 226 | 31.03.1962 |
| 10 | 0.450 | 1.76 | 08.07.1952 | 52.0 | 203 | 250 | 28.01.2002 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1951/2012 62 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 22.0 | 32.1 | 79.2 | 33.3 | 11.4 |
| 363 | 21.4 | 28.7 | 73.6 | 28.7 | 10.7 |
| 362 | 21.4 | 26.5 | 68.8 | 25.9 | 9.62 |
| 361 | 20.2 | 25.9 | 64.0 | 24.1 | 9.42 |
| 360 | 18.3 | 25.9 | 55.0 | 22.0 | 7.62 |
| 359 | 18.0 | 22.9 | 55.0 | 20.7 | 7.06 |
| 358 | 17.7 | 22.0 | 49.4 | 19.7 | 7.06 |
| 357 | 17.7 | 21.4 | 44.7 | 19.0 | 7.06 |
| 356 | 17.5 | 21.4 | 39.5 | 18.3 | 7.06 |
| 350 | 15.9 | 18.0 | 24.8 | 15.0 | 5.62 |
| 340 | 13.0 | 15.9 | 19.9 | 12.1 | 5.13 |
| 330 | 10.0 | 11.6 | 18.1 | 10.3 | 4.97 |
| 320 | 8.00 | 8.19 | 16.3 | 8.84 | 4.35 |
| 300 | 5.63 | 5.63 | 12.4 | 6.88 | 3.21 |
| 270 | 4.29 | 4.13 | 8.42 | 5.13 | 2.37 |
| 240 | 3.35 | 3.35 | 6.33 | 4.01 | 1.91 |
| 210 | 2.89 | 2.89 | 5.51 | 3.22 | 1.57 |
| 183 | 2.45 | 2.59 | 4.93 | 2.74 | 1.23 |
| 150 | 2.19 | 2.32 | 4.05 | 2.25 | 1.03 |
| 130 | 2.07 | 2.19 | 3.72 | 2.01 | 0.840 |
| 120 | 2.07 | 2.19 | 3.56 | 1.90 | 0.840 |
| 110 | 2.07 | 2.19 | 3.42 | 1.80 | 0.750 |
| 100 | 1.96 | 2.07 | 3.33 | 1.69 | 0.750 |
| 90 | 1.96 | 2.07 | 3.19 | 1.58 | 0.680 |
| 80 | 1.85 | 2.07 | 3.19 | 1.47 | 0.680 |
| 70 | 1.85 | 1.96 | 3.05 | 1.38 | 0.580 |
| 60 | 1.75 | 1.96 | 3.03 | 1.27 | 0.580 |
| 50 | 1.65 | 1.96 | 2.90 | 1.19 | 0.420 |
| 40 | 1.56 | 1.85 | 2.66 | 1.09 | 0.420 |
| 30 | 1.47 | 1.75 | 2.42 | 0.956 | 0.360 |
| 25 | 1.39 | 1.65 | 2.40 | 0.900 | 0.360 |
| 20 | 1.39 | 1.65 | 2.40 | 0.840 | 0.300 |
| 15 | 1.23 | 1.47 | 2.28 | 0.750 | 0.300 |
| 10 | 1.16 | 1.39 | 2.28 | 0.650 | 0.300 |
| 9 | 1.16 | 1.39 | 2.28 | 0.650 | 0.300 |
| 8 | 1.16 | 1.39 | 2.16 | 0.610 | 0.300 |
| 7 | 1.16 | 1.39 | 2.16 | 0.600 | 0.300 |
| 6 | 1.09 | 1.39 | 2.16 | 0.580 | 0.300 |
| 5 | 1.09 | 1.31 | 2.16 | 0.560 | 0.300 |
| 4 | 1.09 | 1.23 | 2.05 | 0.540 | 0.200 |
| 3 | 1.09 | 1.23 | 2.05 | 0.500 | 0.200 |
| 2 | 1.09 | 1.23 | 2.05 | 0.460 | 0.200 |
| 1 | 1.09 | 1.23 | 1.94 | 0.380 | 0.180 |
| 0 | 1.09 | 1.16 | 1.94 | 0.170 | 0.170 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Durchflusswerte seit 1975 durch Talsperren beeinflusst
12 Tage Randeis, 51 Tage Verkrautung

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 35.30 km²
PNP : NHN+ 408.00 m
Lage : 5.00 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Hinternah Nr. 421600
Gewässer : Nahe
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.320 | 0.200 | 2.52 | R 0.650 | 1.31 | 0.730 | 0.360 | 0.360 | 0.600 | 0.500 | 0.240 | 0.280 | 0.360 | 0.730 |
| 2. | 0.320 | 0.240 | 5.50 | R 0.600 | 1.71 | 0.730 | 0.400 | 0.280 | 0.450 | 0.500 | 0.200 | 0.280 | 0.550 | 0.650 |
| 3. | 0.320 | 0.280 | 6.10 | R 0.600 | 2.04 | 0.650 | 0.400 | 0.400 | 0.450 | 0.450 | 0.200 | 0.240 | 0.890 | 0.650 |
| 4. | 0.320 | 0.550 | 5.50 | R 0.600 | 2.16 | 0.730 | 0.360 | 0.400 | 0.400 | 0.450 | 0.200 | 0.320 | 0.890 | 0.650 |
| 5. | 0.320 | 0.970 | 5.30 | R 0.550 | 2.16 | 0.650 | 0.450 | 0.500 | 0.500 | 0.550 | 0.200 | 0.320 | 0.810 | 0.650 |
| 6. | 0.280 | 0.650 | 4.70 | R 0.550 | 1.93 | 0.600 | 0.550 | 0.400 | 0.450 | 0.450 | 0.200 | 0.320 | 0.810 | 0.600 |
| 7. | 0.280 | 0.650 | 3.96 | R 0.550 | 1.71 | 0.600 | 0.500 | 0.360 | 0.450 | 0.400 | 0.200 | 0.400 | 1.22 | 0.600 |
| 8. | 0.280 | 0.730 | 3.28 | R 0.550 | 1.60 | 0.600 | 0.450 | 0.360 | 0.400 | 0.400 | 0.200 | 0.320 | 1.22 | 0.550 |
| 9. | 0.280 | 1.22 | 2.78 | R 0.550 | 1.40 | 0.550 | 0.450 | 0.320 | 0.400 | 0.360 | 0.200 | 0.320 | 1.13 | 0.550 |
| 10. | 0.280 | 1.22 | 2.94 | R 0.550 | 1.31 | 0.600 | 0.450 | 0.320 | 0.400 | 0.360 | 0.184 | 0.320 | 1.05 | 0.600 |
| 11. | 0.280 | 1.22 | 2.65 | R 0.500 | 1.31 | 0.600 | 0.450 | 0.280 | 0.360 | 0.360 | 0.200 | 0.280 | 0.970 | 0.550 |
| 12. | 0.280 | 1.22 | 3.11 | R 0.450 | 1.40 | 0.550 | 0.450 | 0.280 | 0.400 | 0.320 | 0.400 | 0.280 | 0.890 | 0.550 |
| 13. | 0.280 | 1.22 | 3.28 | R 0.450 | 1.50 | 0.550 | 0.400 | 0.360 | 0.550 | 0.320 | 0.240 | 0.280 | 0.730 | 0.500 |
| 14. | 0.240 | 1.40 | 2.94 | R 0.450 | 1.60 | 0.500 | 0.400 | 0.400 | 1.22 | 0.320 | 0.240 | 0.280 | 0.650 | 0.500 |
| 15. | 0.240 | 1.40 | 2.52 | 0.450 | 1.60 | 0.500 | 0.360 | 0.360 | 1.22 | 0.280 | 0.240 | 0.280 | 0.650 | 1.22 |
| 16. | 0.240 | 2.16 | 2.04 | 0.400 | 1.60 | 0.500 | 0.360 | 0.320 | 1.31 | 0.320 | 0.240 | 0.280 | 0.600 | 2.52 |
| 17. | 0.240 | 2.78 | 1.60 | 0.400 | 1.60 | 0.450 | 0.360 | 0.320 | 1.82 | 0.280 | 0.200 | 0.280 | 0.600 | 3.79 |
| 18. | 0.240 | 2.52 | 1.40 | 0.450 | 1.60 | 0.450 | 0.360 | 0.280 | 1.93 | 0.280 | 0.240 | 0.240 | 0.550 | 4.70 |
| 19. | 0.240 | 2.16 | 1.93 | 0.600 | 1.60 | 0.450 | 0.360 | 0.280 | 1.71 | 0.240 | 0.320 | 0.240 | 0.550 | 3.96 |
| 20. | 0.240 | 1.82 | 2.28 | 0.450 | 1.50 | 0.450 | 0.320 | 0.450 | 1.50 | 0.240 | 0.200 | 0.240 | 0.550 | 3.11 |
| 21. | 0.200 | 1.50 | 2.28 | 0.450 | 1.40 | 0.400 | 0.320 | 0.650 | 1.40 | 0.240 | 0.200 | 0.240 | 0.500 | 2.40 |
| 22. | 0.200 | 1.31 | 2.52 | 0.400 | 1.31 | 0.450 | 0.320 | 0.550 | 1.13 | 0.280 | 0.240 | 0.240 | 0.500 | 2.04 |
| 23. | 0.200 | 1.40 | 2.40 | 0.400 | 1.31 | 0.400 | 0.320 | 0.500 | 0.970 | 0.240 | 0.200 | 0.240 | 0.500 | 4.70 |
| 24. | 0.200 | 2.28 | 2.28 | 0.500 | 1.22 | 0.400 | 0.280 | 0.450 | 0.810 | 0.320 | 0.240 | 0.240 | 0.500 | 11.6 |
| 25. | 0.200 | 2.52 | 1.93 | 0.730 | 1.13 | 0.450 | 0.280 | 0.500 | 0.890 | 0.320 | 0.320 | 0.240 | 0.500 | 8.55 |
| 26. | 0.200 | 2.94 | 1.71 | 0.650 | 1.13 | 0.400 | 0.280 | 0.450 | 0.810 | 0.360 | 0.320 | 0.240 | 0.450 | 7.30 |
| 27. | 0.200 | 3.45 | 1.50 | 0.650 | 1.05 | 0.400 | 0.240 | 0.400 | 0.650 | 0.360 | 0.500 | 0.280 | 0.550 | 7.30 |
| 28. | 0.200 | 3.62 | 1.31 | 0.650 | 0.970 | 0.360 | 0.240 | 0.400 | 0.730 | 0.280 | 0.360 | 0.280 | 0.550 | 7.30 |
| 29. | 0.200 | 3.28 | 1.22 | 0.970 | 0.890 | 0.360 | 0.240 | 0.400 | 0.730 | 0.240 | 0.320 | 0.280 | 0.890 | 5.70 |
| 30. | 0.200 | 2.78 | 1.13 | | 0.890 | 0.360 | 0.200 | 0.500 | 0.600 | 0.240 | 0.320 | 0.280 | 0.730 | 4.30 |
| 31. | | 2.28 | 0.970 | | 0.810 | | 0.240 | | 0.550 | 0.240 | | 0.360 | | 3.28 |
| Tag | 21.+ | 1. | 31. | 16.+ | 31. | 28.+ | 30. | 2.+ | 11. | 19.+ | 10. | 3.+ | 1. | 13.+ |
| NQ | 0.200 | 0.200 | 0.970 | 0.400 | 0.810 | 0.360 | 0.200 | 0.280 | 0.360 | 0.240 | 0.184 | 0.240 | 0.360 | 0.500 |
| MQ | 0.251 | 1.68 | 2.76 | 0.543 | 1.44 | 0.514 | 0.360 | 0.394 | 0.832 | 0.339 | 0.252 | 0.281 | 0.711 | 2.97 |
| HQ | 0.360 | 3.79 | 7.05 | 1.13 | 2.28 | 0.890 | 1.31 | 1.82 | 2.65 | 1.13 | 1.22 | 0.550 | 1.93 | 13.3 |
| Tag | 1. | 28. | 2. | 29. | 3. | 4. | 2. | 20. | 17. | 5. | 11. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 18 | 127 | 209 | 39 | 110 | 38 | 27 | 29 | 63 | 26 | 19 | 21 | 52 | 225 |

## Hauptwerte

| | 1946/2011 | | 1947/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1946 | 1947 | 1996 | 1996 | 1957 | 1947+ | 1959 | 1982 | 1959+ | 1959 | 1959 | 1976 | 1948+ |
| NQ | 0.060 | 0.090 | 0.080 | 0.063 | 0.063 | 0.140 | 0.080 | 0.020 | 0.010 | 0.010 | 0.010 | 0.020 | 0.060 | 0.100 |
| MNQ | 0.405 | 0.484 | 0.476 | 0.468 | 0.558 | 0.692 | 0.369 | 0.281 | 0.252 | 0.213 | 0.222 | 0.283 | 0.409 | 0.490 |
| MQ | 0.894 | 1.27 | 1.23 | 1.05 | 1.45 | 1.44 | 0.686 | 0.513 | 0.490 | 0.366 | 0.429 | 0.593 | 0.901 | 1.31 |
| MHQ | 2.52 | 4.19 | 4.22 | 2.94 | 5.04 | 3.69 | 1.58 | 1.67 | 2.03 | 1.32 | 1.59 | 1.71 | 2.54 | 4.38 |
| HQ | 10.1 | 15.6 | 24.8 | 14.4 | 25.4 | 19.5 | 5.20 | 6.06 | 17.7 | 7.09 | 17.0 | 7.05 | 10.1 | 15.6 |
| Jahr | 1998 | 1965 | 2002 | 2005 | 1981 | 2006 | 1970 | 1966 | 2007 | 1981 | 1998 | 1960 | 1998 | 1965 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 66 | 96 | 93 | 73 | 110 | 106 | 52 | 38 | 37 | 28 | 31 | 45 | 66 | 99 |

66 Kalenderjahre

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.184 | am 10.09.2012 | 0.200 | 0.184 | 0.184 | am 10.09.2012 |
| MQ m³/s | 0.810 | | 1.21 | 0.411 | 0.958 | |
| HQ m³/s | 7.05 | am 02.01.2012 bei W = 153 cm | 7.05 | 2.65 | 13.3 | am 24.12.2012 bei W = 174 cm |
| Nq l/(skm²) | 5.21 | | 5.67 | 5.21 | 5.21 | |
| Mq l/(skm²) | 23.0 | | 34.4 | 11.6 | 27.1 | |
| Hq l/(skm²) | 200 | | 200 | 75.1 | 377 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 726 | | 541 | 185 | 858 | |

| | 1947/2012 (*) 66 Jahre | | | | 1947/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.010 | am 23.08.1959 | 0.060 | 0.010 | 0.010 | am 23.08.1959 |
| MNQ m³/s | 0.139 | | 0.267 | 0.151 | 0.147 | |
| MQ m³/s | 0.867 | | 1.23 | 0.513 | 0.871 | |
| MHQ m³/s | 9.40 | | 8.90 | 3.61 | 9.35 | |
| HQ m³/s | 25.4 | am 10.03.1981 bei W = 198 cm | 25.4 | 17.7 | 25.4 | am 10.03.1981 bei W = 198 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(skm²) | 3.94 | | 7.57 | 4.29 | 4.17 | |
| Mq l/(skm²) | 24.6 | | 34.7 | 14.5 | 24.7 | |
| MHq l/(skm²) | 266 | | 252 | 102 | 265 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 775 | | 544 | 231 | 779 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.010 | 0.283 | 30.07.1982 | 25.4 | 720 | 198 | 10.03.1981 |
| 2 | 0.010 | 0.283 | 23.08.1959 | 24.8 | 703 | 205 | 28.01.2002 |
| 3 | 0.050 | 1.42 | 16.09.1991 | 22.1 | 626 | 198 | 31.03.2006 |
| 4 | 0.060 | 1.70 | 24.09.1976 | 17.7 | 501 | 186 | 22.07.2007 |
| 5 | 0.060 | 1.70 | 14.09.1947 | 17.5 | 496 | 184 | 31.03.1962 |
| 6 | 0.063 | 1.78 | 22.02.1996 | 17.0 | 482 | 182 | 15.09.1998 |
| 7 | 0.076 | 2.15 | 06.08.1994 | 16.9 | 479 | 184 | 14.01.2011 |
| 8 | 0.080 | 2.27 | 21.08.1967 | 16.0 | 453 | 169 | 13.04.1994 |
| 9 | 0.080 | 2.27 | 24.11.1962 | 15.6 | 442 | 188 | 18.12.1965 |
| 10 | 0.080 | 2.27 | 29.05.1956 | 15.1 | 428 | 178 | 09.03.2000 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1947/2012 66 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 6.10 | 11.6 | 22.0 | 7.20 | 2.34 |
| 363 | 5.50 | 8.55 | 21.4 | 5.72 | 1.97 |
| 362 | 5.50 | 7.30 | 16.6 | 5.10 | 1.84 |
| 361 | 5.30 | 7.30 | 9.50 | 4.65 | 1.84 |
| 360 | 4.70 | 7.30 | 9.50 | 4.30 | 1.75 |
| 359 | 3.96 | 6.10 | 8.60 | 4.05 | 1.46 |
| 358 | 3.62 | 5.70 | 7.44 | 3.79 | 1.46 |
| 357 | 3.45 | 5.50 | 7.16 | 3.62 | 1.33 |
| 356 | 3.28 | 5.50 | 6.32 | 3.45 | 1.33 |
| 350 | 2.94 | 3.96 | 4.74 | 2.87 | 1.33 |
| 340 | 2.40 | 2.78 | 4.05 | 2.36 | 1.07 |
| 330 | 2.04 | 2.28 | 3.32 | 2.00 | 0.960 |
| 320 | 1.71 | 1.82 | 3.00 | 1.71 | 0.770 |
| 300 | 1.40 | 1.40 | 2.61 | 1.33 | 0.380 |
| 270 | 0.890 | 0.890 | 1.58 | 1.00 | 0.310 |
| 240 | 0.600 | 0.650 | 1.33 | 0.770 | 0.280 |
| 210 | 0.500 | 0.550 | 1.11 | 0.620 | 0.120 |
| 183 | 0.450 | 0.500 | 1.00 | 0.540 | 0.110 |
| 150 | 0.400 | 0.450 | 0.900 | 0.450 | 0.100 |
| 130 | 0.360 | 0.400 | 0.800 | 0.400 | 0.090 |
| 120 | 0.320 | 0.400 | 0.700 | 0.370 | 0.090 |
| 110 | 0.320 | 0.360 | 0.700 | 0.360 | 0.090 |
| 100 | 0.320 | 0.360 | 0.700 | 0.330 | 0.090 |
| 90 | 0.280 | 0.320 | 0.610 | 0.310 | 0.080 |
| 80 | 0.280 | 0.320 | 0.610 | 0.280 | 0.080 |
| 70 | 0.280 | 0.320 | 0.610 | 0.270 | 0.080 |
| 60 | 0.240 | 0.280 | 0.530 | 0.240 | 0.080 |
| 50 | 0.240 | 0.280 | 0.530 | 0.220 | 0.080 |
| 40 | 0.240 | 0.240 | 0.470 | 0.200 | 0.040 |
| 30 | 0.240 | 0.240 | 0.470 | 0.180 | 0.040 |
| 25 | 0.240 | 0.240 | 0.460 | 0.168 | 0.020 |
| 20 | 0.200 | 0.240 | 0.430 | 0.152 | 0.020 |
| 15 | 0.200 | 0.240 | 0.400 | 0.136 | 0.020 |
| 10 | 0.200 | 0.200 | 0.400 | 0.110 | 0.020 |
| 9 | 0.200 | 0.200 | 0.400 | 0.110 | 0.020 |
| 8 | 0.200 | 0.200 | 0.400 | 0.100 | 0.020 |
| 7 | 0.200 | 0.200 | 0.400 | 0.100 | 0.010 |
| 6 | 0.200 | 0.200 | 0.400 | 0.100 | 0.010 |
| 5 | 0.200 | 0.200 | 0.400 | 0.090 | 0.010 |
| 4 | 0.200 | 0.200 | 0.390 | 0.090 | 0.010 |
| 3 | 0.200 | 0.200 | 0.390 | 0.080 | 0.010 |
| 2 | 0.200 | 0.200 | 0.390 | 0.080 | 0.010 |
| 1 | 0.200 | 0.200 | 0.390 | 0.040 | 0.010 |
| 0 | 0.184 | 0.184 | 0.310 | 0.010 | 0.010 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
14 Tage Randeis

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 327.00 km²
PNP : NHN+ 306.59 m
Lage : 4.00 km oberhalb der Mündung links

# Q
m³/s

Pegel : Ellingshausen Nr. 422000
Gewässer : Hasel
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.80 | 1.27 | 10.1 | R 6.44 | 7.27 | 3.82 | 2.25 | 2.65 | 5.35 | 3.57 | 1.72 | 1.48 | 1.98 | 3.21 |
| 2. | 1.72 | 1.34 | 16.3 | R 5.96 | 8.53 | 3.82 | 2.45 | 1.72 | 3.57 | 3.32 | 1.56 | 1.48 | 2.25 | 3.09 |
| 3. | 1.72 | 1.41 | 19.1 | R 5.49 | 8.90 | 3.69 | 2.25 | 2.55 | 3.21 | 3.21 | 1.56 | 1.48 | 3.21 | 2.98 |
| 4. | 1.72 | 2.25 | 15.6 | R 5.20 | 8.90 | 4.08 | 2.16 | 2.35 | 2.98 | 2.98 | 1.48 | 1.64 | 2.98 | 2.98 |
| 5. | 1.72 | 4.62 | 16.3 | R 4.76 | 8.53 | 3.45 | 2.87 | 3.57 | 4.35 | 3.69 | 1.41 | 1.64 | 2.98 | 2.87 |
| 6. | 1.64 | 2.65 | 15.4 | R 4.35 | 7.80 | 3.32 | 3.57 | 2.45 | 3.57 | 3.21 | 1.48 | 1.48 | 2.87 | 2.87 |
| 7. | 1.64 | 2.55 | 13.6 | R 4.08 | 7.10 | 3.32 | 2.87 | 2.35 | 3.32 | 2.87 | 1.41 | 2.16 | 4.08 | 2.65 |
| 8. | 1.64 | 2.35 | 14.0 | R 4.08 | 7.45 | 3.21 | 2.55 | 2.06 | 3.09 | 2.65 | 1.41 | 1.64 | 3.82 | 2.45 |
| 9. | 1.56 | 3.09 | 14.5 | R 3.95 | 6.44 | 3.09 | 2.45 | 1.98 | 2.98 | 2.55 | 1.41 | 1.56 | 3.57 | 2.45 |
| 10. | 1.48 | 3.09 | 14.9 | R 3.82 | 5.96 | 3.21 | 2.45 | 1.80 | 2.87 | 2.45 | 1.41 | 1.48 | 3.69 | 2.55 |
| 11. | 1.48 | 2.76 | 14.0 | R 3.69 | 5.96 | 3.32 | 2.35 | 1.89 | 2.76 | 2.35 | 1.41 | 1.41 | 3.45 | 2.45 |
| 12. | 1.48 | 2.98 | 14.3 | R 3.45 | 5.96 | 3.32 | 3.09 | 2.06 | 3.09 | 2.25 | 2.98 | 1.56 | 3.09 | 2.35 |
| 13. | 1.41 | 3.09 | 15.8 | R 3.45 | 5.96 | 3.09 | 2.35 | 2.25 | 4.08 | 2.25 | 1.72 | 1.56 | 2.87 | 2.25 |
| 14. | 1.41 | 4.35 | 14.3 | R 3.45 | 5.96 | 2.98 | 2.25 | 2.45 | 7.62 | 2.16 | 1.48 | 1.56 | 2.65 | 2.25 |
| 15. | 1.41 | 4.76 | 12.5 | 3.45 | 5.96 | 2.76 | 2.25 | 2.55 | 6.93 | 2.06 | 1.56 | 1.56 | 2.55 | 4.21 |
| 16. | 1.34 | 8.34 | 11.1 | 3.32 | 5.96 | 2.76 | 2.35 | 2.65 | 6.44 | 2.45 | 1.41 | 1.41 | 2.45 | 9.09 |
| 17. | 1.34 | 9.09 | 9.67 | 3.82 | 5.96 | 2.65 | 2.16 | 2.06 | 7.80 | 2.16 | 1.41 | 1.34 | 2.45 | 11.1 |
| 18. | 1.34 | 7.62 | 8.71 | 4.08 | 6.44 | 2.65 | 2.06 | 1.89 | 7.98 | 2.06 | 1.41 | 1.34 | 2.35 | 13.4 |
| 19. | 1.34 | 6.44 | 12.8 | 6.77 | 6.44 | 2.55 | 2.16 | 1.80 | 7.45 | 1.98 | 1.98 | 1.34 | 2.25 | 12.1 |
| 20. | 1.34 | 5.65 | 13.2 | 4.08 | 5.96 | 2.55 | 1.98 | 4.91 | 6.77 | 1.89 | 1.41 | 1.41 | 2.16 | 10.5 |
| 21. | 1.34 | 5.35 | 12.3 | 3.45 | 5.65 | 2.55 | 1.98 | 9.28 | 6.44 | 1.80 | 1.34 | 1.34 | 2.06 | 9.28 |
| 22. | 1.27 | 5.49 | 15.4 | 3.45 | 5.20 | 3.09 | 1.98 | 6.93 | 5.49 | 2.25 | 1.56 | 1.27 | 2.06 | 8.34 |
| 23. | 1.20 | 6.60 | 15.4 | 3.57 | 5.05 | 2.76 | 2.06 | 5.20 | 4.76 | 1.89 | 1.34 | 1.34 | 2.06 | 21.4 |
| 24. | 1.20 | 10.3 | 13.8 | 3.95 | 4.91 | 2.76 | 1.89 | 4.62 | 4.35 | 2.35 | 1.41 | 1.27 | 2.06 | 40.5 |
| 25. | 1.20 | 10.9 | 12.5 | 5.35 | 4.76 | 2.76 | 1.80 | 4.76 | 4.35 | 2.45 | 1.64 | 1.27 | 1.98 | 29.4 |
| 26. | 1.20 | 10.7 | 11.3 | 5.05 | 4.62 | 2.45 | 1.72 | 3.95 | 4.21 | 2.25 | 1.80 | 1.34 | 1.98 | 24.4 |
| 27. | 1.20 | 11.3 | 10.5 | 4.62 | 4.35 | 2.45 | 1.72 | 3.57 | 3.69 | 2.25 | 3.21 | 1.56 | 2.55 | 22.6 |
| 28. | 1.13 | 11.3 | 9.48 | 4.62 | 4.21 | 2.35 | K 1.72 | 3.32 | 5.20 | 1.89 | 1.98 | 1.41 | 2.65 | 23.6 |
| 29. | 1.13 | 10.5 | 8.71 | 5.96 | 4.08 | 2.25 | K 1.64 | 3.09 | 5.49 | 1.80 | 1.64 | 1.34 | 4.62 | 19.5 |
| 30. | 1.20 | 10.3 | 7.98 | | 4.76 | 2.25 | K 1.56 | 3.57 | 4.21 | 1.89 | 1.56 | 1.48 | 3.69 | 17.0 |
| 31. | | 9.09 | 7.27 | | 4.21 | | K 1.64 | | 3.82 | 2.06 | | 1.89 | | 14.5 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 28.+ | 1. | 31. | 16. | 29. | 29.+ | 30. | 2. | 11. | 21.+ | 21.+ | 22.+ | 1.+ | 13.+ |
| NQ | 1.13 | 1.27 | 7.27 | 3.32 | 4.08 | 2.25 | 1.56 | 1.72 | 2.76 | 1.80 | 1.34 | 1.27 | 1.98 | 2.25 |
| MQ | 1.42 | 5.86 | 12.9 | 4.40 | 6.10 | 2.98 | 2.21 | 3.21 | 4.78 | 2.42 | 1.64 | 1.49 | 2.78 | 10.6 |
| HQ | 1.80 | 14.3 | 21.7 | 9.09 | 9.28 | 5.49 | 6.93 | 25.5 | 13.4 | 7.10 | 7.45 | 2.87 | 6.44 | 44.9 |
| Tag | 1. | 16. | 2. | 19. | 2. | 4. | 5. | 21. | 17. | 5. | 27. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 48 | 106 | 34 | 50 | 24 | 18 | 25 | 39 | 20 | 13 | 12 | 22 | 87 |

| | 1935/2011 | | 1936/2012 77 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1959 | 1942 | 1942 | 1942 | 1960 | 1948 | 1960 | 1943 | 1976 | 1964 | 1948 | 1949 | 1959 |
| NQ | 0.450 | 0.250 | 0.100 | 0.100 | 0.100 | 1.57 | 0.900 | 0.800 | 0.380 | 0.550 | 0.320 | 0.420 | 0.450 | 0.250 |
| MNQ | 2.30 | 2.75 | 3.13 | 3.54 | 3.94 | 4.09 | 2.45 | 1.98 | 1.82 | 1.56 | 1.48 | 1.64 | 2.31 | 2.76 |
| MQ | 4.23 | 5.92 | 6.31 | 6.28 | 7.42 | 7.10 | 3.95 | 3.30 | 3.20 | 2.52 | 2.44 | 2.96 | 4.23 | 6.01 |
| MHQ | 11.0 | 16.0 | 17.1 | 14.1 | 17.7 | 15.3 | 9.72 | 10.7 | 10.8 | 8.35 | 8.01 | 8.14 | 11.0 | 16.5 |
| HQ | 41.5 | 51.7 | 71.3 | 57.3 | 65.7 | 74.2 | 42.9 | 38.0 | 37.7 | 49.7 | 53.1 | 40.0 | 41.5 | 51.7 |
| Jahr | 1944 | 1978 | 2011 | 2005 | 2006 | 1994 | 1941 | 1966 | 1956 | 1981 | 1998 | 1960 | 1944 | 1978 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 34 | 48 | 52 | 47 | 61 | 56 | 32 | 26 | 26 | 21 | 19 | 24 | 34 | 49 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.13 | am 28.11.2011 | 1.13 | 1.27 | 1.27 | am 22.10.2012 |
| MQ | m³/s | 4.14 | | 5.67 | 2.63 | 4.65 | |
| HQ | m³/s | 25.5 | am 21.06.2012 bei W = 188 cm | 21.7 | 25.5 | 44.9 | am 24.12.2012 bei W = 239 cm |
| Nq | l/(skm²) | 3.46 | | 3.46 | 3.88 | 3.88 | |
| Mq | l/(skm²) | 12.7 | | 17.3 | 8.03 | 14.2 | |
| Hq | l/(skm²) | 78.0 | | 66.4 | 78.0 | 137 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 400 | | 272 | 128 | 450 | |

| | | 1936/2012 (*) 77 Jahre | | | | 1936/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.100 | am 29.01.1942 | 0.100 | 0.320 | 0.100 | am 29.01.1942 |
| MNQ | m³/s | 1.02 | | 1.72 | 1.16 | 1.10 | |
| MQ | m³/s | 4.63 | | 6.22 | 3.07 | 4.64 | |
| MHQ | m³/s | 32.7 | | 30.6 | 18.0 | 33.0 | |
| HQ | m³/s | 74.2 | am 13.04.1994 bei W = 271 cm | 74.2 | 53.1 | 74.2 | am 13.04.1994 bei W = 271 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.12 | | 5.26 | 3.56 | 3.35 | |
| Mq | l/(skm²) | 14.2 | | 19.0 | 9.37 | 14.2 | |
| MHq | l/(skm²) | 100 | | 93.7 | 55.1 | 101 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 447 | | 298 | 149 | 447 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.100 | 0.306 | 29.01.1942 | 74.2 | 227 | 271 | 13.04.1994 |
| 2 | 0.250 | 0.765 | 16.12.1959 | 71.3 | 218 | 268 | 14.01.2011 |
| 3 | 0.320 | 0.979 | 11.09.1964 | 65.7 | 201 | 264 | 31.03.2006 |
| 4 | 0.380 | 1.16 | 17.07.1943 | 59.4 | 182 | 258 | 28.01.2002 |
| 5 | 0.420 | 1.28 | 11.10.1948 | 57.3 | 175 | 256 | 13.02.2005 |
| 6 | 0.430 | 1.31 | 07.07.1949 | 56.3 | 172 | 255 | 11.03.1981 |
| 7 | 0.550 | 1.68 | 22.08.1976 | 53.3 | 163 | 252 | 01.04.1988 |
| 8 | 0.570 | 1.74 | 09.08.1952 | 53.1 | 162 | 252 | 16.09.1998 |
| 9 | 0.590 | 1.80 | 10.10.1951 | 51.7 | 158 | 244 | 31.12.1978 |
| 10 | 0.590 | 1.80 | 18.08.1947 | 49.7 | 152 | 248 | 11.08.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1936/2012 77 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 19.1 | 40.5 | 64.6 | 29.9 | 7.80 |
| 363 | 16.3 | 29.4 | 61.4 | 25.5 | 7.10 |
| 362 | 16.3 | 24.4 | 44.1 | 22.9 | 6.54 |
| 361 | 15.8 | 23.6 | 42.9 | 21.1 | 6.42 |
| 360 | 15.6 | 22.6 | 38.1 | 19.8 | 6.26 |
| 359 | 15.4 | 21.4 | 34.1 | 18.7 | 6.11 |
| 358 | 15.4 | 19.5 | 33.4 | 17.7 | 5.96 |
| 357 | 15.4 | 19.1 | 31.0 | 16.9 | 5.96 |
| 356 | 14.9 | 17.0 | 29.9 | 16.3 | 5.96 |
| 350 | 13.8 | 15.4 | 26.3 | 13.4 | 5.54 |
| 340 | 11.1 | 13.6 | 18.8 | 11.2 | 5.14 |
| 330 | 9.28 | 11.1 | 16.8 | 9.70 | 4.76 |
| 320 | 7.98 | 8.90 | 14.8 | 8.55 | 4.53 |
| 300 | 6.44 | 6.44 | 12.1 | 6.99 | 3.58 |
| 270 | 4.91 | 4.91 | 10.7 | 5.50 | 2.89 |
| 240 | 3.95 | 3.95 | 9.90 | 4.52 | 2.50 |
| 210 | 3.32 | 3.45 | 8.90 | 3.80 | 2.17 |
| 183 | 2.87 | 2.98 | 7.92 | 3.25 | 1.74 |
| 150 | 2.45 | 2.55 | 6.40 | 2.75 | 1.26 |
| 130 | 2.25 | 2.45 | 5.68 | 2.47 | 1.10 |
| 120 | 2.06 | 2.35 | 5.32 | 2.35 | 0.940 |
| 110 | 1.98 | 2.25 | 5.14 | 2.23 | 0.940 |
| 100 | 1.89 | 2.16 | 4.96 | 2.10 | 0.860 |
| 90 | 1.72 | 2.06 | 4.60 | 1.98 | 0.860 |
| 80 | 1.64 | 1.98 | 4.29 | 1.88 | 0.860 |
| 70 | 1.56 | 1.89 | 4.14 | 1.76 | 0.780 |
| 60 | 1.56 | 1.80 | 3.83 | 1.65 | 0.780 |
| 50 | 1.48 | 1.64 | 3.67 | 1.55 | 0.780 |
| 40 | 1.41 | 1.56 | 3.45 | 1.41 | 0.730 |
| 30 | 1.41 | 1.48 | 3.30 | 1.30 | 0.150 |
| 25 | 1.34 | 1.41 | 3.30 | 1.22 | 0.100 |
| 20 | 1.34 | 1.41 | 3.14 | 1.15 | 0.100 |
| 15 | 1.34 | 1.41 | 2.98 | 1.07 | 0.100 |
| 10 | 1.27 | 1.34 | 2.82 | 0.970 | 0.100 |
| 9 | 1.27 | 1.34 | 2.82 | 0.950 | 0.100 |
| 8 | 1.27 | 1.34 | 2.82 | 0.940 | 0.100 |
| 7 | 1.27 | 1.34 | 2.82 | 0.900 | 0.100 |
| 6 | 1.20 | 1.34 | 2.76 | 0.860 | 0.100 |
| 5 | 1.20 | 1.34 | 2.76 | 0.820 | 0.100 |
| 4 | 1.20 | 1.34 | 2.76 | 0.780 | 0.100 |
| 3 | 1.20 | 1.34 | 2.69 | 0.730 | 0.100 |
| 2 | 1.20 | 1.34 | 2.69 | 0.660 | 0.100 |
| 1 | 1.20 | 1.27 | 2.69 | 0.500 | 0.100 |
| 0 | 1.13 | 1.27 | 2.63 | 0.100 | 0.100 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
14 Tage Randeis, 4 Tage Verkrautung

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 40.90 km²
PNP : NN+ 415.14 m
Lage : 0.50 km oberhalb der Mündung links

# Q

m³/s

Pegel : Suhl Nr. 422201
Gewässer : Lauter
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.380 | 0.284 | 2.52 | 0.938 | 1.80 | 0.938 | 0.442 | 0.504 | 1.10 | 0.690 | 0.348 | 0.348 | 0.442 | 0.690 |
| 2. | 0.380 | 0.316 | 4.70 | 0.938 | 2.26 | 0.938 | 0.442 | 0.380 | 0.814 | 0.690 | 0.348 | 0.348 | 0.752 | 0.690 |
| 3. | 0.348 | 0.348 | 4.70 | 0.938 | 2.52 | 0.876 | 0.380 | 0.690 | 0.752 | 0.628 | 0.348 | 0.348 | 0.814 | 0.690 |
| 4. | 0.348 | 0.566 | 3.75 | 0.876 | 2.52 | 0.938 | 0.380 | 0.566 | 0.690 | 0.628 | 0.316 | 0.442 | 0.752 | 0.690 |
| 5. | 0.348 | 0.876 | 3.75 | 0.876 | 2.39 | 0.814 | 0.566 | 0.628 | 0.814 | 0.752 | 0.316 | 0.348 | 0.752 | 0.690 |
| 6. | 0.348 | 0.442 | 3.07 | 0.814 | 2.13 | 0.814 | 0.690 | 0.566 | 0.814 | 0.628 | 0.316 | 0.348 | 0.752 | 0.628 |
| 7. | 0.348 | 0.504 | 2.79 | R 0.814 | 1.90 | 0.814 | 0.504 | 0.442 | 0.752 | 0.566 | 0.316 | 0.442 | 1.30 | 0.628 |
| 8. | 0.348 | 0.442 | 2.79 | R 0.752 | 1.90 | 0.814 | 0.442 | 0.380 | 0.690 | 0.566 | 0.284 | 0.380 | 1.10 | 0.566 |
| 9. | 0.348 | 0.690 | 2.39 | R 0.752 | 1.60 | 0.752 | 0.442 | 0.348 | 0.628 | 0.566 | 0.284 | 0.348 | 0.938 | 0.566 |
| 10. | 0.348 | 0.690 | 2.52 | R 0.752 | 1.50 | 0.690 | 0.442 | 0.348 | 0.628 | 0.566 | 0.284 | 0.316 | 0.876 | 0.628 |
| 11. | 0.348 | 0.690 | 2.52 | R 0.752 | 1.40 | 0.752 | 0.504 | 0.380 | 0.566 | 0.566 | 0.380 | 0.316 | 0.814 | 0.628 |
| 12. | 0.348 | 0.752 | 2.93 | R 0.690 | 1.40 | 0.690 | 0.504 | 0.348 | 0.690 | 0.566 | 0.442 | 0.348 | 0.752 | 0.628 |
| 13. | 0.316 | 0.752 | 3.21 | R 0.690 | 1.50 | 0.628 | 0.504 | 0.442 | 0.876 | 0.504 | 0.316 | 0.348 | 0.690 | 0.566 |
| 14. | 0.348 | 0.938 | 2.79 | 0.628 | 1.50 | 0.628 | 0.504 | 0.504 | 1.60 | 0.504 | 0.316 | 0.380 | 0.628 | 0.628 |
| 15. | 0.348 | 1.00 | 2.39 | 0.628 | 1.60 | 0.628 | 0.442 | 0.442 | 1.60 | 0.442 | 0.348 | 0.348 | 0.628 | 1.10 |
| 16. | 0.348 | 1.80 | 2.00 | 0.628 | 1.60 | 0.566 | 0.504 | 0.566 | 1.50 | 0.566 | 0.316 | 0.348 | 0.566 | 2.26 |
| 17. | 0.316 | 1.90 | 1.70 | 0.690 | 1.70 | 0.566 | 0.504 | 0.348 | 2.00 | 0.442 | 0.316 | 0.348 | 0.566 | 2.65 |
| 18. | 0.284 | 1.60 | 1.60 | 0.752 | 1.90 | 0.566 | 0.442 | 0.348 | 2.00 | 0.442 | 0.348 | 0.316 | 0.504 | 3.07 |
| 19. | 0.284 | 1.30 | 2.39 | 0.938 | 1.80 | 0.566 | 0.442 | 0.380 | 1.80 | 0.380 | 0.348 | 0.316 | 0.504 | 2.65 |
| 20. | 0.316 | 1.10 | 2.13 | 0.690 | 1.70 | 0.566 | 0.442 | 1.90 | 1.60 | 0.380 | 0.316 | 0.348 | 0.442 | 2.26 |
| 21. | 0.316 | 1.00 | 2.26 | 0.690 | 1.50 | 0.566 | 0.442 | 2.00 | 1.50 | 0.380 | 0.316 | 0.316 | 0.442 | 2.00 |
| 22. | 0.284 | 0.938 | 2.52 | 0.628 | 1.40 | 0.628 | 0.504 | 1.90 | 1.20 | 0.442 | 0.348 | 0.316 | 0.442 | 1.80 |
| 23. | 0.284 | 1.20 | 2.52 | 0.690 | 1.40 | 0.566 | 0.442 | 1.40 | 0.938 | 0.380 | 0.316 | 0.316 | 0.442 | 4.84 |
| 24. | 0.284 | 2.52 | 2.26 | 0.814 | 1.40 | 0.566 | 0.380 | 1.20 | 0.876 | 0.504 | 0.348 | 0.316 | 0.442 | 7.59 |
| 25. | 0.284 | 2.52 | 2.00 | 1.00 | 1.30 | 0.628 | 0.380 | 1.10 | 0.814 | 0.504 | 0.380 | 0.316 | 0.442 | 5.92 |
| 26. | 0.284 | 2.65 | 1.80 | 1.10 | 1.20 | 0.504 | 0.380 | 0.938 | 0.752 | 0.504 | 0.380 | 0.348 | 0.442 | 5.51 |
| 27. | 0.284 | 2.93 | 1.60 | 1.00 | 1.20 | 0.504 | 0.380 | 0.876 | 0.690 | 0.442 | 0.752 | 0.380 | 0.566 | 5.38 |
| 28. | 0.284 | 3.07 | 1.40 | 1.00 | 1.10 | 0.504 | 0.380 | 0.752 | 0.938 | 0.380 | 0.442 | 0.348 | 0.628 | 5.11 |
| 29. | 0.284 | 2.79 | 1.30 | 1.40 | 1.00 | 0.504 | 0.380 | 0.690 | 0.938 | 0.348 | 0.348 | 0.316 | 0.938 | 4.16 |
| 30. | 0.284 | 2.52 | 1.20 | | 1.20 | 0.504 | 0.380 | 0.876 | 0.752 | 0.380 | 0.348 | 0.348 | 0.752 | 3.48 |
| 31. | | 2.00 | 1.10 | | 1.00 | | 0.566 | | 0.690 | 0.380 | | 0.442 | | 2.79 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 18.+ | 1. | 31. | 14.+ | 29.+ | 26.+ | 3.+ | 9.+ | 11. | 29. | 8.+ | 10.+ | 1.+ | 8.+ |
| NQ | 0.284 | 0.284 | 1.10 | 0.628 | 1.00 | 0.504 | 0.380 | 0.348 | 0.566 | 0.348 | 0.284 | 0.316 | 0.442 | 0.566 |
| MQ | 0.322 | 1.33 | 2.47 | 0.823 | 1.62 | 0.667 | 0.456 | 0.741 | 1.03 | 0.507 | 0.353 | 0.350 | 0.670 | 2.31 |
| HQ | 0.566 | 3.07 | 6.05 | 1.80 | 3.21 | 1.40 | 2.26 | 15.8 | 7.17 | 5.11 | 3.07 | 1.20 | 1.90 | 8.01 |
| Tag | 14. | 16. | 2. | 29. | 4. | 4. | 5. | 20. | 5. | 5. | 11. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 20 | 87 | 162 | 50 | 106 | 42 | 30 | 47 | 68 | 33 | 22 | 23 | 42 | 151 |

| | 1950/2011 | | 1951/2012 62 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1951 | 1953 | 1963 | 1963 | 1972 | 1959 | 1959 | 1959+ | 1994 | 1959 | 1951 | 1959 | 1951 | 1953 |
| NQ | 0.109 | 0.138 | 0.128 | 0.128 | 0.168 | 0.119 | 0.188 | 0.119 | 0.079 | 0.059 | 0.109 | 0.059 | 0.109 | 0.138 |
| MNQ | 0.444 | 0.573 | 0.591 | 0.624 | 0.713 | 0.772 | 0.487 | 0.376 | 0.361 | 0.311 | 0.318 | 0.349 | 0.438 | 0.576 |
| MQ | 0.846 | 1.19 | 1.20 | 1.11 | 1.41 | 1.40 | 0.765 | 0.639 | 0.575 | 0.455 | 0.513 | 0.625 | 0.825 | 1.20 |
| MHQ | 1.98 | 3.45 | 3.42 | 2.52 | 3.68 | 3.32 | 2.01 | 2.64 | 2.80 | 1.68 | 1.69 | 1.67 | 1.88 | 3.51 |
| HQ | 8.45 | 12.4 | 13.0 | 9.58 | 16.8 | 18.6 | 7.45 | 15.8 | 16.0 | 7.17 | 12.8 | 9.44 | 8.43 | 12.4 |
| Jahr | 1950 | 1965 | 2002 | 2005 | 1981 | 1994 | 2006 | 2012 | 1985 | 2002 | 1998 | 1960 | 1998 | 1965 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 54 | 78 | 79 | 66 | 93 | 89 | 50 | 40 | 38 | 30 | 33 | 41 | 52 | 79 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.284 | am 18.11.2011 | 0.284 | 0.284 | 0.284 | am 08.09.2012 |
| MQ | m³/s | 0.894 | | 1.22 | 0.574 | 1.01 | |
| HQ | m³/s | 15.8 | am 20.06.2012 bei W = 137 cm | 6.05 | 15.8 | 15.8 | am 20.06.2012 bei W = 137 cm |
| Nq | l/(skm²) | 6.94 | | 6.94 | 6.94 | 6.94 | |
| Mq | l/(skm²) | 21.9 | | 29.8 | 14.0 | 24.6 | |
| Hq | l/(skm²) | 386 | | 148 | 386 | 386 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 691 | | 468 | 223 | 777 | |

| | | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.059 | am 08.08.1959 | 0.109 | 0.059 | 0.059 | am 08.08.1959 |
| MNQ | m³/s | 0.221 | | 0.357 | 0.241 | 0.231 | |
| MQ | m³/s | 0.893 | | 1.20 | 0.596 | 0.893 | |
| MHQ | m³/s | 7.54 | | 6.59 | 4.63 | 7.63 | |
| HQ | m³/s | 18.6 | am 13.04.1994 bei W = 153 cm | 18.6 | 16.0 | 18.6 | am 13.04.1994 bei W = 153 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 5.40 | | 8.74 | 5.90 | 5.64 | |
| Mq | l/(skm²) | 21.8 | | 29.2 | 14.6 | 21.8 | |
| MHq | l/(skm²) | 184 | | 161 | 113 | 187 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 689 | | 458 | 232 | 689 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.059 | 1.44 | 08.08.1959 | 18.6 | 455 | 153 | 13.04.1994 |
| 2 | 0.079 | 1.93 | 24.07.1994 | 16.8 | 411 | | 11.03.1981 |
| 3 | 0.079 | 1.93 | 08.10.1971 | 16.0 | 391 | 120 | 06.07.1985 |
| 4 | 0.109 | 2.67 | 31.07.1952 | 15.8 | 386 | 137 | 20.06.2012 |
| 5 | 0.109 | 2.67 | 25.08.1951 | 13.0 | 318 | 118 | 28.01.2002 |
| 6 | 0.119 | 2.91 | 16.08.1973 | 12.8 | 313 | 122 | 15.09.1998 |
| 7 | 0.119 | 2.91 | 26.08.1965 | 12.4 | 303 | | 18.12.1965 |
| 8 | 0.119 | 2.91 | 18.07.1964 | 12.1 | 296 | 112 | 31.03.2006 |
| 9 | 0.128 | 3.13 | 01.11.1962 | 11.3 | 276 | 107 | 09.03.2000 |
| 10 | 0.138 | 3.37 | 04.10.1997 | 11.2 | 274 | | 24.12.1967 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1951/2012 62 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 4.70 | 7.59 | 18.6 | 6.24 | 1.27 |
| 363 | 4.70 | 5.92 | 15.9 | 5.16 | 1.27 |
| 362 | 3.75 | 5.51 | 10.2 | 4.60 | 1.27 |
| 361 | 3.75 | 5.38 | 10.1 | 4.10 | 1.27 |
| 360 | 3.21 | 5.11 | 8.20 | 3.75 | 1.10 |
| 359 | 3.07 | 4.84 | 8.15 | 3.56 | 1.10 |
| 358 | 3.07 | 4.70 | 7.71 | 3.37 | 1.10 |
| 357 | 2.93 | 4.70 | 7.33 | 3.24 | 1.10 |
| 356 | 2.93 | 4.16 | 6.57 | 3.07 | 0.958 |
| 350 | 2.52 | 3.07 | 4.78 | 2.52 | 0.958 |
| 340 | 2.39 | 2.52 | 3.36 | 2.08 | 0.810 |
| 330 | 2.00 | 2.26 | 2.89 | 1.83 | 0.810 |
| 320 | 1.90 | 2.00 | 2.57 | 1.60 | 0.672 |
| 300 | 1.50 | 1.60 | 2.25 | 1.30 | 0.603 |
| 270 | 1.00 | 1.10 | 1.73 | 0.990 | 0.474 |
| 240 | 0.814 | 0.814 | 1.29 | 0.860 | 0.435 |
| 210 | 0.690 | 0.752 | 1.10 | 0.751 | 0.326 |
| 183 | 0.628 | 0.628 | 0.968 | 0.632 | 0.326 |
| 150 | 0.504 | 0.566 | 0.968 | 0.553 | 0.227 |
| 130 | 0.442 | 0.504 | 0.968 | 0.504 | 0.198 |
| 120 | 0.442 | 0.504 | 0.800 | 0.464 | 0.198 |
| 110 | 0.380 | 0.442 | 0.790 | 0.442 | 0.198 |
| 100 | 0.380 | 0.442 | 0.790 | 0.415 | 0.198 |
| 90 | 0.380 | 0.442 | 0.790 | 0.385 | 0.198 |
| 80 | 0.348 | 0.442 | 0.790 | 0.366 | 0.188 |
| 70 | 0.348 | 0.380 | 0.790 | 0.348 | 0.168 |
| 60 | 0.348 | 0.380 | 0.781 | 0.326 | 0.158 |
| 50 | 0.348 | 0.348 | 0.781 | 0.316 | 0.138 |
| 40 | 0.348 | 0.348 | 0.632 | 0.287 | 0.138 |
| 30 | 0.316 | 0.348 | 0.632 | 0.252 | 0.119 |
| 25 | 0.316 | 0.348 | 0.632 | 0.247 | 0.119 |
| 20 | 0.316 | 0.316 | 0.632 | 0.237 | 0.119 |
| 15 | 0.316 | 0.316 | 0.632 | 0.217 | 0.099 |
| 10 | 0.284 | 0.316 | 0.504 | 0.188 | 0.079 |
| 9 | 0.284 | 0.316 | 0.504 | 0.188 | 0.079 |
| 8 | 0.284 | 0.316 | 0.504 | 0.188 | 0.079 |
| 7 | 0.284 | 0.316 | 0.504 | 0.168 | 0.079 |
| 6 | 0.284 | 0.316 | 0.504 | 0.168 | 0.079 |
| 5 | 0.284 | 0.316 | 0.504 | 0.148 | 0.079 |
| 4 | 0.284 | 0.316 | 0.504 | 0.138 | 0.079 |
| 3 | 0.284 | 0.316 | 0.504 | 0.128 | 0.059 |
| 2 | 0.284 | 0.316 | 0.504 | 0.119 | 0.059 |
| 1 | 0.284 | 0.284 | 0.504 | 0.119 | 0.059 |
| 0 | 0.284 | 0.284 | 0.504 | 0.059 | 0.059 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Seit 01.11.1998 als Schreibpegelstation in Betrieb. Standortverlagerung gegenüber der LP−Station Suhl/Lauter ca. 200 m nach oberhalb. Neufestlegung PNP und Q−Statistikfortschreibung
7 Tage Randeis

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 151.00 km²
PNP : NN+ 344.07 m
Lage : 5.00 km oberhalb der Mündung links

# Q

m³/s

Pegel : Schwarza Nr. 422300
Gewässer : Schwarza
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K 0.790 | 0.480 | 5.81 | 2.75 | 4.25 | 1.87 | 0.930 | 1.07 | 2.17 | 1.67 | 0.790 | 0.650 | 0.860 | 1.49 |
| 2. | K 0.790 | 0.590 | 10.0 | R 2.39 | 4.85 | 1.77 | 0.930 | 0.720 | 1.40 | 1.49 | 0.720 | 0.650 | 1.00 | 1.40 |
| 3. | K 0.790 | 0.590 | 11.2 | R 2.17 | 5.01 | 1.77 | 0.860 | 1.00 | 1.31 | 1.49 | 0.720 | 0.650 | 1.40 | 1.31 |
| 4. | K 0.790 | 0.860 | 8.89 | R 2.07 | 5.01 | 1.97 | 0.860 | 1.00 | 1.15 | 1.31 | 0.650 | 0.790 | 1.31 | 1.31 |
| 5. | K 0.790 | 1.87 | 8.89 | R 1.87 | 4.85 | 1.67 | 1.15 | 1.67 | 1.87 | 1.67 | 0.720 | 0.720 | 1.31 | 1.31 |
| 6. | K 0.720 | 1.00 | 7.81 | R 1.77 | 4.40 | 1.58 | 1.40 | 1.07 | 1.49 | 1.40 | 0.650 | 0.720 | 1.23 | 1.31 |
| 7. | K 0.720 | 1.07 | 7.13 | R 1.67 | 3.83 | 1.58 | 1.23 | 1.00 | 1.49 | 1.23 | 0.650 | 0.930 | 1.77 | 1.15 |
| 8. | K 0.720 | 0.930 | 7.64 | R 1.58 | 3.97 | 1.49 | 1.07 | 0.860 | 1.40 | 1.15 | 0.650 | 0.650 | 1.58 | 1.15 |
| 9. | K 0.650 | 1.40 | 7.81 | R 1.49 | 3.27 | 1.49 | 1.00 | 0.860 | 1.31 | 1.15 | 0.650 | 0.650 | 1.49 | 1.07 |
| 10. | K 0.650 | 1.31 | 7.99 | R 1.49 | 3.14 | 1.49 | 0.930 | 0.790 | 1.23 | 1.07 | 0.590 | 0.590 | 1.49 | 1.07 |
| 11. | K 0.590 | 1.23 | 7.30 | R 1.40 | 3.14 | 1.58 | 1.00 | 0.860 | 1.23 | 1.00 | 0.720 | 0.590 | 1.40 | 1.00 |
| 12. | K 0.590 | 1.31 | 7.47 | R 1.40 | 3.14 | 1.58 | 1.23 | 0.860 | 1.31 | 1.00 | 1.23 | 0.720 | 1.23 | 1.00 |
| 13. | K 0.590 | 1.49 | 8.17 | R 1.40 | 3.14 | 1.40 | 1.00 | 0.930 | 1.97 | 0.930 | 0.790 | 0.650 | 1.15 | 1.00 |
| 14. | K 0.590 | 2.07 | 7.13 | R 1.40 | 3.27 | 1.31 | 1.00 | 1.00 | 4.40 | 0.930 | 0.650 | 0.650 | 1.07 | 1.00 |
| 15. | K 0.590 | 2.28 | 6.13 | 1.49 | 3.14 | 1.31 | 1.00 | 0.860 | 3.83 | 0.930 | 0.720 | 0.650 | 1.07 | 1.77 |
| 16. | K 0.590 | 4.11 | 5.17 | 1.31 | 3.14 | 1.23 | 1.07 | 1.00 | 3.27 | 1.07 | 0.650 | 0.650 | 1.00 | 3.69 |
| 17. | K 0.590 | 4.55 | 4.40 | 1.49 | 3.27 | 1.23 | 0.930 | 0.790 | 3.97 | 0.930 | 0.590 | 0.590 | 1.00 | 4.70 |
| 18. | K 0.590 | 3.83 | 3.83 | 1.58 | 3.55 | 1.23 | 0.930 | 0.720 | 4.11 | 0.860 | 0.720 | 0.590 | 0.930 | 6.45 |
| 19. | K 0.590 | 3.27 | 5.97 | 2.88 | 3.41 | 1.23 | 0.930 | 0.720 | 3.83 | 0.860 | 0.860 | 0.590 | 0.930 | 5.97 |
| 20. | K 0.530 | 2.88 | 5.97 | 1.67 | 3.27 | 1.23 | 0.860 | 2.88 | 3.41 | 0.790 | 0.650 | 0.590 | 0.930 | 4.85 |
| 21. | K 0.530 | 2.63 | 6.13 | 1.49 | 2.88 | 1.23 | 0.860 | 3.55 | 3.27 | 0.790 | 0.590 | 0.530 | 0.860 | 4.25 |
| 22. | K 0.530 | 2.63 | 7.30 | 1.58 | 2.63 | 1.49 | 0.860 | 2.51 | 2.63 | 0.860 | 0.720 | 0.530 | 0.860 | 3.83 |
| 23. | K 0.530 | 3.27 | 7.64 | 1.58 | 2.63 | 1.31 | 0.860 | 2.07 | 2.28 | 0.790 | 0.650 | 0.590 | 0.860 | 14.0 |
| 24. | K 0.530 | 5.65 | 6.79 | 1.97 | 2.51 | 1.23 | 0.720 | 1.87 | 2.07 | 1.07 | 0.650 | 0.530 | 0.860 | 22.2 |
| 25. | K 0.480 | 6.13 | 5.97 | 2.75 | 2.39 | 1.23 | 0.720 | 1.77 | 2.17 | 1.00 | 0.720 | 0.530 | 0.790 | 15.4 |
| 26. | K 0.530 | 6.13 | 5.33 | 2.51 | 2.39 | 1.15 | 0.720 | 1.58 | 1.97 | 1.07 | 0.790 | 0.590 | 0.860 | 13.0 |
| 27. | K 0.480 | 6.45 | 4.70 | 2.28 | 2.17 | 1.07 | 0.720 | 1.49 | 1.77 | 0.930 | 1.40 | 0.650 | 1.07 | 12.2 |
| 28. | K 0.480 | 6.62 | 4.11 | 2.51 | 2.07 | 1.07 | 0.720 | 1.40 | 2.39 | 0.860 | 0.860 | 0.590 | 1.15 | 12.4 |
| 29. | K 0.480 | 6.13 | 3.69 | 3.41 | 1.97 | 1.00 | 0.720 | 1.23 | 2.63 | 0.790 | 0.720 | 0.530 | 2.28 | 10.2 |
| 30. | K 0.480 | 5.81 | 3.41 | | 2.39 | 1.00 | 0.650 | 1.40 | 2.07 | 1.00 | 0.650 | 0.650 | 1.67 | 8.53 |
| 31. | | 5.01 | 3.01 | | 1.97 | | 0.720 | | 1.77 | 0.930 | | 0.860 | | 7.13 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25.+ | 1. | 31. | 16. | 29.+ | 29.+ | 30. | 2.+ | 4. | 20.+ | 10.+ | 21.+ | 25. | 11.+ |
| NQ | 0.480 | 0.480 | 3.01 | 1.31 | 1.97 | 1.00 | 0.650 | 0.720 | 1.15 | 0.790 | 0.590 | 0.530 | 0.790 | 1.00 |
| MQ | 0.610 | 3.02 | 6.54 | 1.91 | 3.26 | 1.39 | 0.922 | 1.32 | 2.30 | 1.07 | 0.737 | 0.640 | 1.18 | 5.39 |
| HQ | 0.860 | 7.13 | 14.0 | 4.55 | 5.33 | 2.75 | 3.83 | 18.6 | 9.07 | 3.97 | 3.27 | 1.23 | 2.88 | 25.0 |
| Tag | 1. | 24. | 2. | 19. | 3. | 4. | 11. | 20. | 14. | 5. | 27. | 4. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 54 | 116 | 32 | 58 | 24 | 16 | 23 | 41 | 19 | 13 | 11 | 20 | 96 |

| | 1949/2011 | | 1950/2012 63 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1972 | 1972 | 1960 | 2011 | 2000 | 1952 | 1952 | 1973 | 1991 | 1953 | 1953 |
| NQ | 0.220 | 0.230 | 0.170 | 0.400 | 0.330 | 0.800 | 0.480 | 0.310 | 0.220 | 0.220 | 0.280 | 0.260 | 0.310 | 0.230 |
| MNQ | 1.14 | 1.37 | 1.48 | 1.59 | 1.80 | 2.08 | 1.23 | 0.938 | 0.847 | 0.741 | 0.727 | 0.838 | 1.15 | 1.38 |
| MQ | 2.13 | 3.04 | 3.14 | 2.93 | 3.80 | 3.82 | 2.08 | 1.63 | 1.48 | 1.19 | 1.23 | 1.56 | 2.15 | 3.09 |
| MHQ | 5.61 | 8.44 | 9.17 | 7.19 | 10.1 | 8.91 | 5.54 | 6.20 | 5.71 | 4.61 | 4.67 | 4.53 | 5.64 | 8.77 |
| HQ | 21.5 | 24.6 | 43.2 | 26.6 | 43.6 | 46.8 | 14.8 | 23.6 | 20.0 | 28.8 | 31.8 | 30.0 | 21.5 | 25.0 |
| Jahr | 1977 | 1974 | 2011 | 2005 | 1981 | 1994 | 2002 | 1966 | 1966 | 1981 | 1998 | 1960 | 1977 | 2012 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 37 | 54 | 56 | 47 | 67 | 66 | 37 | 28 | 26 | 21 | 21 | 28 | 37 | 55 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.480 | am 25.11.2011 | 0.480 | 0.530 | 0.530 | am 21.10.2012 |
| MQ | m³/s | 1.99 | | 2.82 | 1.16 | 2.23 | |
| HQ | m³/s | 18.6 | am 20.06.2012 bei W = 143 cm | 14.0 | 18.6 | 25.0 | am 24.12.2012 bei W = 175 cm |
| Nq | l/(skm²) | 3.18 | | 3.18 | 3.51 | 3.51 | |
| Mq | l/(skm²) | 13.2 | | 18.7 | 7.71 | 14.8 | |
| Hq | l/(skm²) | 123 | | 92.7 | 123 | 166 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 416 | | 293 | 123 | 468 | |

| | | 1950/2012 (*) 63 Jahre | | | | 1950/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.170 | am 09.01.1954 | 0.170 | 0.220 | 0.170 | am 09.01.1954 |
| MNQ | m³/s | 0.497 | | 0.849 | 0.558 | 0.525 | |
| MQ | m³/s | 2.33 | | 3.15 | 1.53 | 2.34 | |
| MHQ | m³/s | 18.5 | | 17.0 | 10.6 | 18.8 | |
| HQ | m³/s | 46.8 | am 13.04.1994 bei W = 227 cm | 46.8 | 31.8 | 46.8 | am 13.04.1994 bei W = 227 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.29 | | 5.62 | 3.70 | 3.48 | |
| Mq | l/(skm²) | 15.5 | | 20.9 | 10.1 | 15.5 | |
| MHq | l/(skm²) | 122 | | 113 | 70.0 | 124 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 488 | | 327 | 161 | 489 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.170 | 1.13 | 09.01.1954 | 46.8 | 310 | 227 | 13.04.1994 |
| 2 | 0.220 | 1.46 | 11.07.1952 | 43.6 | 289 | 200 | 10.03.1981 |
| 3 | 0.220 | 1.46 | 01.11.1949 | 43.2 | 286 | 222 | 14.01.2011 |
| 4 | 0.260 | 1.72 | 15.10.1991 | 32.5 | 215 | 198 | 31.03.2006 |
| 5 | 0.270 | 1.79 | 26.08.1962 | 31.8 | 211 | 191 | 15.09.1998 |
| 6 | 0.280 | 1.85 | 16.08.2003 | 30.0 | 199 | 180 | 13.10.1960 |
| 7 | 0.280 | 1.85 | 04.09.1973 | 28.8 | 191 | 186 | 10.08.1981 |
| 8 | 0.310 | 2.05 | 28.06.2000 | 26.9 | 178 | 182 | 28.01.2002 |
| 9 | 0.310 | 2.05 | 26.09.1997 | 26.6 | 176 | 181 | 12.02.2005 |
| 10 | 0.310 | 2.05 | 04.10.1959 | 26.3 | 174 | | 17.10.1960 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1950/2012 63 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 11.2 | 22.2 | 40.0 | 15.9 | 4.42 |
| 363 | 10.0 | 15.4 | 36.4 | 13.5 | 4.22 |
| 362 | 8.89 | 14.0 | 25.8 | 12.3 | 4.15 |
| 361 | 8.89 | 13.0 | 20.4 | 11.5 | 4.08 |
| 360 | 8.17 | 12.4 | 19.8 | 10.6 | 4.08 |
| 359 | 7.99 | 12.2 | 16.6 | 10.0 | 3.94 |
| 358 | 7.81 | 11.2 | 16.2 | 9.43 | 3.80 |
| 357 | 7.81 | 10.2 | 14.7 | 9.00 | 3.80 |
| 356 | 7.64 | 10.0 | 14.2 | 8.57 | 3.80 |
| 350 | 7.13 | 7.81 | 12.3 | 7.11 | 3.27 |
| 340 | 5.97 | 6.79 | 10.9 | 5.88 | 2.90 |
| 330 | 4.85 | 5.17 | 9.80 | 5.08 | 2.70 |
| 320 | 4.11 | 4.40 | 8.77 | 4.40 | 2.47 |
| 300 | 3.27 | 3.27 | 6.35 | 3.55 | 1.71 |
| 270 | 2.39 | 2.39 | 4.80 | 2.77 | 1.40 |
| 240 | 1.77 | 1.77 | 3.67 | 2.23 | 1.22 |
| 210 | 1.49 | 1.49 | 3.17 | 1.87 | 1.07 |
| 183 | 1.23 | 1.31 | 3.03 | 1.58 | 0.920 |
| 150 | 1.00 | 1.07 | 2.78 | 1.31 | 0.720 |
| 130 | 0.930 | 1.00 | 2.52 | 1.18 | 0.560 |
| 120 | 0.860 | 1.00 | 2.52 | 1.11 | 0.520 |
| 110 | 0.860 | 0.930 | 2.40 | 1.05 | 0.520 |
| 100 | 0.790 | 0.930 | 2.28 | 0.990 | 0.480 |
| 90 | 0.790 | 0.860 | 2.07 | 0.930 | 0.430 |
| 80 | 0.720 | 0.860 | 2.07 | 0.860 | 0.430 |
| 70 | 0.720 | 0.790 | 1.89 | 0.800 | 0.430 |
| 60 | 0.650 | 0.720 | 1.71 | 0.760 | 0.380 |
| 50 | 0.650 | 0.720 | 1.55 | 0.720 | 0.380 |
| 40 | 0.650 | 0.720 | 1.48 | 0.650 | 0.350 |
| 30 | 0.590 | 0.650 | 1.44 | 0.590 | 0.310 |
| 25 | 0.590 | 0.650 | 1.40 | 0.560 | 0.310 |
| 20 | 0.590 | 0.650 | 1.40 | 0.530 | 0.310 |
| 15 | 0.530 | 0.590 | 1.33 | 0.480 | 0.270 |
| 10 | 0.530 | 0.590 | 1.26 | 0.440 | 0.270 |
| 9 | 0.530 | 0.590 | 1.26 | 0.430 | 0.270 |
| 8 | 0.530 | 0.590 | 1.26 | 0.410 | 0.270 |
| 7 | 0.530 | 0.590 | 1.26 | 0.400 | 0.230 |
| 6 | 0.530 | 0.590 | 1.26 | 0.400 | 0.230 |
| 5 | 0.530 | 0.590 | 1.26 | 0.380 | 0.230 |
| 4 | 0.480 | 0.590 | 1.19 | 0.370 | 0.200 |
| 3 | 0.480 | 0.530 | 1.19 | 0.340 | 0.200 |
| 2 | 0.480 | 0.530 | 1.19 | 0.330 | 0.170 |
| 1 | 0.480 | 0.530 | 1.19 | 0.310 | 0.170 |
| 0 | 0.480 | 0.530 | 1.19 | 0.170 | 0.170 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Durchflussdaten in mittleren Abflussverhältnissen durch Überleitung mit Stollen in Fremdeinzugsgebiet (Unstrutgebiet − TS Schmalwasser) seit 1985 beeinflusst.
13 Tage Randeis, 30 Tage Verkrautung

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 153.00 km²
PNP : NN+ 268.58 m
Lage : 3.00 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Mittelschmalkalden Nr. 424000
Gewässer : Schmalkalde
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.806 | 0.580 | 5.23 | 2.36 | 3.98 | 1.23 | 0.806 | 1.00 | 1.49 | 1.08 | 0.580 | 0.580 | 0.935 | 1.49 |
| 2. | 0.806 | 0.633 | 8.39 | 2.12 | 4.39 | 1.23 | 0.806 | 0.688 | 1.08 | 1.00 | 0.580 | 0.580 | 1.08 | 1.40 |
| 3. | 0.806 | 0.633 | 8.69 | R 2.00 | 4.26 | 1.23 | 0.806 | 0.745 | 1.00 | 0.935 | 0.580 | 0.580 | 1.31 | 1.31 |
| 4. | 0.806 | 0.868 | 7.07 | R 2.00 | 3.98 | 1.40 | 0.806 | 0.806 | 0.868 | 0.868 | 0.530 | 0.633 | 1.31 | 1.31 |
| 5. | 0.745 | 2.00 | 7.07 | R 1.78 | 3.70 | 1.15 | 1.15 | 2.24 | 2.24 | 1.15 | 0.530 | 0.633 | 1.15 | 1.31 |
| 6. | 0.745 | 1.40 | 6.36 | R 1.58 | 3.29 | 1.15 | 1.40 | 1.31 | 1.68 | 1.15 | 0.580 | 0.633 | 1.08 | 1.23 |
| 7. | 0.745 | 1.23 | 6.22 | R 1.49 | 2.88 | 1.23 | 1.40 | 1.15 | 1.89 | 0.935 | 0.580 | 0.688 | 1.15 | 1.15 |
| 8. | 0.745 | 1.15 | 6.79 | R 1.49 | 3.02 | 1.15 | 1.08 | 1.08 | 1.49 | 0.935 | 0.530 | 0.580 | 1.15 | 1.00 |
| 9. | 0.745 | 1.89 | 7.07 | R 1.40 | 2.62 | 1.15 | 1.00 | 1.00 | 1.23 | 0.868 | 0.530 | 0.580 | 1.15 | 0.935 |
| 10. | 0.745 | 1.89 | 6.93 | 1.40 | 2.36 | 1.15 | 1.00 | 0.935 | 1.23 | 0.806 | 0.530 | 0.530 | 1.23 | 1.15 |
| 11. | 0.745 | 1.68 | 6.51 | 1.31 | 2.36 | 1.15 | 1.08 | 0.935 | 1.15 | 0.806 | 0.633 | 0.530 | 1.23 | 1.08 |
| 12. | 0.688 | 1.49 | 6.65 | 1.31 | 2.36 | 1.15 | 1.23 | 0.935 | 1.15 | 0.806 | 0.935 | 0.633 | 1.08 | 1.00 |
| 13. | 0.688 | 1.58 | 6.65 | 1.31 | 2.36 | 1.08 | 0.935 | 0.868 | 1.78 | 0.745 | 0.633 | 0.580 | 1.00 | 1.00 |
| 14. | 0.688 | 1.68 | 5.94 | 1.31 | 2.36 | 1.08 | 0.935 | 0.806 | 3.02 | 0.745 | 0.580 | 0.633 | 0.935 | 1.00 |
| 15. | 0.688 | 1.68 | 5.09 | 1.31 | 2.24 | 1.00 | 1.00 | 0.806 | 2.75 | 0.688 | 0.580 | 0.633 | 0.935 | 2.12 |
| 16. | 0.688 | 3.15 | 4.39 | 1.23 | 2.24 | 1.00 | 1.00 | 0.935 | 2.62 | 0.935 | 0.530 | 0.580 | 0.868 | 3.56 |
| 17. | 0.633 | 3.43 | 3.84 | 1.58 | 2.12 | 0.935 | 0.935 | 0.745 | 3.43 | 0.745 | 0.530 | 0.580 | 0.868 | 4.39 |
| 18. | 0.633 | 3.02 | 3.43 | 1.78 | 2.24 | 0.935 | 0.868 | 0.745 | 3.56 | 0.688 | 0.633 | 0.580 | 0.868 | 6.36 |
| 19. | 0.633 | 2.75 | 6.22 | 3.15 | 2.12 | 0.935 | 0.868 | 0.688 | 3.15 | 0.633 | 0.633 | 0.580 | 0.868 | 5.80 |
| 20. | 0.633 | 2.49 | 6.65 | 1.68 | 1.89 | 0.935 | 0.868 | 1.23 | 2.88 | 0.580 | 0.580 | 0.580 | 0.806 | 4.95 |
| 21. | 0.633 | 2.49 | 6.65 | 1.40 | 1.78 | 0.935 | 0.806 | 1.49 | 2.62 | K 0.580 | 0.530 | 0.580 | 0.806 | 4.26 |
| 22. | 0.633 | 2.62 | 7.65 | 1.40 | 1.68 | 1.08 | 0.745 | 1.31 | 2.12 | K 0.745 | 0.580 | 0.530 | 0.806 | 3.84 |
| 23. | 0.633 | 3.70 | 7.50 | 1.58 | 1.58 | 1.00 | 0.745 | 1.08 | 1.89 | K 0.633 | 0.580 | 0.482 | 0.745 | 14.0 |
| 24. | 0.633 | 6.22 | 6.79 | 2.49 | 1.49 | 1.00 | 0.688 | 1.00 | 1.68 | K 0.868 | 0.580 | 0.482 | 0.745 | 24.7 |
| 25. | 0.633 | 6.51 | 5.80 | 3.29 | 1.49 | 1.00 | 0.688 | 1.08 | 1.49 | K 0.745 | 0.633 | 0.482 | 0.688 | 15.0 |
| 26. | 0.633 | 6.36 | 5.09 | 2.88 | 1.40 | 0.935 | 0.688 | 1.00 | 1.40 | K 0.745 | 0.688 | 0.482 | 0.688 | 11.1 |
| 27. | 0.633 | 6.36 | 4.39 | 2.49 | 1.31 | 0.935 | 0.633 | 1.00 | 1.23 | K 0.745 | 1.08 | 0.580 | 0.806 | 9.30 |
| 28. | 0.633 | 5.94 | 3.98 | 2.62 | 1.31 | 0.935 | 0.633 | 1.00 | 1.58 | K 0.688 | 0.688 | 0.580 | 1.00 | 9.00 |
| 29. | 0.633 | 5.23 | 3.56 | 3.43 | 1.23 | 0.868 | 0.633 | 0.935 | 1.78 | K 0.633 | 0.633 | 0.530 | 2.49 | 7.80 |
| 30. | 0.633 | 4.95 | 3.15 | | 1.49 | 0.868 | 0.580 | 1.00 | 1.31 | K 0.745 | 0.580 | 0.745 | 1.78 | 6.65 |
| 31. | | 4.26 | 2.75 | | 1.31 | | 0.633 | | 1.15 | K 0.688 | | 0.745 | | 5.66 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 17.+ | 1. | 31. | 16. | 29. | 29.+ | 30. | 2.+ | 4. | 20.+ | 4.+ | 23.+ | 25.+ | 9. |
| NQ | 0.633 | 0.580 | 2.75 | 1.23 | 1.23 | 0.868 | 0.580 | 0.688 | 0.868 | 0.580 | 0.530 | 0.482 | 0.688 | 0.935 |
| MQ | 0.691 | 2.90 | 5.89 | 1.90 | 2.35 | 1.06 | 0.885 | 1.02 | 1.87 | 0.804 | 0.613 | 0.585 | 1.05 | 5.00 |
| HQ | 0.806 | 7.36 | 10.4 | 4.39 | 4.53 | 1.89 | 3.84 | 6.08 | 6.65 | 2.62 | 2.36 | 1.08 | 3.70 | 29.7 |
| Tag | 1. | 24. | 2. | 19. | 2. | 4. | 6. | 5. | 5. | 5. | 27. | 6. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 12 | 51 | 103 | 31 | 41 | 18 | 15 | 17 | 33 | 14 | 10 | 10 | 18 | 87 |

| | 1955/2011 | | 1956/2012 57 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1985 | 1986 | 1963 | 1963 | 1963 | 1974 | 1974 | 2000 | 2003 | 2003 | 2003 | 1985+ | 1985 | 1986 |
| NQ | 0.230 | 0.170 | 0.270 | 0.260 | 0.280 | 0.700 | 0.520 | 0.320 | 0.230 | 0.190 | 0.190 | 0.230 | 0.230 | 0.170 |
| MNQ | 0.953 | 1.22 | 1.36 | 1.51 | 1.66 | 1.76 | 1.11 | 0.848 | 0.730 | 0.636 | 0.602 | 0.705 | 0.942 | 1.21 |
| MQ | 1.92 | 2.86 | 2.92 | 2.90 | 3.54 | 3.24 | 1.87 | 1.57 | 1.34 | 1.13 | 1.09 | 1.37 | 1.92 | 2.88 |
| MHQ | 5.04 | 8.69 | 8.46 | 7.58 | 8.96 | 7.77 | 4.91 | 5.91 | 5.27 | 5.43 | 4.40 | 4.22 | 5.08 | 8.98 |
| HQ | 17.5 | 34.0 | 44.5 | 34.3 | 40.2 | 43.7 | 16.3 | 29.8 | 25.0 | 103 | 27.8 | 29.0 | 17.5 | 34.0 |
| Jahr | 1992 | 1967 | 2011 | 2005 | 1981 | 1994 | 2004 | 1958 | 1956 | 1981 | 2007 | 1960 | 1992 | 1967 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 33 | 50 | 51 | 46 | 62 | 55 | 33 | 27 | 24 | 20 | 18 | 24 | 33 | 50 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.482 | am 23.10.2012 | 0.580 | 0.482 | 0.482 | am 23.10.2012 |
| MQ | m³/s | 1.72 | | 2.49 | 0.964 | 1.93 | |
| HQ | m³/s | 10.4 | am 02.01.2012 bei W = 88.0 cm | 10.4 | 6.65 | 29.7 | am 24.12.2012 bei W = 165 cm |
| Nq | l/(skm²) | 3.15 | | 3.79 | 3.15 | 3.15 | |
| Mq | l/(skm²) | 11.3 | | 16.3 | 6.30 | 12.6 | |
| Hq | l/(skm²) | 68.0 | | 68.0 | 43.5 | 194 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 356 | | 256 | 100 | 399 | |

| | | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.170 | am 04.12.1986 | 0.170 | 0.190 | 0.170 | am 04.12.1986 |
| MNQ | m³/s | 0.419 | | 0.732 | 0.484 | 0.460 | |
| MQ | m³/s | 2.14 | | 2.90 | 1.40 | 2.14 | |
| MHQ | m³/s | 20.0 | | 16.7 | 12.1 | 20.7 | |
| HQ | m³/s | 103 | am 10.08.1981 bei W = 283 cm | 44.5 | 103 | 103 | am 10.08.1981 bei W = 283 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.74 | | 4.78 | 3.16 | 3.01 | |
| Mq | l/(skm²) | 14.0 | | 18.9 | 9.12 | 14.0 | |
| MHq | l/(skm²) | 131 | | 109 | 79.2 | 135 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 442 | | 297 | 145 | 442 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.170 | 1.11 | 04.12.1986 | 103 | 673 | 283 | 10.08.1981 |
| 2 | 0.190 | 1.24 | 09.08.2003 | 44.5 | 291 | 207 | 14.01.2011 |
| 3 | 0.220 | 1.44 | 08.08.1995 | 43.7 | 286 | 221 | 13.04.1994 |
| 4 | 0.220 | 1.44 | 13.08.1976 | 40.2 | 263 | 194 | 11.03.1981 |
| 5 | 0.230 | 1.50 | 07.09.2005 | 34.3 | 224 | 198 | 12.02.2005 |
| 6 | 0.230 | 1.50 | 25.08.2001 | 34.0 | 222 | 180 | 24.12.1967 |
| 7 | 0.230 | 1.50 | 31.10.1985 | 31.9 | 208 | 176 | 06.01.1982 |
| 8 | 0.240 | 1.57 | 05.10.1971 | 30.5 | 199 | 178 | 30.12.1986 |
| 9 | 0.260 | 1.70 | 18.09.1982 | 30.4 | 199 | 179 | 20.04.1983 |
| 10 | 0.260 | 1.70 | 26.02.1963 | 29.8 | 195 | 124 | 28.06.1958 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1956/2012 57 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 8.69 | 24.7 | 64.8 | 15.5 | 3.86 |
| 363 | 8.39 | 15.0 | 60.0 | 13.4 | 3.86 |
| 362 | 7.65 | 14.0 | 35.5 | 11.6 | 3.86 |
| 361 | 7.50 | 11.1 | 31.9 | 10.5 | 3.86 |
| 360 | 7.07 | 9.30 | 28.3 | 9.75 | 3.74 |
| 359 | 7.07 | 9.00 | 27.5 | 9.16 | 3.74 |
| 358 | 7.07 | 8.69 | 17.5 | 8.80 | 3.62 |
| 357 | 6.93 | 8.39 | 15.5 | 8.39 | 3.50 |
| 356 | 6.79 | 7.80 | 14.8 | 7.98 | 3.50 |
| 350 | 6.51 | 6.93 | 12.4 | 6.52 | 3.14 |
| 340 | 5.80 | 6.36 | 8.80 | 5.30 | 2.24 |
| 330 | 4.26 | 4.95 | 6.78 | 4.55 | 1.92 |
| 320 | 3.43 | 3.84 | 6.02 | 4.00 | 1.60 |
| 300 | 2.62 | 2.75 | 5.31 | 3.24 | 1.38 |
| 270 | 1.78 | 1.78 | 4.26 | 2.50 | 1.12 |
| 240 | 1.40 | 1.40 | 3.49 | 2.04 | 1.01 |
| 210 | 1.23 | 1.23 | 3.05 | 1.69 | 0.870 |
| 183 | 1.00 | 1.08 | 2.61 | 1.44 | 0.770 |
| 150 | 0.935 | 1.00 | 2.40 | 1.20 | 0.570 |
| 130 | 0.806 | 0.935 | 2.30 | 1.06 | 0.450 |
| 120 | 0.806 | 0.868 | 2.20 | 0.980 | 0.390 |
| 110 | 0.745 | 0.868 | 2.10 | 0.935 | 0.390 |
| 100 | 0.745 | 0.806 | 2.00 | 0.868 | 0.390 |
| 90 | 0.688 | 0.745 | 1.90 | 0.820 | 0.330 |
| 80 | 0.688 | 0.745 | 1.80 | 0.770 | 0.330 |
| 70 | 0.633 | 0.688 | 1.70 | 0.720 | 0.270 |
| 60 | 0.633 | 0.633 | 1.60 | 0.670 | 0.270 |
| 50 | 0.633 | 0.633 | 1.50 | 0.600 | 0.230 |
| 40 | 0.580 | 0.580 | 1.41 | 0.560 | 0.230 |
| 30 | 0.580 | 0.580 | 1.34 | 0.510 | 0.230 |
| 25 | 0.580 | 0.580 | 1.27 | 0.490 | 0.230 |
| 20 | 0.580 | 0.580 | 1.26 | 0.450 | 0.190 |
| 15 | 0.580 | 0.580 | 1.23 | 0.400 | 0.190 |
| 10 | 0.530 | 0.530 | 1.23 | 0.380 | 0.190 |
| 9 | 0.530 | 0.530 | 1.23 | 0.360 | 0.190 |
| 8 | 0.530 | 0.530 | 1.23 | 0.360 | 0.190 |
| 7 | 0.530 | 0.530 | 1.23 | 0.360 | 0.190 |
| 6 | 0.530 | 0.530 | 1.23 | 0.330 | 0.190 |
| 5 | 0.530 | 0.530 | 1.23 | 0.330 | 0.190 |
| 4 | 0.530 | 0.530 | 1.23 | 0.300 | 0.190 |
| 3 | 0.530 | 0.530 | 1.23 | 0.270 | 0.190 |
| 2 | 0.482 | 0.482 | 1.23 | 0.270 | 0.190 |
| 1 | 0.482 | 0.482 | 1.23 | 0.230 | 0.170 |
| 0 | 0.482 | 0.482 | 1.23 | 0.170 | 0.170 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
7 Tage Randeis, 11 Tage Verkrautung

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 214.00 km²
PNP : NN+ 233.02 m
Lage : 2.00 km oberhalb der Mündung rechts

# Q
m³/s

Pegel : Dorndorf 2 Nr. 426000
Gewässer : Felda
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.670 | 0.611 | 4.52 | 3.25 | 2.98 | 1.41 | K 1.22 | K 1.22 | 0.957 | 0.878 | 0.557 | 0.508 | 0.878 | 1.22 |
| 2. | 0.735 | 0.611 | 6.81 | R 3.11 | 2.85 | 1.41 | K 1.22 | K 0.804 | 0.878 | 0.804 | 0.508 | 0.508 | 0.804 | 1.13 |
| 3. | 0.670 | 0.670 | 6.81 | R 2.98 | 2.71 | 1.41 | K 1.22 | K 0.878 | 0.878 | 0.735 | 0.508 | 0.508 | 0.957 | 1.04 |
| 4. | 0.670 | 0.957 | 5.11 | R 2.98 | 2.58 | 1.62 | K 1.13 | K 1.04 | 0.804 | 0.735 | 0.508 | 0.611 | 1.62 | 1.04 |
| 5. | 0.670 | 2.98 | 8.10 | R 2.98 | 2.45 | 1.41 | K 1.32 | K 1.85 | 0.878 | 0.804 | 0.508 | 0.735 | 1.32 | 1.13 |
| 6. | 0.670 | 1.96 | 9.75 | R 2.85 | 2.33 | 1.32 | K 1.73 | K 1.22 | 0.804 | 0.804 | 0.508 | 0.670 | 1.22 | R 1.04 |
| 7. | 0.670 | 1.73 | 7.61 | R 2.85 | 2.20 | 1.41 | K 1.73 | K 1.22 | 0.804 | 0.670 | 0.508 | 0.878 | 1.22 | R 0.957 |
| 8. | 0.611 | 1.85 | 8.59 | R 2.58 | 2.58 | 1.32 | K 1.41 | K 1.04 | 0.878 | 0.670 | 0.508 | 0.804 | 1.13 | R 0.957 |
| 9. | 0.611 | 2.58 | 8.10 | R 2.58 | 2.58 | 1.32 | K 1.32 | K 0.878 | 0.804 | 0.670 | 0.463 | 0.670 | 1.04 | R 0.878 |
| 10. | 0.611 | 2.33 | 8.26 | R 2.58 | 2.45 | 1.32 | K 1.22 | K 0.735 | 0.670 | 0.611 | 0.463 | 0.670 | 1.04 | R 0.878 |
| 11. | 0.611 | 1.62 | 6.49 | R 2.45 | 2.33 | 1.32 | K 1.13 | K 0.735 | 0.878 | 0.611 | 0.508 | 0.670 | 1.52 | R 0.878 |
| 12. | 0.611 | 1.52 | 6.02 | R 2.33 | 2.33 | 1.32 | K 1.52 | K 0.735 | 0.878 | 0.611 | 1.04 | 0.611 | 1.22 | R 0.878 |
| 13. | 0.611 | 1.52 | 6.18 | R 2.33 | 2.20 | 1.32 | K 1.13 | K 0.804 | 1.13 | 0.557 | 0.611 | 0.735 | 1.04 | 0.804 |
| 14. | 0.611 | 2.71 | 5.26 | R 2.20 | 2.08 | 1.32 | K 1.22 | K 0.878 | 1.96 | 0.557 | 0.557 | 0.735 | 0.957 | 0.878 |
| 15. | 0.611 | 3.39 | 4.66 | R 2.08 | 2.08 | 1.22 | K 1.04 | K 0.735 | 1.73 | 0.557 | 0.557 | 0.804 | 0.957 | 2.85 |
| 16. | 0.611 | 4.37 | 4.23 | R 1.96 | 1.96 | 1.22 | K 1.22 | K 0.804 | 1.32 | 0.670 | 0.508 | 0.735 | 0.878 | 6.81 |
| 17. | 0.611 | 7.45 | 3.81 | R 2.85 | 1.85 | 1.22 | K 1.13 | K 0.735 | 1.73 | 0.611 | 0.508 | 0.670 | 0.878 | 7.77 |
| 18. | 0.611 | 4.09 | 3.53 | R 3.67 | 1.85 | 1.22 | K 1.04 | K 0.670 | 2.45 | 0.557 | 0.508 | 0.670 | 0.804 | 7.77 |
| 19. | 0.611 | 3.11 | 6.65 | 7.45 | 1.73 | 1.22 | K 0.957 | K 0.670 | 1.52 | 0.508 | 0.557 | 0.611 | 0.804 | 5.87 |
| 20. | 0.611 | 2.71 | 11.1 | 3.39 | 1.73 | 1.22 | K 0.957 | K 1.04 | 1.22 | 0.508 | 0.508 | 0.670 | 0.735 | 4.37 |
| 21. | 0.611 | 2.71 | 8.10 | 2.45 | 1.62 | 1.22 | K 0.878 | K 1.32 | 1.32 | 0.508 | 0.508 | 0.611 | 0.735 | 3.67 |
| 22. | 0.557 | 2.98 | 14.0 | 2.20 | 1.52 | 1.22 | K 0.878 | K 1.22 | 1.22 | 0.557 | 0.508 | 0.611 | 0.735 | 3.39 |
| 23. | 0.557 | 5.41 | 9.75 | 2.45 | 1.52 | 1.22 | K 0.804 | K 0.957 | 1.04 | 0.557 | 0.508 | 0.611 | 0.670 | 14.8 |
| 24. | 0.557 | 6.18 | 7.61 | 3.25 | 1.52 | 1.32 | K 0.804 | K 0.804 | 0.957 | 0.670 | 0.508 | 0.611 | 0.670 | 15.4 |
| 25. | 0.557 | 5.41 | 6.34 | 3.25 | 1.41 | 1.32 | K 0.804 | K 0.878 | 0.878 | 0.804 | 0.508 | 0.611 | 0.670 | 8.26 |
| 26. | 0.557 | 4.52 | 5.56 | 2.71 | 1.41 | 1.22 | K 0.804 | K 0.878 | 0.878 | 0.611 | 0.670 | 0.611 | 0.670 | 8.59 |
| 27. | 0.557 | 3.81 | 4.96 | 2.58 | 1.41 | 1.22 | K 0.804 | K 0.735 | 0.804 | 0.611 | 0.804 | 0.735 | 0.735 | 8.26 |
| 28. | 0.611 | 3.39 | 4.66 | 2.45 | 1.41 | 1.22 | K 0.804 | K 0.735 | 0.957 | 0.557 | 0.670 | 0.735 | 0.735 | 11.3 |
| 29. | 0.557 | 3.11 | 4.23 | 2.85 | 1.41 | 1.13 | K 0.735 | K 0.670 | 1.85 | 0.557 | 0.557 | 0.670 | 1.22 | 7.29 |
| 30. | 0.557 | 3.53 | 3.81 | | 1.52 | 1.13 | K 0.735 | K 0.735 | 1.32 | 0.611 | 0.557 | 0.804 | 1.62 | 6.02 |
| 31. | | 3.39 | 3.53 | | 1.52 | | K 0.804 | | 0.957 | 0.611 | | 0.957 | | 5.26 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 22.+ | 1.+ | 18.+ | 16. | 25.+ | 29.+ | 29.+ | 18.+ | 10. | 19.+ | 9.+ | 1.+ | 23.+ | 13. |
| NQ | 0.557 | 0.611 | 3.53 | 1.96 | 1.41 | 1.13 | 0.735 | 0.670 | 0.670 | 0.508 | 0.463 | 0.508 | 0.670 | 0.804 |
| MQ | 0.613 | 3.01 | 6.59 | 2.88 | 2.00 | 1.29 | 1.09 | 0.921 | 1.14 | 0.638 | 0.557 | 0.679 | 0.983 | 4.56 |
| HQ | 0.878 | 11.6 | 21.3 | 10.8 | 2.98 | 2.08 | 2.08 | 2.71 | 3.81 | 1.13 | 1.62 | 1.52 | 2.20 | 38.3 |
| Tag | 2. | 17. | 22. | 19. | 1. | 4. | 5. | 5. | 17. | 5. | 12. | 30. | 29. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 38 | 82 | 34 | 25 | 16 | 14 | 11 | 14 | 8 | 7 | 8 | 12 | 57 |

| | 1935/2011 | | 1936/2012 77 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1975 | 1959+ | 1963 | 1972 | 1972 | 1963 | 1954 | 1955 | 1954 | 1947+ | 1975 | 1975 | 1975 | 1959+ |
| NQ | 0.050 | 0.300 | 0.420 | 0.710 | 0.410 | 0.670 | 0.360 | 0.250 | 0.370 | 0.330 | 0.160 | 0.300 | 0.050 | 0.300 |
| MNQ | 1.00 | 1.30 | 1.69 | 1.98 | 1.96 | 1.94 | 1.35 | 1.06 | 0.844 | 0.748 | 0.694 | 0.774 | 0.997 | 1.30 |
| MQ | 1.92 | 2.90 | 3.61 | 3.82 | 3.81 | 3.07 | 2.10 | 1.70 | 1.36 | 1.11 | 1.03 | 1.29 | 1.91 | 2.93 |
| MHQ | 7.62 | 11.8 | 14.2 | 12.6 | 11.6 | 7.92 | 6.14 | 6.32 | 5.42 | 3.79 | 3.28 | 3.90 | 7.62 | 12.2 |
| HQ | 47.5 | 43.0 | 59.4 | 46.5 | 47.0 | 55.6 | 42.6 | 50.6 | 57.0 | 28.2 | 24.0 | 27.8 | 47.5 | 43.0 |
| Jahr | 1940 | 1993 | 1995 | 1946 | 1979 | 1994 | 2004 | 1981 | 1966 | 1981 | 2007 | 1941 | 1940 | 1993 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 23 | 36 | 45 | 44 | 48 | 37 | 26 | 21 | 17 | 14 | 12 | 16 | 23 | 37 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.463 | am 09.09.2012 | 0.557 | 0.463 | 0.463 | am 09.09.2012 |
| MQ | m³/s | 1.79 | | 2.75 | 0.838 | 1.95 | |
| HQ | m³/s | 21.3 | am 22.01.2012 bei W = 259 cm | 21.3 | 3.81 | 38.3 | am 23.12.2012 bei W = 302 cm |
| Nq | l/(skm²) | 2.16 | | 2.60 | 2.16 | 2.16 | |
| Mq | l/(skm²) | 8.36 | | 12.8 | 3.92 | 9.11 | |
| Hq | l/(skm²) | 99.5 | | 99.5 | 17.8 | 179 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 264 | | 202 | 62 | 288 | |

| | | 1936/2012 (*) 77 Jahre² | | | | 1936/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.050 | am 08.11.1975 | 0.050 | 0.160 | 0.050 | am 08.11.1975 |
| MNQ | m³/s | 0.537 | | 0.857 | 0.600 | 0.573 | |
| MQ | m³/s | 2.30 | | 3.19 | 1.43 | 2.30 | |
| MHQ | m³/s | 27.2 | | 25.0 | 11.1 | 27.1 | |
| HQ | m³/s | 59.4 | am 23.01.1995 bei W = 233 cm | 59.4 | 57.0 | 59.4 | am 23.01.1995 bei W = 233 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.51 | | 4.01 | 2.80 | 2.68 | |
| Mq | l/(skm²) | 10.8 | | 14.9 | 6.69 | 10.8 | |
| MHq | l/(skm²) | 127 | | 117 | 52.0 | 127 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 340 | | 233 | 106 | 340 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.050 | 0.234 | 08.11.1975 | 59.4 | 278 | 233 | 23.01.1995 |
| 2 | 0.250 | 1.17 | 12.06.1955 | 57.0 | 266 | 234 | 20.07.1966 |
| 3 | 0.300 | 1.40 | 12.12.1959 | 55.6 | 260 | 228 | 13.04.1994 |
| 4 | 0.310 | 1.45 | 01.09.1998 | 50.6 | 236 | 232 | 04.06.1981 |
| 5 | 0.330 | 1.54 | 17.08.1991 | 49.0 | 229 | 320 | 13.01.2011 |
| 6 | 0.330 | 1.54 | 28.08.1947 | 47.5 | 222 | 212 | 05.11.1940 |
| 7 | 0.340 | 1.59 | 26.06.1960 | 47.0 | 220 | 200 | 12.03.1979 |
| 8 | 0.340 | 1.59 | 23.06.1954 | 46.5 | 217 | 210 | 09.02.1946 |
| 9 | 0.340 | 1.59 | 28.10.1937 | 44.0 | 206 | 213 | 23.02.1970 |
| 10 | 0.370 | 1.73 | 19.09.1979 | 43.0 | 201 | 210 | 21.12.1993 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1936/2012 77 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 14.0 | 15.4 | 40.5 | 16.6 | 5.30 |
| 363 | 11.1 | 14.8 | 36.0 | 13.7 | 5.15 |
| 362 | 9.75 | 14.0 | 29.5 | 12.1 | 4.49 |
| 361 | 9.75 | 11.3 | 25.2 | 11.0 | 3.97 |
| 360 | 8.59 | 11.1 | 24.2 | 10.1 | 3.75 |
| 359 | 8.26 | 9.75 | 22.4 | 9.53 | 3.75 |
| 358 | 8.10 | 9.75 | 20.9 | 8.94 | 3.63 |
| 357 | 8.10 | 8.59 | 20.0 | 8.52 | 3.42 |
| 356 | 8.10 | 8.59 | 19.4 | 8.22 | 3.32 |
| 350 | 6.81 | 8.10 | 12.5 | 6.81 | 2.54 |
| 340 | 5.26 | 6.65 | 10.9 | 5.61 | 2.09 |
| 330 | 4.09 | 5.11 | 7.86 | 4.78 | 1.92 |
| 320 | 3.39 | 3.67 | 7.16 | 4.22 | 1.84 |
| 300 | 2.71 | 2.71 | 6.35 | 3.48 | 1.66 |
| 270 | 2.08 | 1.96 | 5.15 | 2.73 | 1.42 |
| 240 | 1.41 | 1.41 | 4.33 | 2.24 | 1.13 |
| 210 | 1.22 | 1.22 | 3.86 | 1.85 | 0.957 |
| 183 | 1.13 | 1.13 | 3.49 | 1.58 | 0.800 |
| 150 | 0.878 | 0.878 | 3.02 | 1.31 | 0.670 |
| 130 | 0.804 | 0.878 | 2.92 | 1.16 | 0.560 |
| 120 | 0.735 | 0.804 | 2.82 | 1.10 | 0.550 |
| 110 | 0.735 | 0.804 | 2.72 | 1.04 | 0.510 |
| 100 | 0.670 | 0.735 | 2.63 | 0.980 | 0.480 |
| 90 | 0.670 | 0.735 | 2.63 | 0.920 | 0.450 |
| 80 | 0.611 | 0.735 | 2.45 | 0.860 | 0.450 |
| 70 | 0.611 | 0.670 | 2.36 | 0.804 | 0.420 |
| 60 | 0.611 | 0.670 | 2.27 | 0.760 | 0.380 |
| 50 | 0.611 | 0.611 | 2.18 | 0.720 | 0.300 |
| 40 | 0.557 | 0.611 | 2.08 | 0.670 | 0.300 |
| 30 | 0.557 | 0.557 | 1.92 | 0.620 | 0.300 |
| 25 | 0.557 | 0.557 | 1.84 | 0.600 | 0.230 |
| 20 | 0.508 | 0.508 | 1.84 | 0.570 | 0.230 |
| 15 | 0.508 | 0.508 | 1.84 | 0.540 | 0.160 |
| 10 | 0.508 | 0.508 | 1.84 | 0.508 | 0.100 |
| 9 | 0.508 | 0.508 | 1.75 | 0.490 | 0.100 |
| 8 | 0.508 | 0.508 | 1.75 | 0.480 | 0.050 |
| 7 | 0.508 | 0.508 | 1.75 | 0.470 | 0.050 |
| 6 | 0.508 | 0.508 | 1.75 | 0.463 | 0.050 |
| 5 | 0.508 | 0.508 | 1.75 | 0.450 | 0.050 |
| 4 | 0.508 | 0.508 | 1.75 | 0.420 | 0.050 |
| 3 | 0.508 | 0.508 | 1.75 | 0.410 | 0.050 |
| 2 | 0.508 | 0.508 | 1.67 | 0.390 | 0.050 |
| 1 | 0.508 | 0.508 | 1.67 | 0.360 | 0.050 |
| 0 | 0.463 | 0.463 | 1.67 | 0.050 | 0.050 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
24 Tage Randeis, 61 Tage Verkrautung
²Vorsicht: 1.3% Lücken im Zeitraum 1936/2012
²Ausgefallenes Abflussjahr: 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 182 km²
PNP : NN + 333.90 m
Lage: 30.0 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Günthers Nr. 41450056
Gewässer : Ulster
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | R1.00 | 0.939 | 8.93 | R2.93 | 4.73 | 1.57 | 1.04 | 1.47 | 1.48 | 1.15 | 0.656 | 0.628 | 1.83 | 1.71 |
| 2. | R1.06 | 0.986 | 14.4 | R2.75 | 4.28 | 1.52 | 1.07 | 0.894 | 1.28 | 1.05 | 0.617 | 0.606 | 1.72 | 1.50 |
| 3. | R1.10 | 1.06 | 10.1 | R2.57 | 3.89 | 1.48 | 1.10 | 1.17 | 1.44 | 0.982 | 0.595 | 0.585 | 2.83 | R1.38 |
| 4. | R1.09 | 2.38 | 7.70 | R2.41 | 3.68 | 2.13 | 1.03 | 1.56 | 1.12 | 0.944 | 0.575 | 1.14 | 3.33 | R1.48 |
| 5. | R1.06 | 7.83 | 14.2 | R2.30 | 3.51 | 1.77 | 1.39 | 3.52 | 1.90 | 1.32 | 0.583 | 1.26 | 2.90 | R1.60 |
| 6. | R1.05 | 2.97 | 11.7 | R2.19 | 3.11 | 1.61 | 2.23 | 1.85 | 1.69 | 1.12 | 0.610 | 1.06 | 2.72 | R1.56 |
| 7. | R1.06 | 3.55 | 10.2 | D2.12 | 2.82 | 1.68 | 2.35 | 2.09 | 1.29 | 0.993 | 0.561 | 3.59 | 2.89 | R1.48 |
| 8. | R1.06 | 3.14 | 10.5 | D2.05 | 3.49 | 1.64 | 1.66 | 1.48 | 1.18 | 0.935 | 0.530 | 1.68 | 2.59 | R1.43 |
| 9. | R1.05 | 6.78 | 9.55 | D1.98 | 3.19 | 1.56 | 1.43 | 1.13 | 1.10 | 0.877 | 0.521 | 1.19 | 2.06 | R1.38 |
| 10. | R1.05 | 4.24 | 9.59 | D1.93 | 2.97 | 1.78 | 1.39 | 0.998 | 0.972 | 0.860 | 0.494 | 0.974 | 2.52 | R1.33 |
| 11. | R1.05 | 2.82 | 7.53 | D1.90 | 3.03 | 1.75 | 1.32 | 0.930 | 1.42 | 0.824 | 0.826 | 0.858 | 2.83 | R1.29 |
| 12. | R1.06 | 2.77 | 7.50 | D1.88 | 3.09 | 1.70 | 1.95 | 1.06 | 1.83 | 0.794 | 1.65 | 0.910 | 2.11 | R1.26 |
| 13. | R1.04 | 3.34 | 8.45 | R1.85 | 2.89 | 1.80 | 1.37 | 1.77 | 3.61 | 0.753 | 0.875 | 1.09 | 1.75 | R1.33 |
| 14. | R1.04 | 7.16 | 6.26 | R1.82 | 2.69 | 1.61 | 1.22 | 1.66 | 10.4 | 0.724 | 0.684 | 1.13 | 1.55 | R1.42 |
| 15. | R1.03 | 6.28 | 5.16 | R1.80 | 2.53 | 1.49 | 1.23 | 1.24 | 5.72 | 0.688 | 0.699 | 1.48 | 1.44 | R12.6 |
| 16. | R1.01 | 12.6 | 4.29 | R1.77 | 2.39 | 1.40 | 1.56 | 1.62 | 4.14 | 1.07 | 0.636 | 1.29 | 1.37 | R19.3 |
| 17. | 1.01 | 8.72 | 3.72 | R2.38 | 2.28 | 1.34 | 1.40 | 1.31 | 7.35 | 0.816 | 0.592 | 1.05 | 1.29 | R12.9 |
| 18. | 1.01 | 5.28 | 3.30 | R5.30 | 2.32 | 1.33 | 1.19 | 1.03 | 5.41 | 0.723 | 0.591 | 0.912 | 1.26 | 11.2 |
| 19. | 1.03 | 3.98 | 15.6 | R11.7 | 2.51 | 1.31 | 1.14 | 0.903 | 3.43 | 0.650 | 0.589 | 0.816 | 1.25 | 7.01 |
| 20. | 1.00 | 3.38 | 13.5 | 3.16 | 2.15 | 1.28 | 1.05 | 1.45 | 2.69 | 0.628 | 0.579 | 0.772 | 1.19 | 5.30 |
| 21. | 0.993 | 3.26 | 13.3 | 2.29 | 2.02 | 1.26 | 0.979 | 2.41 | 2.70 | 0.626 | 0.569 | 0.756 | 1.15 | 4.45 |
| 22. | 0.974 | 4.56 | 17.4 | 2.27 | 1.93 | 1.30 | 0.924 | 1.97 | 2.27 | 0.745 | 0.665 | 0.732 | 1.13 | 4.74 |
| 23. | 0.943 | 9.79 | 10.7 | 2.71 | 1.86 | 1.31 | 0.879 | 1.29 | 1.86 | 0.643 | 0.586 | 0.737 | 1.08 | 34.4 |
| 24. | 0.957 | 11.3 | 8.15 | 5.52 | 1.79 | 1.33 | 0.826 | 1.09 | 1.60 | 0.874 | 0.567 | 0.749 | 1.10 | 21.1 |
| 25. | 0.934 | 7.80 | 6.51 | 6.06 | 1.70 | 1.61 | 0.775 | 1.65 | 1.44 | 0.984 | 0.633 | 0.748 | 1.05 | 11.9 |
| 26. | 0.945 | 7.03 | 5.31 | 3.99 | 1.63 | 1.34 | 0.759 | 1.24 | 1.31 | 0.835 | 0.885 | 0.758 | 1.02 | 16.4 |
| 27. | 0.950 | 6.15 | R4.60 | 3.24 | 1.59 | 1.22 | 0.754 | 1.02 | 1.20 | 0.931 | 1.38 | 0.917 | 1.34 | 15.7 |
| 28. | 0.940 | 5.26 | R4.13 | 3.22 | 1.54 | 1.15 | 0.747 | 1.14 | 1.65 | 0.679 | 0.960 | 0.851 | 1.28 | 20.2 |
| 29. | 0.910 | 4.52 | R3.73 | 4.91 | 1.49 | 1.10 | 0.740 | 0.943 | 2.27 | 0.646 | 0.753 | 0.830 | 2.38 | 10.5 |
| 30. | 0.947 | 5.23 | R3.36 | | 1.91 | 1.07 | 0.729 | 1.07 | 1.61 | 0.873 | 0.657 | 1.54 | 2.19 | 8.34 |
| 31. | | 4.60 | R3.12 | | 1.77 | | 0.799 | | 1.30 | 0.730 | | 2.04 | | 6.92 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 16. | 29. | 30. | 30. | 2. | 10. | 21. | 10. | 3. | 26. | 12. |
| NQ | 0.910 | 0.939 | 3.12 | 1.77 | 1.49 | 1.07 | 0.729 | 0.894 | 0.972 | 0.626 | 0.494 | 0.585 | 1.02 | 1.26 |
| MQ | 1.01 | 5.15 | 8.47 | 3.14 | 2.61 | 1.48 | 1.19 | 1.43 | 2.54 | 0.854 | 0.704 | 1.09 | 1.84 | 7.84 |
| HQ | 1.50 | 27.2 | 39.3 | 21.7 | 5.19 | 2.89 | 3.10 | 6.39 | 17.6 | 2.18 | 3.76 | 5.64 | 6.13 | 66.2 |
| Tag | 3. | 16. | 19. | 19. | 1. | 4. | 6.+ | 5. | 14. | 5. | 12. | 7. | 3. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 14 | 76 | 125 | 43 | 38 | 21 | 18 | 20 | 37 | 13 | 10 | 16 | 26 | 115 |

| | 1955/2011 | | 1956/2012 57 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1959 | 1972 | 1972 | 1963 | 1960 | 2011 | 1976 | 1957 | 1959 | 1959 | 1959 | 1991 | 1959 |
| NQ | 0.443 | 0.420 | 0.450 | 0.500 | 0.570 | 0.650 | 0.478 | 0.300 | 0.250 | 0.170 | 0.110 | 0.130 | 0.443 | 0.420 |
| MNQ | 1.11 | 1.57 | 1.78 | 1.88 | 1.96 | 2.02 | 1.32 | 0.977 | 0.821 | 0.648 | 0.655 | 0.795 | 1.12 | 1.58 |
| MQ | 2.58 | 4.08 | 4.42 | 4.09 | 4.65 | 3.79 | 2.44 | 1.89 | 1.58 | 1.19 | 1.31 | 1.73 | 2.59 | 4.13 |
| MHQ | 14.3 | 25.0 | 26.0 | 20.8 | 21.1 | 15.6 | 11.2 | 10.3 | 9.52 | 6.99 | 8.31 | 9.10 | 14.3 | 25.6 |
| HQ | 44.5 | 98.0 | 84.4 | 78.2 | 80.5 | 80.5 | 76.0 | 86.7 | 52.0 | 54.8 | 64.8 | 47.0 | 44.5 | 98.0 |
| Jahr | 1963 | 1967 | 1995 | 1970 | 1986 | 1994 | 2004 | 1981 | 1966 | 1981 | 1998 | 1960 | 1963 | 1967 |

| | 1955/2011 | | 1956/2012 57 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 37 | 60 | 65 | 56 | 68 | 54 | 36 | 27 | 23 | 18 | 19 | 25 | 37 | 61 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.494 | am 10.09.2012 | 0.910 | 0.494 | 0.494 | am 10.09.2012 |
| MQ m³/s | 2.48 | | 3.68 | 1.30 | 2.78 | |
| HQ m³/s | 39.3 | am 19.01.2012 bei W= 226 cm | 39.3 | 17.6 | 66.2 | am 23.12.2012 bei W= 275 cm |
| Nq l/(s km²) | 2.71 | | 5.00 | 2.71 | 2.71 | |
| Mq l/(s km²) | 13.6 | | 20.2 | 7.16 | 15.3 | |
| Hq l/(s km²) | 216 | | 216 | 96.7 | 364 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 430 | | 318 | 114 | 483 | |
| | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
| NQ m³/s | 0.110 | am 13.09.1959 | 0.420 | 0.110 | 0.110 | am 13.09.1959 |
| MNQ m³/s | 0.513 | | 0.919 | 0.540 | 0.529 | |
| MQ m³/s | 2.81 | | 3.94 | 1.69 | 2.81 | |
| MHQ m³/s | 50.3 | | 45.3 | 23.9 | 50.3 | |
| HQ m³/s | 98.0 | am 24.12.1967 | 98.0 | 86.7 | 98.0 | am 24.12.1967 |
| $HQ_1$ m³/s | 28.8 | | 26.8 | 7.60 | 29.1 | |
| $HQ_5$ m³/s | 60.2 | | 58.4 | 18.4 | 64.8 | |
| MNq l/(s km²) | 2.82 | | 5.05 | 2.97 | 2.91 | |
| Mq l/(s km²) | 15.4 | | 21.6 | 9.29 | 15.4 | |
| MHq l/(s km²) | 276 | | 249 | 131 | 276 | |
| | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 487 | | 340 | 148 | 488 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.110 | 0.604 | 13.09.1959 | 98.0 | 538 | 328 | 24.12.1967 |
| 2 | 0.190 | 1.04 | 11.08.2003 | 86.7 | 476 | 315 | 04.06.1981 |
| 3 | 0.220 | 1.21 | 07.10.1971 | 84.4 | 464 | 300 | 23.01.1995 |
| 4 | 0.250 | 1.37 | 05.10.1960 | 80.5 | 442 | 295 | 13.04.1994 |
| 5 | 0.250 | 1.37 | 13.07.1957 | 80.5 | 442 | 295 | 31.03.1986 |
| 6 | 0.258 | 1.42 | 05.09.1991 | 78.2 | 430 | 292 | 23.02.1970 |
| 7 | 0.260 | 1.43 | 07.07.1976 | 76.0 | 418 | 291 | 07.05.2004 |
| 8 | 0.260 | 1.43 | 01.09.1973 | 74.5 | 409 | 287 | 27.02.2002 |
| 9 | 0.310 | 1.70 | 30.07.1963 | 73.8 | 405 | 286 | 30.12.2002 |
| 10 | 0.328 | 1.80 | 24.08.1989 | 73.1 | 402 | 285 | 07.02.1984 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1956/2012 57 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 17.4 | 34.4 | | | |
| 364 | 15.6 | 21.1 | 54.8 | 25.8 | 8.62 |
| 363 | 14.4 | 20.2 | 41.5 | 21.1 | 7.36 |
| 362 | 14.2 | 19.3 | 39.7 | 17.5 | 7.02 |
| 361 | 13.5 | 17.4 | 36.5 | 15.5 | 6.14 |
| 360 | 13.3 | 16.4 | 32.9 | 14.3 | 5.68 |
| 359 | 12.6 | 15.7 | 31.7 | 13.4 | 5.52 |
| 358 | 12.6 | 15.6 | 24.0 | 12.6 | 5.37 |
| 357 | 11.7 | 14.4 | 22.8 | 11.9 | 5.22 |
| 356 | 11.3 | 14.2 | 22.4 | 11.5 | 5.06 |
| 350 | 9.79 | 11.9 | 15.9 | 9.18 | 3.85 |
| 340 | 7.53 | 9.55 | 12.0 | 7.20 | 2.98 |
| 330 | 6.06 | 6.92 | 9.64 | 6.00 | 2.63 |
| 320 | 4.91 | 5.16 | 8.63 | 5.23 | 2.18 |
| 300 | 3.52 | 3.43 | 6.73 | 4.17 | 1.85 |
| 270 | 2.57 | 2.51 | 5.52 | 3.21 | 1.50 |
| 240 | 1.91 | 1.93 | 4.30 | 2.59 | 1.25 |
| 210 | 1.63 | 1.66 | 3.70 | 2.13 | 1.03 |
| 183 | 1.42 | 1.49 | 3.10 | 1.79 | 0.850 |
| 150 | 1.18 | 1.32 | 2.65 | 1.45 | 0.600 |
| 130 | 1.09 | 1.23 | 2.42 | 1.29 | 0.550 |
| 120 | 1.06 | 1.17 | 2.40 | 1.21 | 0.490 |
| 110 | 1.04 | 1.12 | 2.29 | 1.14 | 0.480 |
| 100 | 0.998 | 1.07 | 2.11 | 1.06 | 0.470 |
| 90 | 0.960 | 1.03 | 2.01 | 0.988 | 0.440 |
| 80 | 0.935 | 0.944 | 1.96 | 0.921 | 0.370 |
| 70 | 0.894 | 0.894 | 1.87 | 0.861 | 0.250 |
| 60 | 0.835 | 0.835 | 1.78 | 0.796 | 0.190 |
| 50 | 0.772 | 0.772 | 1.71 | 0.739 | 0.190 |
| 40 | 0.745 | 0.745 | 1.60 | 0.673 | 0.170 |
| 30 | 0.684 | 0.684 | 1.51 | 0.601 | 0.170 |
| 25 | 0.650 | 0.650 | 1.43 | 0.561 | 0.170 |
| 20 | 0.633 | 0.633 | 1.32 | 0.527 | 0.150 |
| 15 | 0.606 | 0.606 | 1.32 | 0.498 | 0.150 |
| 10 | 0.586 | 0.586 | 1.32 | 0.450 | 0.150 |
| 9 | 0.585 | 0.585 | 1.32 | 0.431 | 0.150 |
| 8 | 0.583 | 0.583 | 1.24 | 0.417 | 0.150 |
| 7 | 0.579 | 0.579 | 1.24 | 0.401 | 0.150 |
| 6 | 0.575 | 0.575 | 1.24 | 0.392 | 0.150 |
| 5 | 0.569 | 0.569 | 1.24 | 0.361 | 0.150 |
| 4 | 0.567 | 0.567 | 1.24 | 0.344 | 0.150 |
| 3 | 0.561 | 0.561 | 1.16 | 0.301 | 0.150 |
| 2 | 0.530 | 0.530 | 1.16 | 0.286 | 0.150 |
| 1 | 0.521 | 0.521 | 1.16 | 0.190 | 0.130 |
| 0 | 0.494 | 0.494 | 1.08 | 0.110 | 0.110 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 399.00 km²
PNP : NN+ 233.59 m
Lage : 5.00 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Unterbreizbach Nr. 427010
Gewässer : Ulster
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K 1.45 | 1.05 | 10.9 | R 5.00 | 7.50 | 2.70 | 2.00 | K 2.70 | K 2.30 | K 2.15 | K 1.45 | 1.25 | 2.50 | 2.70 |
| 2. | K 1.45 | 1.05 | 18.0 | R 4.50 | 7.00 | 2.70 | K 2.15 | K 1.85 | K 2.30 | K 2.00 | K 1.45 | 1.15 | 2.30 | 2.50 |
| 3. | K 1.45 | 1.15 | 15.8 | R 4.10 | 6.50 | 2.70 | K 2.15 | K 1.85 | K 2.30 | K 1.85 | K 1.35 | 1.15 | 2.90 | 2.30 |
| 4. | K 1.45 | 2.00 | 11.5 | R 3.70 | 6.00 | 3.70 | K 2.00 | K 2.90 | K 2.00 | K 1.85 | K 1.35 | 1.45 | 5.25 | 2.30 |
| 5. | K 1.45 | 9.10 | 20.2 | R 3.70 | 5.75 | 3.30 | K 2.15 | K 5.25 | K 2.50 | K 2.30 | K 1.35 | 2.30 | 4.10 | 2.70 |
| 6. | K 1.45 | 4.50 | 22.4 | R 3.70 | 5.25 | 2.90 | K 3.50 | K 3.10 | K 3.10 | K 2.50 | K 1.35 | 1.55 | 3.70 | 2.70 |
| 7. | K 1.45 | 4.30 | 15.8 | R 3.50 | 4.75 | 2.90 | K 3.90 | K 3.50 | K 2.15 | K 2.00 | K 1.35 | 4.50 | 3.70 | R 2.50 |
| 8. | K 1.45 | 4.75 | 16.5 | R 3.50 | 5.75 | 2.90 | K 2.90 | K 2.70 | K 2.00 | K 1.70 | K 1.35 | 2.90 | 3.70 | R 2.15 |
| 9. | K 1.45 | 7.50 | 15.1 | R 3.30 | 5.75 | 2.90 | K 2.50 | K 2.00 | K 2.00 | K 1.70 | K 1.25 | 2.00 | 2.90 | R 2.15 |
| 10. | K 1.35 | 6.50 | 15.1 | R 3.30 | 5.00 | 2.90 | K 2.30 | K 1.85 | K 1.70 | K 1.70 | K 1.15 | 1.45 | 3.10 | R 2.15 |
| 11. | K 1.35 | 4.10 | 12.1 | R 3.30 | 5.00 | 2.90 | K 2.15 | K 1.85 | K 2.30 | K 1.70 | K 1.15 | 1.45 | 4.50 | R 2.00 |
| 12. | K 1.35 | 3.70 | 11.2 | R 3.30 | 5.00 | 2.90 | K 3.30 | K 2.00 | K 2.70 | K 1.55 | K 3.30 | 1.35 | 3.10 | 2.00 |
| 13. | K 1.35 | 3.90 | 13.0 | R 3.30 | 4.75 | 3.10 | K 2.30 | K 2.50 | K 4.50 | K 1.55 | K 1.85 | 1.55 | 2.70 | 2.30 |
| 14. | K 1.35 | 8.25 | 10.6 | R 3.30 | 4.50 | 2.90 | K 2.15 | K 3.10 | K11.5 | K 1.55 | K 1.45 | 1.55 | 2.30 | 2.50 |
| 15. | K 1.35 | 9.10 | 8.80 | R 3.30 | 4.30 | 2.50 | K 2.00 | K 2.15 | K 8.50 | K 1.45 | K 1.45 | 2.15 | 2.15 | 16.9 |
| 16. | K 1.35 | 13.6 | 7.75 | R 3.50 | 4.10 | 2.30 | K 2.50 | K 2.50 | K 6.50 | K 2.00 | K 1.45 | 2.00 | 2.00 | 28.8 |
| 17. | K 1.25 | 14.0 | 6.75 | R 5.25 | 3.90 | 2.30 | K 2.30 | K 2.30 | K 8.50 | K 1.85 | K 1.35 | 1.70 | 2.00 | 19.3 |
| 18. | K 1.25 | 8.00 | 6.00 | R 7.75 | 3.90 | 2.30 | K 2.15 | K 1.85 | K 9.10 | K 1.55 | K 1.25 | 1.45 | 1.85 | 16.9 |
| 19. | K 1.25 | 6.25 | 16.9 | 16.9 | 4.10 | 2.30 | K 2.00 | K 1.70 | K 5.25 | K 1.45 | K 1.25 | 1.35 | 1.85 | 11.5 |
| 20. | K 1.25 | 5.25 | 29.9 | 6.25 | 3.70 | 2.30 | K 1.85 | K 3.30 | K 3.90 | K 1.35 | K 1.25 | 1.35 | 1.85 | 8.50 |
| 21. | K 1.25 | 4.75 | 19.3 | 4.30 | 3.50 | 2.30 | K 1.85 | K 4.50 | K 4.10 | K 1.35 | K 1.25 | 1.25 | 1.70 | 7.25 |
| 22. | K 1.25 | 6.25 | 35.2 | 3.70 | 3.30 | 2.30 | K 1.70 | K 3.70 | K 3.70 | K 1.45 | K 1.25 | 1.25 | 1.70 | 7.50 |
| 23. | K 1.25 | 12.1 | 19.7 | 4.30 | 3.30 | 2.50 | K 1.70 | K 2.50 | K 2.90 | K 1.45 | K 1.35 | 1.25 | 1.70 | 36.4 |
| 24. | K 1.15 | 15.1 | 15.1 | 7.00 | 3.10 | 2.30 | K 1.55 | K 2.00 | K 2.50 | K 2.00 | K 1.25 | 1.25 | 1.55 | 39.8 |
| 25. | K 1.15 | 12.1 | 12.4 | 8.80 | 3.10 | 2.70 | K 1.45 | K 2.50 | K 2.15 | K 2.50 | K 1.25 | 1.25 | 1.55 | 18.0 |
| 26. | K 1.15 | 10.3 | 10.6 | 6.50 | 2.90 | 2.50 | K 1.45 | K 2.30 | K 2.00 | K 1.70 | K 1.45 | 1.25 | 1.45 | 21.0 |
| 27. | K 1.15 | 8.80 | 9.10 | 5.25 | 2.70 | 2.30 | K 1.45 | K 1.85 | K 1.85 | K 2.00 | K 2.15 | 1.45 | 1.85 | 21.0 |
| 28. | K 1.15 | 7.75 | 8.25 | 5.00 | 2.70 | 2.15 | K 1.45 | K 2.00 | K 2.30 | K 1.70 | K 1.85 | 1.45 | 1.85 | 30.9 |
| 29. | K 1.15 | 6.75 | 7.75 | 6.75 | 2.70 | 2.00 | K 1.45 | K 1.70 | K 4.75 | K 1.45 | K 1.35 | 1.35 | 2.90 | 15.4 |
| 30. | K 1.05 | 8.00 | 7.25 | | 3.10 | 2.00 | K 1.45 | K 2.00 | K 3.30 | K 1.70 | K 1.25 | 1.70 | 3.30 | 12.1 |
| 31. | | 7.50 | 6.50 | | 3.10 | | K 1.55 | | K 2.50 | K 1.70 | | 3.10 | | 10.3 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1.+ | 18. | 9.+ | 27.+ | 29.+ | 25.+ | 19.+ | 10. | 20.+ | 10.+ | 2.+ | 26. | 11.+ |
| NQ | 1.05 | 1.05 | 6.00 | 3.30 | 2.70 | 2.00 | 1.45 | 1.70 | 1.70 | 1.35 | 1.15 | 1.15 | 1.45 | 2.00 |
| MQ | 1.31 | 7.01 | 14.0 | 5.04 | 4.39 | 2.62 | 2.11 | 2.53 | 3.78 | 1.77 | 1.45 | 1.68 | 2.60 | 11.4 |
| HQ | 1.85 | 35.8 | 64.4 | 31.5 | 8.00 | 4.50 | 4.50 | 8.25 | 21.0 | 3.30 | 5.75 | 7.00 | 7.75 | 89.9 |
| Tag | 2. | 16. | 22. | 19. | 1. | 4. | 6. | 5. | 14. | 25. | 12. | 7. | 4. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 47 | 94 | 32 | 29 | 17 | 14 | 16 | 25 | 12 | 9 | 11 | 17 | 77 |

| | 1940/2011 | | 1941/2012 72 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1991 | 1941 | 1954 | 1963 | 1960 | 1953+ | 1947 | 1964 | 1947 | 1964 | 1976 | 1976 | 1991 |
| NQ | 0.480 | 0.730 | 0.200 | 1.01 | 1.18 | 1.45 | 1.01 | 0.300 | 0.450 | 0.300 | 0.180 | 0.180 | 0.480 | 0.730 |
| MNQ | 2.21 | 2.85 | 3.38 | 3.64 | 3.84 | 3.74 | 2.64 | 2.14 | 1.80 | 1.57 | 1.50 | 1.70 | 2.19 | 2.84 |
| MQ | 4.55 | 6.77 | 7.66 | 7.46 | 7.99 | 6.56 | 4.28 | 3.64 | 3.16 | 2.55 | 2.52 | 3.18 | 4.47 | 6.84 |
| MHQ | 24.3 | 35.8 | 39.1 | 32.2 | 32.7 | 23.2 | 17.5 | 16.6 | 15.8 | 12.4 | 11.4 | 12.9 | 22.5 | 36.7 |
| HQ | 134 | 182 | 147 | 122 | 128 | 136 | 153 | 218 | 154 | 121 | 111 | 63.0 | 116 | 182 |
| Jahr | 1940 | 1947 | 1995 | 1970 | 1942+ | 1994 | 2004 | 1981 | 1966 | 1981 | 2007 | 1974 | 1977 | 1947 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 30 | 45 | 51 | 46 | 54 | 43 | 29 | 24 | 21 | 17 | 16 | 21 | 29 | 46 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.05 | am 30.11.2011 | 1.05 | 1.15 | 1.15 | am 10.09.2012 |
| MQ | m³/s | 3.99 | | 5.78 | 2.22 | 4.47 | |
| HQ | m³/s | 64.4 | am 22.01.2012 bei W = 175 cm | 64.4 | 21.0 | 89.9 | am 23.12.2012 bei W = 211 cm |
| Nq | l/(skm²) | 2.63 | | 2.63 | 2.88 | 2.88 | |
| Mq | l/(skm²) | 10.0 | | 14.5 | 5.57 | 11.2 | |
| Hq | l/(skm²) | 161 | | 161 | 52.6 | 225 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 316 | | 228 | 89 | 355 | |

| | | 1941/2012 (*) 72 Jahre² | | | | 1941/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.180 | am 04.09.1964 | 0.200 | 0.180 | 0.180 | am 04.09.1964 |
| MNQ | m³/s | 1.15 | | 1.84 | 1.28 | 1.25 | |
| MQ | m³/s | 5.02 | | 6.84 | 3.22 | 5.01 | |
| MHQ | m³/s | 81.4 | | 72.8 | 37.3 | 77.3 | |
| HQ | m³/s | 218 | am 04.06.1981 bei W = 295 cm | 182 | 218 | 218 | am 04.06.1981 bei W = 295 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.89 | | 4.62 | 3.22 | 3.14 | |
| Mq | l/(skm²) | 12.6 | | 17.1 | 8.08 | 12.6 | |
| MHq | l/(skm²) | 204 | | 183 | 93.6 | 194 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 397 | | 268 | 128 | 397 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.180 | 0.451 | 30.10.1976 | 218 | 546 | 295 | 04.06.1981 |
| 2 | 0.180 | 0.451 | 04.09.1964 | 182 | 456 | 330 | 28.12.1947 |
| 3 | 0.200 | 0.501 | 19.01.1941 | 154 | 386 | 259 | 19.07.1966 |
| 4 | 0.300 | 0.752 | 29.06.1947 | 153 | 383 | 258 | 07.05.2004 |
| 5 | 0.520 | 1.30 | 27.08.1944 | 147 | 368 | 254 | 23.01.1995 |
| 6 | 0.580 | 1.45 | 05.08.1993 | 145 | 363 | 252 | 24.12.1967 |
| 7 | 0.610 | 1.53 | 08.09.1973 | 136 | 341 | 247 | 13.04.1994 |
| 8 | 0.620 | 1.55 | 01.11.1991 | 134 | 336 | | 04.11.1940 |
| 9 | 0.630 | 1.58 | 16.08.1953 | 128 | 321 | 241 | 31.03.1986 |
| 10 | 0.630 | 1.58 | 13.08.1952 | 128 | 321 | 280 | 18.03.1942 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 72 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 35.2 | 39.8 | 97.9 | 40.6 | 12.0 |
| 363 | 29.9 | 36.4 | 74.2 | 34.3 | 12.0 |
| 362 | 22.4 | 35.2 | 63.6 | 28.8 | 11.7 |
| 361 | 20.2 | 30.9 | 59.3 | 25.5 | 10.0 |
| 360 | 19.7 | 29.9 | 56.8 | 23.3 | 9.92 |
| 359 | 19.3 | 28.8 | 44.9 | 21.5 | 9.48 |
| 358 | 18.0 | 22.4 | 39.6 | 20.4 | 8.00 |
| 357 | 16.9 | 21.0 | 39.0 | 19.5 | 7.75 |
| 356 | 16.9 | 21.0 | 37.8 | 18.6 | 7.75 |
| 350 | 15.1 | 18.0 | 27.0 | 15.0 | 6.45 |
| 340 | 11.5 | 15.1 | 21.3 | 11.9 | 4.26 |
| 330 | 8.80 | 10.9 | 18.0 | 10.2 | 3.87 |
| 320 | 7.75 | 8.50 | 15.7 | 8.97 | 3.57 |
| 300 | 6.00 | 5.75 | 12.5 | 7.40 | 3.26 |
| 270 | 4.30 | 4.10 | 9.63 | 5.76 | 2.67 |
| 240 | 3.30 | 3.30 | 7.92 | 4.75 | 2.12 |
| 210 | 2.90 | 2.90 | 6.98 | 3.92 | 1.88 |
| 183 | 2.30 | 2.50 | 6.11 | 3.37 | 1.66 |
| 150 | 2.00 | 2.30 | 5.24 | 2.87 | 1.29 |
| 130 | 2.00 | 2.00 | 5.01 | 2.58 | 1.10 |
| 120 | 1.85 | 2.00 | 4.85 | 2.44 | 1.10 |
| 110 | 1.70 | 2.00 | 4.65 | 2.30 | 0.960 |
| 100 | 1.70 | 1.85 | 4.57 | 2.17 | 0.960 |
| 90 | 1.55 | 1.85 | 4.35 | 2.06 | 0.830 |
| 80 | 1.45 | 1.70 | 4.12 | 1.96 | 0.830 |
| 70 | 1.45 | 1.70 | 4.06 | 1.85 | 0.700 |
| 60 | 1.45 | 1.55 | 3.87 | 1.70 | 0.700 |
| 50 | 1.35 | 1.45 | 3.68 | 1.57 | 0.580 |
| 40 | 1.35 | 1.45 | 3.68 | 1.45 | 0.580 |
| 30 | 1.25 | 1.35 | 3.30 | 1.34 | 0.580 |
| 25 | 1.25 | 1.35 | 3.30 | 1.25 | 0.580 |
| 20 | 1.25 | 1.35 | 3.11 | 1.18 | 0.480 |
| 15 | 1.25 | 1.25 | 2.94 | 1.07 | 0.450 |
| 10 | 1.15 | 1.25 | 2.94 | 0.960 | 0.450 |
| 9 | 1.15 | 1.25 | 2.94 | 0.910 | 0.450 |
| 8 | 1.15 | 1.25 | 2.94 | 0.910 | 0.380 |
| 7 | 1.15 | 1.25 | 2.94 | 0.850 | 0.380 |
| 6 | 1.15 | 1.25 | 2.94 | 0.840 | 0.380 |
| 5 | 1.15 | 1.25 | 2.94 | 0.820 | 0.380 |
| 4 | 1.15 | 1.25 | 2.94 | 0.750 | 0.310 |
| 3 | 1.15 | 1.25 | 2.77 | 0.730 | 0.310 |
| 2 | 1.15 | 1.15 | 2.77 | 0.630 | 0.300 |
| 1 | 1.05 | 1.15 | 2.60 | 0.520 | 0.300 |
| 0 | 1.05 | 1.15 | 2.60 | 0.180 | 0.180 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Durchflussstatistik wurde aufgrund von Längsschnittuntersuchungen im Hochwasserbereich ab Abflussjahr 1965 korrigiert
23 Tage Randeis, 182 Tage Verkrautung
²Vorsicht: 1.4% Lücken im Zeitraum 1941/2012
²Ausgefallenes Abflussjahr: 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 105.20 km²
PNP : NHN+ 283.06 m
Lage : 30.50 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Teutleben Nr. 429050
Gewässer : Hörsel
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K 0.235 | K 0.235 | 1.18 | R 0.913 | 0.853 | 0.422 | 0.288 | 0.544 | K 0.544 | K 0.318 | K 0.212 | K 0.174 | K 0.460 | 0.740 |
| 2. | K 0.235 | K 0.235 | 2.03 | R 0.794 | 0.913 | 0.422 | 0.288 | 0.288 | K 0.385 | K 0.288 | K 0.192 | K 0.174 | K 0.460 | 0.638 |
| 3. | K 0.235 | K 0.318 | 2.58 | R 0.688 | 0.973 | 0.422 | 0.288 | 0.385 | K 0.385 | K 0.288 | K 0.212 | K 0.174 | K 0.544 | 0.638 |
| 4. | K 0.235 | K 0.460 | 2.67 | R 0.740 | 0.913 | 0.590 | 0.288 | 0.422 | K 0.318 | K 0.260 | K 0.212 | K 0.260 | K 0.544 | 0.688 |
| 5. | K 0.235 | K 0.913 | 6.17 | R 0.688 | 0.853 | 0.422 | 0.501 | 0.973 | K 0.638 | K 0.422 | K 0.212 | K 0.351 | K 0.422 | 0.688 |
| 6. | K 0.235 | K 0.794 | 6.44 | R 0.638 | 0.794 | 0.385 | 0.688 | 0.460 | K 0.422 | K 0.385 | K 0.235 | K 0.318 | K 0.501 | 0.638 |
| 7. | K 0.235 | K 0.973 | 4.28 | R 0.638 | 0.740 | 0.422 | 0.501 | 0.385 | K 0.318 | K 0.288 | K 0.212 | K 0.422 | K 0.590 | 0.590 |
| 8. | K 0.318 | K 0.853 | 4.28 | R 0.590 | 0.853 | 0.422 | 0.385 | 0.351 | K 0.318 | K 0.288 | K 0.192 | K 0.260 | K 0.501 | R 0.460 |
| 9. | K 0.422 | K 2.48 | 4.02 | R 0.544 | 0.740 | 0.385 | 0.351 | 0.318 | K 0.288 | K 0.288 | K 0.192 | K 0.288 | K 0.501 | R 0.501 |
| 10. | K 0.422 | K 1.61 | 3.41 | R 0.544 | 0.688 | 0.422 | 0.318 | 0.288 | K 0.460 | K 0.288 | K 0.192 | K 0.235 | K 0.501 | R 0.638 |
| 11. | K 0.351 | K 1.25 | 2.77 | R 0.501 | 0.688 | 0.422 | 0.318 | 0.318 | K 0.501 | K 0.260 | K 0.235 | K 0.212 | K 0.501 | R 0.590 |
| 12. | K 0.351 | K 0.973 | 2.58 | R 0.501 | 0.688 | 0.422 | 0.422 | 0.318 | K 0.590 | K 0.260 | K 0.460 | K 0.212 | K 0.422 | R 0.590 |
| 13. | K 0.385 | K 0.913 | 2.77 | R 0.460 | 0.688 | 0.422 | 0.318 | 0.288 | K 0.544 | K 0.260 | K 0.235 | K 0.192 | K 0.422 | R 0.544 |
| 14. | K 0.460 | K 1.54 | 2.67 | R 0.590 | 0.638 | 0.385 | 0.318 | 0.351 | K 1.04 | K 0.235 | K 0.192 | K 0.212 | K 0.422 | R 0.590 |
| 15. | K 0.460 | K 1.95 | 2.30 | R 0.638 | 0.544 | 0.351 | 0.351 | 0.288 | K 1.11 | K 0.260 | K 0.212 | K 0.235 | K 0.422 | R 2.39 |
| 16. | K 0.422 | K 3.52 | 1.86 | R 0.590 | 0.501 | 0.385 | 0.422 | K 0.351 | K 0.794 | K 0.385 | K 0.192 | K 0.212 | K 0.385 | 2.96 |
| 17. | K 0.288 | K 3.64 | 1.61 | 1.04 | 0.501 | 0.422 | 0.318 | K 0.288 | K 1.33 | K 0.318 | K 0.235 | K 0.235 | K 0.385 | 2.58 |
| 18. | K 0.288 | K 2.21 | 1.47 | 0.973 | 0.501 | 0.385 | 0.288 | K 0.260 | K 1.11 | K 0.260 | K 0.260 | K 0.260 | K 0.385 | 2.77 |
| 19. | K 0.288 | K 1.70 | 2.21 | 1.47 | 0.501 | 0.318 | 0.288 | K 0.288 | K 0.913 | K 0.212 | K 0.235 | K 0.351 | K 0.351 | 2.48 |
| 20. | K 0.260 | K 1.47 | 4.02 | 1.04 | 0.501 | 0.351 | 0.288 | K 0.853 | K 0.913 | K 0.235 | K 0.212 | K 0.288 | K 0.385 | 2.12 |
| 21. | K 0.260 | 1.25 | 3.77 | 0.853 | 0.460 | 0.351 | 0.288 | K 1.25 | K 0.853 | K 0.260 | K 0.192 | K 0.288 | K 0.422 | 1.78 |
| 22. | K 0.288 | 1.11 | 5.50 | 0.794 | 0.460 | 0.351 | 0.260 | K 0.590 | K 0.638 | K 0.288 | K 0.235 | K 0.422 | K 0.422 | 1.70 |
| 23. | K 0.288 | 1.04 | 4.95 | 0.853 | 0.460 | 0.351 | 0.260 | K 0.351 | K 0.501 | K 0.192 | K 0.212 | K 0.422 | K 0.422 | 4.41 |
| 24. | K 0.288 | 1.47 | 3.89 | 0.913 | 0.422 | 0.351 | 0.260 | K 0.318 | K 0.422 | K 0.422 | K 0.212 | K 0.385 | K 0.385 | 7.80 |
| 25. | K 0.288 | 1.70 | 3.07 | 0.973 | 0.422 | 0.318 | 0.235 | K 0.422 | K 0.385 | K 0.422 | K 0.288 | K 0.318 | K 0.385 | 5.90 |
| 26. | K 0.288 | 1.47 | 2.48 | 0.973 | 0.422 | 0.318 | 0.235 | K 0.351 | K 0.351 | K 0.260 | K 0.318 | K 0.318 | K 0.385 | 4.82 |
| 27. | K 0.260 | 1.40 | 2.03 | 0.794 | 0.422 | 0.318 | 0.260 | K 0.318 | K 0.318 | K 0.235 | K 0.385 | K 0.422 | K 0.422 | 4.28 |
| 28. | K 0.235 | 1.33 | 1.70 | 0.740 | 0.422 | 0.318 | 0.235 | K 0.288 | K 0.385 | K 0.235 | K 0.235 | K 0.351 | K 0.638 | 4.55 |
| 29. | K 0.235 | 1.18 | 1.54 | 0.794 | 0.422 | 0.318 | 0.260 | K 0.288 | K 0.590 | K 0.212 | K 0.192 | K 0.385 | K 1.47 | 3.41 |
| 30. | K 0.235 | 1.61 | 1.33 | | 0.422 | 0.288 | 0.260 | K 0.385 | K 0.385 | K 0.212 | K 0.174 | K 0.544 | 1.04 | 2.77 |
| 31. | | 1.18 | 0.973 | | 0.422 | | 0.318 | | K 0.318 | K 0.235 | | K 0.544 | | 2.30 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 1.+ | 1.+ | 31. | 13. | 24.+ | 30. | 25.+ | 18. | 9. | 23. | 30. | 1.+ | 19. | 8. |
| NQ | 0.235 | 0.235 | 0.973 | 0.460 | 0.422 | 0.288 | 0.235 | 0.260 | 0.288 | 0.192 | 0.174 | 0.174 | 0.351 | 0.460 |
| MQ | 0.301 | 1.38 | 2.99 | 0.768 | 0.607 | 0.382 | 0.326 | 0.419 | 0.583 | 0.283 | 0.232 | 0.305 | 0.503 | 2.18 |
| HQ | 0.460 | 6.85 | 11.9 | 2.03 | 0.973 | 0.913 | 1.33 | 2.96 | 2.67 | 2.21 | 1.47 | 0.794 | 1.95 | 8.62 |
| Tag | 15. | 16. | 5. | 19. | 2. | 4. | 5. | 21. | 5. | 24. | 11. | 4. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 35 | 76 | 18 | 15 | 9 | 8 | 10 | 15 | 7 | 6 | 8 | 12 | 55 |

| | 1963/2011 | | 1964/2012 49 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1997 | 1969 | 1970 | 1972+ | 1972 | 1972 | 2000 | 1964 | 1976 | 1976 | 1966 | 1964 | 1997 | 1969 |
| NQ | 0.090 | 0.180 | 0.180 | 0.240 | 0.240 | 0.240 | 0.160 | 0.120 | 0.110 | 0.110 | 0.050 | 0.050 | 0.090 | 0.180 |
| MNQ | 0.430 | 0.629 | 0.657 | 0.719 | 0.792 | 0.781 | 0.490 | 0.357 | 0.297 | 0.262 | 0.258 | 0.323 | 0.423 | 0.626 |
| MQ | 1.02 | 1.72 | 1.74 | 1.60 | 1.94 | 1.61 | 0.933 | 0.708 | 0.509 | 0.537 | 0.434 | 0.684 | 0.996 | 1.75 |
| MHQ | 4.54 | 7.88 | 8.39 | 6.50 | 7.99 | 7.27 | 4.18 | 4.67 | 2.98 | 4.91 | 2.13 | 2.87 | 4.47 | 8.03 |
| HQ | 26.2 | 39.6 | 30.3 | 43.0 | 29.1 | 66.2 | 26.8 | 39.4 | 21.2 | 78.8 | 24.4 | 29.5 | 26.2 | 39.6 |
| Jahr | 1998 | 1965 | 2011 | 1984 | 1979 | 1994 | 2004 | 1975 | 1966 | 1981 | 2007 | 1986 | 1998 | 1965 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 25 | 44 | 44 | 37 | 49 | 40 | 24 | 17 | 13 | 14 | 11 | 17 | 25 | 44 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.174 | am 30.09.2012 | 0.235 | 0.174 | 0.174 | am 30.09.2012 |
| MQ | m³/s | 0.718 | | 1.08 | 0.358 | 0.802 | |
| HQ | m³/s | 11.9 | am 05.01.2012 bei W = 138 cm | 11.9 | 2.96 | 11.9 | am 05.01.2012 bei W = 138 cm |
| Nq | l/(skm²) | 1.65 | | 2.23 | 1.65 | 1.65 | |
| Mq | l/(skm²) | 6.83 | | 10.3 | 3.41 | 7.63 | |
| Hq | l/(skm²) | 113 | | 113 | 28.1 | 113 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 216 | | 162 | 54 | 241 | |

| | | 1964/2012 (*) 49 Jahre | | | | 1964/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.050 | am 17.10.1964 | 0.090 | 0.050 | 0.050 | am 17.10.1964 |
| MNQ | m³/s | 0.191 | | 0.317 | 0.223 | 0.207 | |
| MQ | m³/s | 1.12 | | 1.61 | 0.635 | 1.12 | |
| MHQ | m³/s | 22.8 | | 19.0 | 10.7 | 22.6 | |
| HQ | m³/s | 78.8 | am 11.08.1981 | 66.2 | 78.8 | 78.8 | am 11.08.1981 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 1.81 | | 3.01 | 2.12 | 1.97 | |
| Mq | l/(skm²) | 10.6 | | 15.3 | 6.04 | 10.6 | |
| MHq | l/(skm²) | 216 | | 180 | 102 | 214 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 335 | | 239 | 96 | 335 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.050 | 0.475 | 30.09.1966 | 78.8 | 749 | | 11.08.1981 |
| 2 | 0.050 | 0.475 | 17.10.1964 | 66.2 | 629 | 262 | 13.04.1994 |
| 3 | 0.090 | 0.856 | 13.11.1997 | 56.8 | 540 | | 20.04.1983 |
| 4 | 0.110 | 1.05 | 11.07.1976 | 53.8 | 511 | | 22.08.1977 |
| 5 | 0.115 | 1.09 | 18.09.2008 | 43.0 | 409 | | 07.02.1984 |
| 6 | 0.115 | 1.09 | 22.09.2005 | 39.6 | 376 | | 10.12.1965 |
| 7 | 0.120 | 1.14 | 29.08.1971 | 39.4 | 375 | | 24.06.1975 |
| 8 | 0.130 | 1.24 | 20.08.2003 | 33.6 | 319 | | 17.12.1974 |
| 9 | 0.140 | 1.33 | 03.10.1999 | 32.7 | 311 | | 04.06.1981 |
| 10 | 0.140 | 1.33 | 21.07.1995 | 30.3 | 288 | 197 | 08.01.2011 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1964/2012 49 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 6.44 | 7.80 | 63.2 | 11.3 | 2.98 |
| 363 | 6.17 | 6.44 | 20.4 | 9.36 | 2.59 |
| 362 | 5.50 | 6.17 | 16.4 | 8.20 | 2.59 |
| 361 | 4.95 | 5.90 | 14.2 | 7.15 | 2.59 |
| 360 | 4.28 | 5.50 | 13.4 | 6.55 | 2.59 |
| 359 | 4.28 | 4.95 | 13.1 | 6.02 | 2.45 |
| 358 | 4.02 | 4.82 | 13.1 | 5.65 | 1.90 |
| 357 | 4.02 | 4.55 | 13.1 | 5.28 | 1.90 |
| 356 | 3.89 | 4.41 | 12.4 | 4.97 | 1.90 |
| 350 | 2.77 | 3.89 | 10.3 | 3.85 | 1.53 |
| 340 | 2.21 | 2.67 | 7.15 | 2.94 | 1.17 |
| 330 | 1.61 | 2.21 | 7.15 | 2.50 | 1.02 |
| 320 | 1.33 | 1.47 | 4.95 | 2.10 | 0.880 |
| 300 | 0.973 | 0.913 | 3.16 | 1.60 | 0.700 |
| 270 | 0.688 | 0.688 | 2.74 | 1.20 | 0.550 |
| 240 | 0.501 | 0.544 | 2.37 | 0.920 | 0.460 |
| 210 | 0.422 | 0.460 | 1.73 | 0.740 | 0.385 |
| 183 | 0.385 | 0.422 | 1.45 | 0.650 | 0.330 |
| 150 | 0.351 | 0.385 | 1.18 | 0.510 | 0.270 |
| 130 | 0.318 | 0.351 | 1.07 | 0.450 | 0.220 |
| 120 | 0.318 | 0.318 | 0.980 | 0.420 | 0.200 |
| 110 | 0.288 | 0.318 | 0.930 | 0.410 | 0.150 |
| 100 | 0.288 | 0.318 | 0.900 | 0.370 | 0.120 |
| 90 | 0.288 | 0.288 | 0.880 | 0.351 | 0.120 |
| 80 | 0.260 | 0.288 | 0.810 | 0.320 | 0.120 |
| 70 | 0.260 | 0.288 | 0.810 | 0.300 | 0.120 |
| 60 | 0.260 | 0.260 | 0.810 | 0.290 | 0.120 |
| 50 | 0.235 | 0.260 | 0.740 | 0.260 | 0.120 |
| 40 | 0.235 | 0.235 | 0.740 | 0.240 | 0.120 |
| 30 | 0.235 | 0.235 | 0.690 | 0.220 | 0.080 |
| 25 | 0.212 | 0.212 | 0.690 | 0.200 | 0.080 |
| 20 | 0.212 | 0.212 | 0.680 | 0.200 | 0.080 |
| 15 | 0.212 | 0.212 | 0.620 | 0.180 | 0.080 |
| 10 | 0.192 | 0.192 | 0.620 | 0.170 | 0.080 |
| 9 | 0.192 | 0.192 | 0.620 | 0.170 | 0.080 |
| 8 | 0.192 | 0.192 | 0.620 | 0.160 | 0.080 |
| 7 | 0.192 | 0.192 | 0.620 | 0.160 | 0.080 |
| 6 | 0.192 | 0.192 | 0.620 | 0.160 | 0.080 |
| 5 | 0.192 | 0.192 | 0.620 | 0.145 | 0.080 |
| 4 | 0.192 | 0.192 | 0.620 | 0.140 | 0.080 |
| 3 | 0.192 | 0.192 | 0.620 | 0.120 | 0.080 |
| 2 | 0.174 | 0.174 | 0.620 | 0.120 | 0.050 |
| 1 | 0.174 | 0.174 | 0.620 | 0.110 | 0.050 |
| 0 | 0.174 | 0.174 | 0.620 | 0.050 | 0.050 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
24 Tage Randeis, 217 Tage Verkrautung

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 305.20 km²
PNP : NN+ 216.31 m
Lage : 10.60 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Eisenach−Petersberg Nr. 429010
Gewässer : Hörsel
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.510 | 0.460 | 3.72 | 2.81 | 2.72 | 1.17 | 0.710 | 1.17 | 1.03 | 0.660 | 0.460 | 0.350 | 1.03 | 1.76 |
| 2. | 0.510 | 0.510 | 6.05 | R 2.63 | 2.90 | 1.10 | 0.660 | 0.610 | 0.760 | 0.610 | 0.380 | 0.350 | 0.970 | 1.45 |
| 3. | 0.560 | 0.610 | 7.70 | R 2.54 | 2.90 | 1.17 | 0.660 | 0.660 | 0.760 | 0.560 | 0.350 | 0.320 | 1.17 | 1.38 |
| 4. | 0.510 | 0.970 | 6.90 | R 2.45 | 2.81 | 1.68 | 0.660 | 0.910 | 0.610 | 0.510 | 0.380 | 0.420 | 1.45 | 1.45 |
| 5. | 0.510 | 2.09 | 11.8 | R 2.36 | 2.63 | 1.31 | 1.03 | 2.00 | 1.52 | 0.710 | 0.380 | 0.860 | 1.24 | 1.52 |
| 6. | 0.510 | 1.84 | 16.0 | R 2.27 | 2.36 | 1.24 | 1.68 | 1.10 | 1.10 | 0.910 | 0.420 | 0.810 | 1.17 | 1.38 |
| 7. | 0.560 | 2.09 | 11.8 | R 2.18 | 2.27 | 1.24 | 1.31 | 0.970 | 0.860 | 0.610 | 0.380 | 0.910 | 1.17 | R 1.24 |
| 8. | 0.610 | 2.09 | 12.3 | R 2.09 | 2.54 | 1.10 | 1.03 | 0.810 | 0.760 | 0.510 | 0.350 | 0.660 | 1.10 | R 1.10 |
| 9. | 0.710 | 3.83 | 12.8 | R 2.00 | 2.18 | 1.10 | 0.910 | 0.660 | 0.710 | 0.510 | 0.320 | 0.560 | 1.03 | R 1.24 |
| 10. | 0.760 | 3.40 | 10.3 | R 1.92 | 2.00 | 1.10 | 0.860 | 0.560 | 0.710 | 0.460 | 0.320 | 0.510 | 1.17 | R 1.24 |
| 11. | 0.660 | 2.45 | 8.20 | R 1.84 | 2.00 | 1.17 | 0.860 | 0.610 | 1.60 | 0.460 | 0.320 | 0.460 | 1.31 | R 1.24 |
| 12. | 0.660 | 2.18 | 6.90 | R 1.76 | 2.00 | 1.10 | 1.10 | 0.710 | 1.38 | 0.420 | 1.17 | 0.420 | 1.03 | R 1.24 |
| 13. | 0.660 | 2.09 | 7.30 | R 1.68 | 2.00 | 1.17 | 0.810 | 0.560 | 1.68 | 0.420 | 0.610 | 0.510 | 0.970 | 1.17 |
| 14. | 0.710 | 2.63 | 6.90 | 1.60 | 1.92 | 1.03 | 0.760 | 0.660 | 2.81 | 0.420 | 0.460 | 0.560 | 0.970 | 1.24 |
| 15. | 0.710 | 4.16 | 5.61 | 1.76 | 1.84 | 0.970 | 0.760 | 0.560 | 2.81 | 0.380 | 0.380 | 0.560 | 0.910 | 5.33 |
| 16. | 0.710 | 7.30 | 4.63 | 1.68 | 1.76 | 0.970 | 0.910 | 0.660 | 2.18 | 0.660 | 0.380 | 0.510 | 0.910 | 7.70 |
| 17. | 0.610 | 8.95 | 4.05 | 2.36 | 1.68 | 1.03 | 0.760 | 0.560 | 2.72 | 0.610 | 0.350 | 0.510 | 0.860 | 7.10 |
| 18. | 0.560 | 5.19 | 3.61 | 2.45 | 1.68 | 0.970 | 0.710 | 0.460 | 2.72 | 0.460 | 0.380 | 0.460 | 0.860 | 7.95 |
| 19. | 0.560 | 4.05 | 5.90 | 3.30 | 1.68 | 0.910 | 0.710 | 0.510 | 2.36 | 0.350 | 0.420 | 0.610 | 0.860 | 6.50 |
| 20. | 0.510 | 3.50 | 12.8 | 2.45 | 1.60 | 0.910 | 0.610 | 1.84 | 2.27 | 0.320 | 0.420 | 0.560 | 0.810 | 5.33 |
| 21. | 0.510 | 3.20 | 10.8 | 2.00 | 1.52 | 0.970 | 0.610 | 2.90 | 2.18 | 0.350 | 0.380 | 0.510 | 0.860 | 4.50 |
| 22. | 0.560 | 3.10 | 15.2 | 1.84 | 1.45 | 0.970 | 0.560 | 1.52 | 1.68 | 0.350 | 0.380 | 0.610 | 0.810 | 4.16 |
| 23. | 0.560 | 3.30 | 13.9 | 1.92 | 1.45 | 0.970 | 0.510 | 0.970 | 1.38 | 0.350 | 0.420 | 0.710 | 0.810 | 12.0 |
| 24. | 0.560 | 4.38 | 11.8 | 2.27 | 1.38 | 0.970 | 0.460 | 0.760 | 1.17 | 0.910 | 0.380 | 0.660 | 0.810 | 23.0 |
| 25. | 0.560 | 4.91 | 8.95 | 2.72 | 1.31 | 0.910 | 0.420 | 0.860 | 0.970 | 1.10 | 0.420 | 0.610 | 0.810 | 18.5 |
| 26. | 0.560 | 4.38 | 6.90 | 2.72 | 1.31 | 0.810 | 0.420 | 0.760 | 0.860 | 0.660 | 0.810 | 0.560 | 0.760 | 15.0 |
| 27. | 0.510 | 4.05 | 5.61 | 2.54 | 1.31 | 0.810 | 0.420 | 0.660 | 0.810 | 0.560 | 1.03 | 0.710 | 0.860 | 13.1 |
| 28. | 0.510 | 3.83 | 4.77 | 2.45 | 1.24 | 0.760 | 0.380 | 0.660 | 0.910 | 0.460 | 0.660 | 0.760 | 1.03 | 14.5 |
| 29. | 0.460 | 3.50 | 4.16 | 2.54 | 1.24 | 0.810 | 0.350 | 0.560 | 1.38 | 0.420 | 0.460 | 0.660 | 2.72 | 11.0 |
| 30. | 0.460 | 4.27 | 3.72 | | 1.24 | 0.760 | 0.380 | 0.710 | 0.970 | 0.420 | 0.380 | 0.970 | 2.36 | 8.45 |
| 31. | | 3.50 | 3.00 | | 1.24 | | 0.460 | | 0.760 | 0.460 | | 1.03 | | 6.50 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29.+ | 1. | 31. | 14. | 28.+ | 28.+ | 29. | 18. | 4. | 20. | 9.+ | 3. | 26. | 8. |
| NQ | 0.460 | 0.460 | 3.00 | 1.60 | 1.24 | 0.760 | 0.350 | 0.460 | 0.610 | 0.320 | 0.320 | 0.320 | 0.760 | 1.10 |
| MQ | 0.578 | 3.32 | 8.20 | 2.25 | 1.88 | 1.04 | 0.725 | 0.898 | 1.43 | 0.535 | 0.465 | 0.603 | 1.09 | 6.11 |
| HQ | 1.10 | 16.2 | 21.2 | 4.05 | 3.50 | 2.18 | 2.54 | 5.05 | 3.94 | 2.63 | 2.45 | 1.38 | 3.50 | 24.5 |
| Tag | 17. | 16. | 5. | 19. | 16. | 4. | 6. | 21. | 5. | 25. | 11. | 30. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 29 | 72 | 18 | 16 | 9 | 6 | 8 | 13 | 5 | 4 | 5 | 9 | 54 |

| | 1939/2011 | | 1940/2012 73 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1969 | 1970 | 1972 | 1972 | 1953+ | 2011+ | 1976 | 1976 | 1991 | 1991 | 1991 | 1991 | 1969 |
| NQ | 0.240 | 0.400 | 0.340 | 0.600 | 0.600 | 0.760 | 0.350 | 0.310 | 0.210 | 0.220 | 0.160 | 0.200 | 0.240 | 0.400 |
| MNQ | 1.27 | 1.67 | 2.00 | 2.21 | 2.24 | 2.24 | 1.39 | 1.08 | 0.868 | 0.781 | 0.765 | 0.895 | 1.23 | 1.65 |
| MQ | 2.80 | 4.04 | 4.70 | 4.71 | 5.26 | 4.46 | 2.58 | 2.27 | 1.70 | 1.49 | 1.25 | 1.73 | 2.68 | 4.03 |
| MHQ | 10.2 | 14.0 | 15.7 | 15.0 | 16.9 | 14.7 | 8.83 | 10.8 | 7.67 | 7.17 | 4.75 | 5.89 | 9.75 | 13.9 |
| HQ | 64.4 | 65.6 | 50.5 | 72.3 | 60.0 | 113 | 38.2 | 76.0 | 75.7 | 125 | 43.4 | 33.2 | 64.4 | 65.6 |
| Jahr | 1940 | 1965 | 1987 | 1946 | 1942 | 1961 | 2004 | 1961 | 1956 | 1981 | 2007 | 1986 | 1940 | 1965 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 24 | 35 | 41 | 38 | 46 | 38 | 23 | 19 | 15 | 13 | 11 | 15 | 23 | 35 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.320 | am 20.08.2012 | 0.460 | 0.320 | 0.320 | am 20.08.2012 |
| MQ | m³/s | 1.84 | | 2.91 | 0.778 | 2.11 | |
| HQ | m³/s | 21.2 | am 05.01.2012 bei W = 130 cm | 21.2 | 5.05 | 24.5 | am 24.12.2012 bei W = 139 cm |
| Nq | l/(skm²) | 1.05 | | 1.51 | 1.05 | 1.05 | |
| Mq | l/(skm²) | 6.01 | | 9.52 | 2.55 | 6.93 | |
| Hq | l/(skm²) | 69.5 | | 69.5 | 16.5 | 80.3 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 190 | | 150 | 41 | 219 | |

| | | 1940/2012 (*) 73 Jahre² | | | | 1940/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.160 | am 14.09.1991 | 0.240 | 0.160 | 0.160 | am 14.09.1991 |
| MNQ | m³/s | 0.546 | | 0.972 | 0.602 | 0.569 | |
| MQ | m³/s | 3.08 | | 4.33 | 1.84 | 3.06 | |
| MHQ | m³/s | 36.4 | | 32.2 | 19.5 | 35.2 | |
| HQ | m³/s | 125 | am 11.08.1981 | 113 | 125 | 125 | am 11.08.1981 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 1.79 | | 3.18 | 1.97 | 1.87 | |
| Mq | l/(skm²) | 10.1 | | 14.2 | 6.02 | 10.0 | |
| MHq | l/(skm²) | 119 | | 106 | 63.8 | 115 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 318 | | 222 | 96 | 317 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.160 | 0.524 | 14.09.1991 | 125 | 410 | | 11.08.1981 |
| 2 | 0.190 | 0.623 | 19.09.1959 | 113 | 370 | | 29.04.1961 |
| 3 | 0.210 | 0.688 | 10.07.1976 | 90.4 | 296 | 282 | 13.04.1994 |
| 4 | 0.240 | 0.786 | 26.07.1995 | 76.0 | 249 | | 10.06.1961 |
| 5 | 0.260 | 0.852 | 20.08.2003 | 75.7 | 248 | | 15.07.1956 |
| 6 | 0.290 | 0.950 | 07.09.2005 | 72.3 | 237 | | 08.02.1946 |
| 7 | 0.290 | 0.950 | 15.09.1999 | 68.6 | 225 | | 04.06.1958 |
| 8 | 0.300 | 0.983 | 09.09.1989 | 65.6 | 215 | | 10.12.1965 |
| 9 | 0.300 | 0.983 | 14.09.1974 | 64.4 | 211 | | 20.04.1983 |
| 10 | 0.320 | 1.05 | 20.08.2012 | 64.4 | 211 | | 04.11.1940 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1940/2012 73 Kalenderjahre²: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 16.0 | 23.0 | 102 | 25.2 | 5.09 |
| 363 | 15.2 | 18.5 | 49.5 | 21.5 | 4.59 |
| 362 | 13.9 | 16.0 | 40.4 | 19.5 | 4.51 |
| 361 | 12.8 | 15.2 | 39.5 | 17.9 | 4.51 |
| 360 | 12.8 | 15.0 | 33.6 | 16.2 | 4.43 |
| 359 | 12.3 | 14.5 | 33.2 | 15.2 | 4.27 |
| 358 | 11.8 | 13.9 | 32.0 | 14.5 | 4.11 |
| 357 | 11.8 | 13.1 | 30.8 | 13.8 | 4.09 |
| 356 | 11.8 | 12.8 | 25.2 | 13.1 | 3.95 |
| 350 | 7.70 | 11.8 | 19.4 | 10.5 | 3.68 |
| 340 | 5.61 | 7.30 | 15.1 | 8.20 | 3.20 |
| 330 | 4.05 | 5.61 | 12.9 | 6.82 | 2.60 |
| 320 | 3.50 | 3.72 | 10.8 | 5.80 | 2.11 |
| 300 | 2.63 | 2.54 | 8.62 | 4.63 | 1.88 |
| 270 | 2.00 | 1.92 | 7.00 | 3.51 | 1.58 |
| 240 | 1.52 | 1.45 | 5.92 | 2.81 | 1.26 |
| 210 | 1.10 | 1.17 | 5.20 | 2.27 | 1.10 |
| 183 | 0.910 | 1.03 | 4.30 | 1.86 | 0.880 |
| 150 | 0.760 | 0.860 | 3.58 | 1.50 | 0.700 |
| 130 | 0.660 | 0.810 | 3.40 | 1.30 | 0.600 |
| 120 | 0.660 | 0.760 | 3.26 | 1.21 | 0.520 |
| 110 | 0.610 | 0.710 | 2.98 | 1.14 | 0.450 |
| 100 | 0.560 | 0.660 | 2.84 | 1.07 | 0.420 |
| 90 | 0.560 | 0.610 | 2.70 | 0.980 | 0.360 |
| 80 | 0.560 | 0.610 | 2.70 | 0.930 | 0.330 |
| 70 | 0.510 | 0.560 | 2.56 | 0.860 | 0.330 |
| 60 | 0.510 | 0.510 | 2.56 | 0.810 | 0.300 |
| 50 | 0.460 | 0.460 | 2.42 | 0.750 | 0.270 |
| 40 | 0.420 | 0.420 | 2.28 | 0.660 | 0.240 |
| 30 | 0.420 | 0.420 | 2.28 | 0.600 | 0.220 |
| 25 | 0.380 | 0.380 | 2.14 | 0.560 | 0.220 |
| 20 | 0.380 | 0.380 | 2.14 | 0.520 | 0.200 |
| 15 | 0.380 | 0.380 | 2.00 | 0.480 | 0.200 |
| 10 | 0.350 | 0.350 | 1.90 | 0.420 | 0.200 |
| 9 | 0.350 | 0.350 | 1.90 | 0.420 | 0.200 |
| 8 | 0.350 | 0.350 | 1.90 | 0.410 | 0.200 |
| 7 | 0.350 | 0.350 | 1.90 | 0.400 | 0.200 |
| 6 | 0.350 | 0.350 | 1.90 | 0.390 | 0.200 |
| 5 | 0.350 | 0.350 | 1.90 | 0.370 | 0.200 |
| 4 | 0.350 | 0.350 | 1.90 | 0.350 | 0.180 |
| 3 | 0.320 | 0.320 | 1.80 | 0.330 | 0.180 |
| 2 | 0.320 | 0.320 | 1.80 | 0.300 | 0.160 |
| 1 | 0.320 | 0.320 | 1.80 | 0.270 | 0.160 |
| 0 | 0.320 | 0.320 | 1.80 | 0.160 | 0.160 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
18 Tage Randeis
²Vorsicht: 1.4% Lücken im Zeitraum 1940/2012
²Ausgefallenes Abflussjahr: 1945

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 426.10 km²
PNP : NHN+ 215.20 m
Lage : 0.30 km oberhalb der Mündung links

# Q

m³/s

Pegel : Eisenach−Nessemühle Nr. 429600
Gewässer : Nesse
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.91 | 1.64 | 2.76 | 2.97 | 2.86 | 2.46 | 2.27 | 2.37 | 2.27 | 1.91 | K 1.64 | 1.55 | 1.55 | 2.00 |
| 2. | 1.91 | 1.64 | 3.30 | 2.86 | 2.86 | 2.46 | 2.27 | 1.91 | 2.00 | 1.91 | K 1.55 | 1.55 | 1.55 | 1.91 |
| 3. | 2.00 | 1.73 | 3.68 | 2.86 | 2.86 | 2.46 | 2.27 | 1.91 | 2.09 | 1.82 | K 1.55 | 1.55 | 1.64 | 1.82 |
| 4. | 2.00 | 1.91 | 3.20 | 2.86 | 2.86 | 2.97 | 2.18 | 2.09 | 1.91 | 1.73 | K 1.64 | 1.55 | 1.82 | 1.82 |
| 5. | 2.00 | 2.46 | 5.15 | 2.76 | 2.86 | 2.66 | 2.27 | 2.56 | 2.00 | 1.91 | K 1.64 | 1.82 | 1.64 | 1.82 |
| 6. | 1.91 | 2.18 | 6.54 | 2.76 | 2.76 | 2.46 | 3.08 | 2.18 | 2.00 | 2.18 | K 1.64 | 1.82 | 1.64 | 1.82 |
| 7. | 1.91 | 2.18 | 4.60 | 2.66 | 2.76 | 2.56 | 2.66 | 2.09 | 1.91 | 1.82 | K 1.64 | 1.82 | 1.55 | 1.73 |
| 8. | 1.91 | 2.18 | 5.32 | 2.66 | 2.76 | 2.46 | 2.37 | 2.00 | 1.91 | 1.73 | K 1.64 | 1.64 | 1.55 | 1.55 |
| 9. | 1.91 | 2.56 | 6.00 | 2.66 | 2.76 | 2.46 | 2.27 | 1.91 | 1.91 | 1.73 | K 1.46 | 1.64 | 1.55 | 1.64 |
| 10. | 1.82 | 2.46 | 4.83 | 2.56 | 2.76 | 2.46 | 2.18 | 1.82 | 1.82 | 1.73 | K 1.46 | 1.55 | 1.64 | 1.73 |
| 11. | 1.73 | 2.09 | 4.09 | 2.56 | 2.76 | 2.46 | 2.18 | 1.82 | 2.37 | 1.64 | K 1.55 | 1.55 | 1.91 | 1.82 |
| 12. | 1.73 | 2.18 | 3.81 | 2.56 | 2.76 | 2.46 | 2.46 | 1.91 | K 2.18 | 1.64 | K 2.18 | 1.46 | 1.55 | 1.64 |
| 13. | 1.64 | 2.18 | 4.23 | 2.56 | 2.66 | 2.56 | 2.18 | 1.82 | K 2.18 | 1.64 | K 1.73 | 1.73 | 1.46 | 1.64 |
| 14. | 1.64 | 2.27 | 4.23 | 2.56 | 2.66 | 2.56 | 2.18 | 1.91 | K 2.46 | 1.64 | K 1.55 | 1.55 | 1.46 | 1.64 |
| 15. | 1.64 | 2.76 | 3.81 | 2.76 | 2.66 | 2.46 | 2.18 | 1.82 | K 2.27 | 1.64 | K 1.55 | 1.55 | 1.46 | 2.86 |
| 16. | 1.73 | 3.08 | 3.40 | 2.66 | 2.56 | 2.46 | 2.18 | 1.91 | K 2.09 | K 1.82 | K 1.55 | 1.55 | 1.46 | 3.55 |
| 17. | 1.64 | 3.30 | 3.20 | 3.08 | 2.56 | 2.46 | 2.09 | 1.91 | K 2.37 | K 1.91 | K 1.55 | 1.55 | 1.46 | 3.08 |
| 18. | 1.73 | 2.86 | 3.20 | 2.97 | 2.56 | 2.46 | 2.00 | 1.73 | K 2.37 | K 1.73 | K 1.55 | 1.55 | 1.46 | 2.97 |
| 19. | 1.73 | 2.56 | 4.37 | 3.20 | 2.66 | 2.46 | 2.00 | 1.82 | K 2.18 | K 1.64 | K 1.64 | 1.55 | 1.46 | 2.66 |
| 20. | 1.73 | 2.56 | 7.29 | 2.86 | 2.56 | 2.46 | 2.00 | 2.76 | K 2.18 | K 1.55 | K 1.55 | 1.37 | 1.46 | 2.56 |
| 21. | 1.73 | 2.46 | 6.18 | 2.66 | 2.56 | 2.46 | 2.09 | 3.81 | K 2.27 | K 1.55 | K 1.64 | 1.37 | 1.46 | 2.56 |
| 22. | 1.82 | 2.56 | 7.67 | 2.66 | 2.56 | 2.46 | 2.00 | 2.56 | K 2.18 | K 1.55 | K 1.64 | 1.37 | 1.46 | 2.46 |
| 23. | 1.73 | 2.56 | 6.54 | 2.66 | 2.56 | 2.46 | 1.82 | 2.09 | K 2.00 | K 1.55 | K 1.64 | 1.37 | 1.46 | 6.36 |
| 24. | 1.73 | 2.66 | 5.48 | 2.66 | 2.56 | 2.46 | 1.82 | 1.91 | K 2.00 | K 2.18 | K 1.64 | 1.46 | 1.46 | 10.3 |
| 25. | 1.73 | 2.86 | 4.60 | 2.86 | 2.56 | 2.37 | 1.82 | 2.00 | K 2.00 | K 2.09 | K 1.64 | 1.37 | 1.37 | 5.83 |
| 26. | 1.73 | 2.66 | 4.09 | 2.86 | 2.56 | 2.37 | 1.82 | 2.00 | K 1.91 | K 1.73 | K 1.82 | 1.37 | 1.37 | 4.60 |
| 27. | 1.73 | 2.46 | 3.95 | 2.86 | 2.56 | 2.37 | 1.82 | 2.00 | K 1.91 | K 1.73 | K 2.09 | 1.55 | 1.46 | 4.50 |
| 28. | 1.64 | 2.46 | 3.68 | 2.86 | 2.56 | 2.27 | 1.82 | 2.18 | K 1.91 | K 1.73 | K 1.82 | 1.55 | 1.64 | 5.65 |
| 29. | 1.64 | 2.37 | 3.55 | 2.86 | 2.56 | 2.27 | 1.82 | 1.91 | K 2.18 | K 1.64 | K 1.64 | 1.46 | 2.46 | 4.50 |
| 30. | 1.64 | 2.86 | 3.30 | | 2.56 | 2.27 | 1.82 | 2.09 | K 2.27 | K 1.73 | K 1.55 | 1.55 | 2.66 | 3.95 |
| 31. | | 2.97 | 3.08 | | 2.56 | | 1.82 | | 2.00 | K 1.82 | | 1.64 | | 3.68 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13.+ | 1.+ | 1. | 10.+ | 16.+ | 28.+ | 23.+ | 18. | 10. | 20.+ | 9.+ | 20.+ | 25.+ | 8. |
| NQ | 1.64 | 1.64 | 2.76 | 2.56 | 2.56 | 2.27 | 1.82 | 1.73 | 1.82 | 1.55 | 1.46 | 1.37 | 1.37 | 1.55 |
| MQ | 1.78 | 2.44 | 4.49 | 2.77 | 2.67 | 2.47 | 2.12 | 2.09 | 2.10 | 1.76 | 1.65 | 1.55 | 1.60 | 3.12 |
| HQ | 2.18 | 4.50 | 8.86 | 3.40 | 2.97 | 4.50 | 3.95 | 5.15 | 3.20 | 3.20 | 2.97 | 3.20 | 4.50 | 12.0 |
| Tag | 1. | 17. | 5. | 17. | 1. | 4. | 6. | 21. | 29. | 24. | 12. | 8. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 15 | 28 | 16 | 17 | 15 | 13 | 13 | 13 | 11 | 10 | 10 | 10 | 20 |

| | 1939/2011 | | 1940/2012 73 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1988 | 1977 | 1963 | 1963 | 1989+ | 1989 | 1985 | 1981 | 1964 | 1964 | 1991 | 1976 | 1988 |
| NQ | 0.530 | 0.490 | 0.780 | 0.130 | 0.650 | 1.24 | 1.01 | 0.960 | 0.880 | 0.600 | 0.430 | 0.490 | 0.530 | 0.490 |
| MNQ | 1.88 | 2.11 | 2.31 | 2.52 | 2.72 | 2.91 | 2.48 | 2.14 | 1.85 | 1.87 | 1.75 | 1.76 | 1.84 | 2.08 |
| MQ | 2.78 | 3.37 | 3.71 | 3.84 | 4.34 | 3.97 | 3.38 | 2.96 | 2.58 | 2.45 | 2.20 | 2.30 | 2.70 | 3.33 |
| MHQ | 7.88 | 10.6 | 11.3 | 10.9 | 13.6 | 11.6 | 9.29 | 9.50 | 7.48 | 7.15 | 5.13 | 5.55 | 7.28 | 10.5 |
| HQ | 46.8 | 56.7 | 55.3 | 38.2 | 57.6 | 120 | 70.4 | 100 | 60.0 | 90.2 | 40.4 | 28.4 | 30.2 | 56.7 |
| Jahr | 1939 | 2002 | 1982 | 1966 | 1956 | 1994 | 1978 | 1958 | 1956 | 1981 | 2007 | 1966 | 1984 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 17 | 21 | 23 | 22 | 27 | 24 | 21 | 18 | 16 | 15 | 13 | 14 | 16 | 21 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.37 | am 20.10.2012 | 1.64 | 1.37 | 1.37 | am 20.10.2012 |
| MQ | m³/s | 2.32 | | 2.78 | 1.88 | 2.37 | |
| HQ | m³/s | 8.86 | am 05.01.2012 bei W = 94.0 cm | 8.86 | 5.15 | 12.0 | am 24.12.2012 bei W = 109 cm |
| Nq | l/(skm²) | 3.22 | | 3.85 | 3.22 | 3.22 | |
| Mq | l/(skm²) | 5.45 | | 6.51 | 4.41 | 5.56 | |
| Hq | l/(skm²) | 20.8 | | 20.8 | 12.1 | 28.2 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 172 | | 102 | 70 | 176 | |

| | | 1940/2012 (*) 73 Jahre² | | | | 1940/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.130 | am 26.02.1963 | 0.130 | 0.430 | 0.130 | am 26.02.1963 |
| MNQ | m³/s | 1.31 | | 1.69 | 1.47 | 1.36 | |
| MQ | m³/s | 3.15 | | 3.67 | 2.65 | 3.14 | |
| MHQ | m³/s | 29.8 | | 25.3 | 16.9 | 29.6 | |
| HQ | m³/s | 120 | am 13.04.1994 bei W = 320 cm | 120 | 100 | 120 | am 13.04.1994 bei W = 320 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.07 | | 3.96 | 3.44 | 3.20 | |
| Mq | l/(skm²) | 7.40 | | 8.61 | 6.21 | 7.38 | |
| MHq | l/(skm²) | 70.0 | | 59.4 | 39.7 | 69.4 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 234 | | 135 | 99 | 233 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.130 | 0.305 | 26.02.1963 | 120 | 282 | 320 | 13.04.1994 |
| 2 | 0.430 | 1.01 | 23.09.1964 | 100 | 235 | | 04.06.1958 |
| 3 | 0.490 | 1.15 | 27.09.1991 | 90.2 | 212 | | 11.08.1981 |
| 4 | 0.490 | 1.15 | 16.09.1989 | 87.0 | 204 | | 29.04.1961 |
| 5 | 0.490 | 1.15 | 02.12.1988 | 70.4 | 165 | | 23.05.1978 |
| 6 | 0.530 | 1.24 | 01.11.1976 | 60.0 | 141 | 230 | 15.07.1956 |
| 7 | 0.660 | 1.55 | 07.10.1959 | 57.6 | 135 | | 04.03.1956 |
| 8 | 0.720 | 1.69 | 15.10.1992 | 56.7 | 133 | 251 | 31.12.2002 |
| 9 | 0.750 | 1.76 | 10.11.1963 | 55.8 | 131 | | 18.03.1942 |
| 10 | 0.800 | 1.88 | 17.12.1983 | 55.3 | 130 | | 02.01.1982 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1940/2012 73 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 7.67 | 10.3 | 70.8 | 20.0 | 5.24 |
| 363 | 7.29 | 7.67 | 56.6 | 15.4 | 4.89 |
| 362 | 6.54 | 7.29 | 37.1 | 13.4 | 4.89 |
| 361 | 6.54 | 6.54 | 31.8 | 11.9 | 4.56 |
| 360 | 6.18 | 6.54 | 25.9 | 10.8 | 4.23 |
| 359 | 6.00 | 6.36 | 24.4 | 10.1 | 4.23 |
| 358 | 5.48 | 6.18 | 23.4 | 9.50 | 3.68 |
| 357 | 5.32 | 6.00 | 21.7 | 9.00 | 3.68 |
| 356 | 5.15 | 5.83 | 21.2 | 8.49 | 3.54 |
| 350 | 4.23 | 4.60 | 15.4 | 6.95 | 3.21 |
| 340 | 3.40 | 3.95 | 11.8 | 5.75 | 2.47 |
| 330 | 3.08 | 3.40 | 9.60 | 5.09 | 2.33 |
| 320 | 2.86 | 3.08 | 8.44 | 4.61 | 2.19 |
| 300 | 2.76 | 2.76 | 7.09 | 4.03 | 2.05 |
| 270 | 2.56 | 2.56 | 6.08 | 3.49 | 1.91 |
| 240 | 2.46 | 2.46 | 5.38 | 3.10 | 1.77 |
| 210 | 2.27 | 2.27 | 4.75 | 2.78 | 1.58 |
| 183 | 2.18 | 2.09 | 4.56 | 2.55 | 1.50 |
| 150 | 2.00 | 1.91 | 4.23 | 2.33 | 1.24 |
| 130 | 1.91 | 1.82 | 4.12 | 2.19 | 1.12 |
| 120 | 1.82 | 1.82 | 4.12 | 2.16 | 1.01 |
| 110 | 1.82 | 1.82 | 4.01 | 2.07 | 0.910 |
| 100 | 1.82 | 1.73 | 4.01 | 2.05 | 0.910 |
| 90 | 1.73 | 1.64 | 4.01 | 2.00 | 0.810 |
| 80 | 1.73 | 1.64 | 3.90 | 1.91 | 0.810 |
| 70 | 1.64 | 1.64 | 3.79 | 1.86 | 0.810 |
| 60 | 1.64 | 1.55 | 3.79 | 1.77 | 0.720 |
| 50 | 1.64 | 1.55 | 3.68 | 1.72 | 0.720 |
| 40 | 1.64 | 1.55 | 3.57 | 1.63 | 0.640 |
| 30 | 1.55 | 1.55 | 3.46 | 1.50 | 0.560 |
| 25 | 1.55 | 1.55 | 3.46 | 1.44 | 0.560 |
| 20 | 1.55 | 1.46 | 3.35 | 1.38 | 0.560 |
| 15 | 1.55 | 1.46 | 3.35 | 1.31 | 0.560 |
| 10 | 1.55 | 1.46 | 3.24 | 1.19 | 0.490 |
| 9 | 1.46 | 1.46 | 3.24 | 1.17 | 0.490 |
| 8 | 1.46 | 1.46 | 3.24 | 1.12 | 0.490 |
| 7 | 1.46 | 1.46 | 3.13 | 1.07 | 0.490 |
| 6 | 1.46 | 1.37 | 3.13 | 1.04 | 0.490 |
| 5 | 1.46 | 1.37 | 3.13 | 0.970 | 0.490 |
| 4 | 1.37 | 1.37 | 3.02 | 0.910 | 0.490 |
| 3 | 1.37 | 1.37 | 3.02 | 0.840 | 0.490 |
| 2 | 1.37 | 1.37 | 2.91 | 0.810 | 0.240 |
| 1 | 1.37 | 1.37 | 2.91 | 0.640 | 0.150 |
| 0 | 1.37 | 1.37 | 2.91 | 0.130 | 0.130 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Saisonal schwankend durch geologisch bedingten Übertritt von Wasser aus dem Hörselgebiet. Rückstaueinfluss von Nesse und Hörsel, HQ−Korrektur nach hydraulischer Berechnung.
65 Tage Verkrautung
²Vorsicht: 4.1% Lücken im Zeitraum 1940/2012
²Ausgefallene Abflussjahre: 1945, 1946, 1947

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 149 km²
PNP : NN + 194.32 m
Lage: 13.5 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Bischhausen Nr. 41850054
Gewässer : Wehre
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.299 | 0.264 | 2.18 | R1.58 | 1.24 | 0.594 | 0.639 | 0.752 | 0.550 | 0.693 | 0.364 | 0.301 | 0.427 | 0.453 |
| 2. | 0.297 | 0.283 | 2.68 | R1.42 | 1.18 | 0.576 | 0.637 | 0.419 | 0.454 | 0.653 | 0.358 | 0.301 | 0.488 | 0.460 |
| 3. | 0.299 | 0.307 | 2.59 | R1.29 | 1.10 | 0.550 | 0.630 | 0.430 | 0.426 | 0.625 | 0.339 | 0.286 | 0.925 | 0.454 |
| 4. | 0.309 | 0.366 | 2.39 | R1.16 | 1.08 | 0.979 | 0.633 | 0.466 | 0.365 | 0.590 | 0.336 | 0.462 | 0.965 | 0.482 |
| 5. | 0.302 | 0.603 | 5.41 | R1.08 | 1.10 | 0.759 | 0.903 | 0.628 | 0.690 | 0.594 | 0.337 | 0.433 | 0.787 | 0.624 |
| 6. | 0.311 | 0.479 | 6.71 | R1.02 | 1.05 | 0.693 | 0.960 | 0.472 | 0.557 | 1.08 | 0.335 | 0.457 | 0.650 | 0.564 |
| 7. | 0.293 | 0.649 | 5.23 | R0.968 | 1.01 | 0.723 | 0.796 | 0.449 | 0.462 | 0.684 | 0.318 | 0.414 | 0.707 | 0.527 |
| 8. | 0.297 | 0.783 | 4.73 | R0.925 | 1.42 | 0.679 | 0.710 | 0.386 | 0.634 | 0.601 | 0.305 | 0.338 | 0.703 | 0.473 |
| 9. | 0.300 | 0.967 | 4.46 | R0.891 | 1.29 | 0.696 | 0.645 | 0.328 | 0.502 | 0.588 | 0.299 | 0.330 | 0.615 | 0.472 |
| 10. | 0.298 | 0.754 | 4.01 | R0.869 | 1.19 | 0.878 | 0.654 | 0.317 | 0.528 | 0.565 | 0.293 | 0.329 | 0.740 | 0.623 |
| 11. | 0.299 | 0.582 | 3.38 | R0.847 | 1.12 | 0.830 | 0.605 | 0.319 | 0.453 | 0.537 | 0.363 | 0.322 | 0.990 | 0.562 |
| 12. | 0.299 | 0.519 | 3.18 | R0.823 | 1.03 | 0.880 | 0.645 | 0.351 | 0.541 | 0.521 | 0.442 | 0.342 | 0.770 | 0.540 |
| 13. | 0.295 | 0.583 | 3.33 | R0.794 | 0.947 | 1.31 | 0.585 | 0.319 | 0.897 | 0.482 | 0.408 | 0.332 | 0.685 | 0.532 |
| 14. | 0.298 | 0.749 | 2.84 | R0.805 | 0.900 | 1.05 | 0.570 | 0.298 | 5.36 | 0.464 | 0.343 | 0.342 | 0.636 | 0.548 |
| 15. | 0.297 | 0.982 | 2.51 | R0.967 | 0.848 | 0.954 | 0.573 | 0.298 | 2.62 | 0.444 | 0.336 | 0.568 | 0.599 | 2.59 |
| 16. | 0.298 | 2.02 | 2.16 | R0.879 | 0.847 | 0.895 | 0.558 | 0.364 | 1.99 | 0.521 | 0.322 | 0.442 | 0.590 | 3.87 |
| 17. | 0.298 | 2.36 | 1.91 | 1.74 | 0.792 | 0.889 | 0.508 | 0.337 | 3.39 | 0.463 | 0.319 | 0.378 | 0.547 | 4.94 |
| 18. | 0.295 | 1.63 | 1.71 | 1.68 | 0.806 | 0.898 | 0.509 | 0.270 | 2.69 | 0.422 | 0.313 | 0.371 | 0.542 | 4.54 |
| 19. | 0.295 | 1.25 | 4.15 | 1.98 | 0.766 | 0.888 | 0.509 | 0.298 | 2.22 | 0.393 | 0.307 | 0.338 | 0.517 | 3.44 |
| 20. | 0.294 | 1.07 | 4.69 | 1.12 | 0.671 | 0.851 | 0.484 | 1.19 | 1.90 | 0.388 | 0.310 | 0.335 | 0.497 | 2.78 |
| 21. | 0.299 | 1.52 | 5.08 | 0.916 | 0.640 | 0.853 | 0.445 | 0.731 | 1.99 | 0.390 | 0.310 | 0.339 | 0.481 | 2.37 |
| 22. | 0.294 | 1.92 | 7.66 | 0.877 | 0.628 | 1.01 | 0.425 | 0.534 | 1.59 | 0.378 | 0.309 | 0.332 | 0.454 | 2.28 |
| 23. | 0.287 | 2.22 | 6.64 | 0.974 | 0.622 | 0.907 | 0.391 | 0.426 | 1.34 | 0.373 | 0.301 | 0.334 | 0.453 | 9.74 |
| 24. | 0.281 | 2.34 | 5.52 | 1.16 | 0.608 | 0.831 | 0.340 | 0.380 | 1.15 | 0.522 | 0.312 | 0.340 | 0.472 | 9.62 |
| 25. | 0.290 | 2.16 | 4.36 | 1.44 | 0.602 | 0.806 | 0.291 | 0.465 | 1.02 | 0.969 | 0.331 | 0.337 | 0.453 | 6.02 |
| 26. | 0.290 | 1.79 | 3.59 | 1.23 | 0.596 | 0.758 | 0.286 | 0.427 | 0.911 | 0.593 | 0.328 | 0.331 | 0.451 | 4.64 |
| 27. | 0.289 | 1.54 | 3.11 | 1.09 | 0.578 | 0.734 | 0.281 | 0.399 | 0.825 | 0.617 | 0.366 | 0.373 | 0.490 | 3.91 |
| 28. | 0.277 | 1.33 | 2.71 | 1.09 | 0.547 | 0.722 | 0.274 | 0.387 | 1.05 | 0.475 | 0.325 | 0.378 | 0.456 | 3.42 |
| 29. | 0.264 | 1.20 | R2.33 | 1.19 | 0.555 | 0.694 | 0.274 | 0.360 | 1.11 | 0.421 | 0.316 | 0.369 | 0.470 | 2.89 |
| 30. | 0.264 | 2.30 | R2.11 | | 0.635 | 0.668 | 0.276 | 0.352 | 0.890 | 0.409 | 0.304 | 0.501 | 0.472 | 2.58 |
| 31. | | 2.13 | R1.81 | | 0.617 | | 0.439 | | 0.749 | 0.400 | | 0.498 | | 2.36 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29.+ | 1. | 18. | 13. | 28. | 3. | 28.+ | 18. | 4. | 23. | 10. | 3. | 1. | 1. |
| NQ | 0.264 | 0.264 | 1.71 | 0.794 | 0.547 | 0.550 | 0.274 | 0.270 | 0.365 | 0.373 | 0.293 | 0.286 | 0.427 | 0.453 |
| MQ | 0.294 | 1.21 | 3.72 | 1.13 | 0.871 | 0.818 | 0.531 | 0.438 | 1.29 | 0.544 | 0.332 | 0.373 | 0.601 | 2.56 |
| HQ | 0.541 | 4.23 | 9.72 | 3.25 | 1.64 | 1.56 | 1.56 | 2.21 | 11.2 | 2.12 | 0.541 | 0.847 | 1.79 | 17.1 |
| Tag | 6.+ | 16. | 21. | 17. | 8. | 13. | 5. | 20. | 14. | 6. | 12.+ | 4.+ | 3. | 23. |
| $h_N$ mm | 1 | 109 | 112 | 18 | 15 | 40 | 66 | 81 | 134 | 49 | 24 | 48 | 44 | 110 |
| $h_A$ mm | 5 | 22 | 67 | 19 | 16 | 14 | 10 | 8 | 23 | 10 | 6 | 7 | 10 | 46 |

| | 1969/2011 | | 1970/2012 43 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 1991 | 1977 | 1997 | 2012 | 2011 | 2012 | 2011 | 1993 + | 1993 + | 1991 | 2011 | 2011 | 1991 |
| NQ | 0.264 | 0.253 | 0.420 | 0.495 | 0.547 | 0.542 | 0.274 | 0.249 | 0.246 | 0.231 | 0.174 | 0.232 | 0.264 | 0.253 |
| MNQ | 0.691 | 0.904 | 1.11 | 1.20 | 1.31 | 1.24 | 0.988 | 0.748 | 0.589 | 0.524 | 0.506 | 0.562 | 0.687 | 0.899 |
| MQ | 1.32 | 1.98 | 2.34 | 2.30 | 2.56 | 1.89 | 1.47 | 1.20 | 0.857 | 0.713 | 0.748 | 0.875 | 1.31 | 2.02 |
| MHQ | 5.59 | 8.40 | 10.1 | 8.93 | 7.60 | 4.48 | 5.53 | 6.74 | 3.65 | 3.34 | 4.10 | 3.84 | 5.58 | 8.77 |
| HQ | 25.1 | 28.5 | 39.4 | 26.0 | 27.4 | 20.4 | 42.5 | 63.0 | 13.2 | 28.9 | 42.7 | 23.4 | 25.1 | 28.5 |
| Jahr | 1984 | 1988 | 1995 | 1984 | 1987 | 1994 | 1997 | 1981 | 1992 | 1970 | 2007 | 1970 | 1984 | 1988 |

| | 1969/2011 | | 1970/2012 43 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 74 | 77 | 68 | 53 | 61 | 54 | 71 | 80 | 81 | 65 | 68 | 62 | 73 | 79 |
| $Mh_A$ mm | 23 | 35 | 42 | 39 | 46 | 33 | 26 | 21 | 15 | 13 | 13 | 16 | 23 | 36 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.264 | am 29.11.2011 | 0.264 | 0.270 | 0.270 | am 18.06.2012 |
| MQ m³/s | 0.967 | | 1.35 | 0.586 | 1.11 | |
| HQ m³/s | 11.2 | am 14.07.2012 bei W= 148 cm | 9.72 | 11.2 | 17.1 | am 23.12.2012 bei W= 178 cm |
| Nq l/(s km²) | 1.77 | | 1.77 | 1.81 | 1.81 | |
| Mq l/(s km²) | 6.48 | | 9.06 | 3.93 | 7.41 | |
| Hq l/(s km²) | 75.1 | | 65.1 | 75.1 | 115 | |
| $h_N$ mm | 697 | | 295 | 402 | 741 | |
| $h_A$ mm | 204 | | 142 | 62 | 234 | |
| | 1970/2012 (*) 43 Jahre | | | | 1970/2012 | |
| NQ m³/s | 0.174 | am 07.09.1991 | 0.253 | 0.174 | 0.174 | am 07.09.1991 |
| MNQ m³/s | 0.398 | | 0.629 | 0.457 | 0.434 | |
| MQ m³/s | 1.52 | | 2.07 | 0.978 | 1.52 | |
| MHQ m³/s | 21.0 | | 17.0 | 12.3 | 20.4 | |
| HQ m³/s | 63.0 | am 04.06.1981 | 39.4 | 63.0 | 63.0 | am 04.06.1981 |
| $HQ_1$ m³/s | 13.2 | | 12.2 | 5.20 | 13.2 | |
| $HQ_5$ m³/s | 25.0 | | 23.4 | 14.0 | 25.0 | |
| MNq l/(s km²) | 2.67 | | 4.22 | 3.06 | 2.91 | |
| Mq l/(s km²) | 10.2 | | 13.9 | 6.55 | 10.2 | |
| MHq l/(s km²) | 141 | | 114 | 82.4 | 137 | |
| | 1970/2012 (*) 43 Jahre | | | | 1970/2012 | |
| $Mh_N$ mm | 814 | | 387 | 428 | 815 | |
| $Mh_A$ mm | 321 | | 218 | 104 | 322 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.174 | 1.17 | 07.09.1991 | 63.0 | 422 | 353 | 04.06.1981 |
| 2 | 0.231 | 1.55 | 18.08.2011 | 42.7 | 286 | 292 | 29.09.2007 |
| 3 | 0.231 | 1.55 | 14.08.1993 | 42.5 | 285 | 295 | 17.05.1997 |
| 4 | 0.260 | 1.74 | 19.07.2003 | 39.7 | 266 | 285 | 23.01.1995 |
| 5 | 0.260 | 1.74 | 27.09.1973 | 38.5 | 258 | 286 | 05.06.1979 |
| 6 | 0.268 | 1.80 | 10.09.2009 | 28.9 | 194 | 238 | 08.08.1970 |
| 7 | 0.270 | 1.81 | 18.06.2012 | 28.5 | 191 | 234 | 19.12.1988 |
| 8 | 0.275 | 1.84 | 17.08.2008 | 27.4 | 184 | 226 | 26.03.1987 |
| 9 | 0.300 | 2.01 | 06.11.1982 | 27.1 | 182 | 224 | 02.01.1987 |
| 10 | 0.301 | 2.02 | 19.08.1989 | 26.6 | 178 | 224 | 22.01.1993 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1970/2012 43 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 7.66 | 9.74 | | | |
| 364 | 6.71 | 9.62 | 29.5 | 11.6 | 3.63 |
| 363 | 6.64 | 7.66 | 21.0 | 9.56 | 3.45 |
| 362 | 5.52 | 6.71 | 17.6 | 8.49 | 3.02 |
| 361 | 5.41 | 6.64 | 17.1 | 7.65 | 2.68 |
| 360 | 5.36 | 6.02 | 14.7 | 7.07 | 2.60 |
| 359 | 5.23 | 5.52 | 14.0 | 6.68 | 2.52 |
| 358 | 5.08 | 5.41 | 12.2 | 6.22 | 2.44 |
| 357 | 4.73 | 5.36 | 11.5 | 5.95 | 2.28 |
| 356 | 4.69 | 5.23 | 11.4 | 5.67 | 2.19 |
| 350 | 3.39 | 4.54 | 8.72 | 4.61 | 2.06 |
| 340 | 2.59 | 3.39 | 6.92 | 3.55 | 1.88 |
| 330 | 2.18 | 2.68 | 5.60 | 3.03 | 1.80 |
| 320 | 1.90 | 2.28 | 4.64 | 2.69 | 1.54 |
| 300 | 1.24 | 1.31 | 3.92 | 2.19 | 1.26 |
| 270 | 0.979 | 0.990 | 3.13 | 1.77 | 0.823 |
| 240 | 0.848 | 0.851 | 2.69 | 1.48 | 0.614 |
| 210 | 0.684 | 0.694 | 2.44 | 1.24 | 0.519 |
| 183 | 0.596 | 0.622 | 2.26 | 1.07 | 0.405 |
| 150 | 0.501 | 0.542 | 2.06 | 0.861 | 0.339 |
| 130 | 0.442 | 0.488 | 1.96 | 0.761 | 0.322 |
| 120 | 0.419 | 0.472 | 1.88 | 0.727 | 0.309 |
| 110 | 0.387 | 0.456 | 1.88 | 0.701 | 0.302 |
| 100 | 0.369 | 0.445 | 1.80 | 0.661 | 0.300 |
| 90 | 0.343 | 0.426 | 1.80 | 0.641 | 0.298 |
| 80 | 0.338 | 0.393 | 1.72 | 0.601 | 0.294 |
| 70 | 0.331 | 0.378 | 1.72 | 0.576 | 0.289 |
| 60 | 0.319 | 0.358 | 1.72 | 0.534 | 0.284 |
| 50 | 0.309 | 0.339 | 1.65 | 0.501 | 0.272 |
| 40 | 0.300 | 0.334 | 1.58 | 0.463 | 0.265 |
| 30 | 0.299 | 0.322 | 1.44 | 0.426 | 0.263 |
| 25 | 0.297 | 0.317 | 1.22 | 0.421 | 0.257 |
| 20 | 0.294 | 0.310 | 1.22 | 0.397 | 0.255 |
| 15 | 0.290 | 0.304 | 1.14 | 0.381 | 0.250 |
| 10 | 0.283 | 0.299 | 1.14 | 0.341 | 0.236 |
| 9 | 0.283 | 0.298 | 1.14 | 0.335 | 0.235 |
| 8 | 0.281 | 0.293 | 1.14 | 0.328 | 0.224 |
| 7 | 0.277 | 0.291 | 1.14 | 0.320 | 0.207 |
| 6 | 0.276 | 0.291 | 1.14 | 0.306 | 0.194 |
| 5 | 0.276 | 0.286 | 1.06 | 0.300 | 0.189 |
| 4 | 0.274 | 0.281 | 1.06 | 0.292 | 0.185 |
| 3 | 0.270 | 0.276 | 1.06 | 0.279 | 0.181 |
| 2 | 0.270 | 0.276 | 1.06 | 0.265 | 0.181 |
| 1 | 0.270 | 0.274 | 1.06 | 0.254 | 0.175 |
| 0 | 0.264 | 0.270 | 0.980 | 0.174 | 0.174 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 430 km²
PNP : NN + 166.50 m
Lage: 5.0 km oberhalb der Mündung, links

# Q

m³/s

Pegel : Niddawitzhausen Nr. 41890059
Gewässer : Wehre
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.03 | 0.934 | 5.18 | R4.09 | 3.29 | 1.80 | 1.60 | 2.16 | 1.72 | 1.95 | 1.25 | 1.08 | 1.18 | 1.21 |
| 2. | 0.997 | 1.03 | 6.49 | R3.77 | 3.21 | 1.73 | 1.61 | 1.37 | 1.50 | 1.84 | 1.23 | 1.08 | 1.43 | 1.24 |
| 3. | 1.02 | 1.08 | 6.29 | R3.49 | 3.05 | 1.71 | 1.63 | 1.53 | 1.38 | 1.77 | 1.23 | 1.04 | 2.27 | 1.25 |
| 4. | 1.02 | 1.21 | 5.76 | R3.28 | 3.03 | 2.67 | 1.65 | 1.59 | 1.27 | 1.69 | 1.20 | 1.55 | 2.55 | 1.35 |
| 5. | 0.991 | 1.95 | 11.7 | R3.11 | 3.05 | 1.96 | 2.49 | 1.82 | 1.84 | 1.68 | 1.23 | 1.50 | 1.92 | 1.57 |
| 6. | 1.02 | 1.51 | 15.9 | R2.99 | 2.85 | 1.79 | 2.59 | 1.47 | 1.65 | 2.65 | 1.22 | 1.56 | 1.65 | 1.42 |
| 7. | 0.998 | 1.92 | 11.4 | R2.87 | 2.72 | 1.84 | 1.93 | 1.46 | 1.41 | 1.78 | 1.18 | 1.39 | 1.72 | 1.32 |
| 8. | 0.977 | 1.97 | 10.8 | R2.76 | 3.47 | 1.69 | 1.76 | 1.35 | 1.66 | 1.60 | 1.16 | 1.15 | 1.67 | 1.22 |
| 9. | 0.978 | 2.56 | 10.1 | R2.70 | 3.11 | 1.66 | 1.68 | 1.22 | 1.51 | 1.54 | 1.17 | 1.11 | 1.57 | 1.22 |
| 10. | 1.04 | 1.96 | 9.01 | R2.65 | 2.96 | 1.96 | 1.66 | 1.19 | 1.65 | 1.49 | 1.14 | 1.05 | 1.77 | 1.73 |
| 11. | 1.04 | 1.53 | 7.65 | R2.60 | 2.93 | 1.88 | 1.69 | 1.21 | 1.79 | 1.44 | 1.33 | 1.05 | 2.22 | 1.50 |
| 12. | 1.05 | 1.48 | 6.97 | R2.56 | 2.87 | 2.00 | 1.69 | 1.28 | 1.80 | 1.50 | 1.59 | 1.16 | 1.76 | 1.36 |
| 13. | 1.02 | 1.58 | 7.45 | R2.58 | 2.80 | 2.50 | 1.45 | 1.20 | 2.75 | 1.45 | 1.38 | 1.12 | 1.60 | 1.34 |
| 14. | 1.00 | 1.92 | 6.48 | R2.61 | 2.71 | 2.08 | 1.44 | 1.24 | 11.2 | 1.43 | 1.22 | 1.22 | 1.53 | 1.37 |
| 15. | 1.01 | 2.74 | 5.64 | R2.64 | 2.64 | 1.94 | 1.48 | 1.20 | 5.64 | 1.40 | 1.17 | 1.89 | 1.50 | 5.39 |
| 16. | 0.927 | 5.60 | 4.97 | R2.69 | 2.59 | 1.83 | 1.51 | 1.47 | 4.08 | 1.74 | 1.17 | 1.35 | 1.46 | 7.94 |
| 17. | 0.995 | 6.67 | 4.45 | R4.33 | 2.53 | 1.75 | 1.40 | 1.34 | 6.13 | 1.46 | 1.15 | 1.23 | 1.41 | 11.3 |
| 18. | 1.03 | 4.46 | 4.10 | R4.28 | 2.47 | 1.75 | 1.37 | 1.16 | 5.48 | 1.38 | 1.15 | 1.19 | 1.39 | 9.78 |
| 19. | 1.04 | 3.44 | 8.84 | R4.95 | 2.41 | 1.74 | 1.42 | 1.38 | 4.47 | 1.35 | 1.13 | 1.17 | 1.37 | 7.47 |
| 20. | 1.01 | 2.91 | 10.6 | 3.38 | 2.28 | 1.70 | 1.40 | 3.90 | 3.85 | 1.33 | 1.12 | 1.15 | 1.33 | 6.13 |
| 21. | 0.962 | 3.79 | 10.5 | 2.85 | 2.19 | 1.70 | 1.34 | 2.35 | 4.65 | 1.33 | 1.11 | 1.18 | 1.30 | 5.33 |
| 22. | 0.944 | 4.43 | 16.6 | 2.65 | 2.15 | 2.07 | 1.30 | 1.78 | 3.58 | 1.31 | 1.13 | 1.21 | 1.27 | 5.11 |
| 23. | 0.931 | 5.00 | 14.1 | 2.75 | 2.10 | 1.81 | 1.25 | 1.48 | 3.06 | 1.28 | 1.10 | 1.06 | 1.24 | 19.0 |
| 24. | 0.982 | 5.23 | 12.1 | 3.05 | 2.03 | 1.70 | 1.20 | 1.42 | 2.72 | 1.87 | 1.15 | 1.09 | 1.30 | 19.6 |
| 25. | 0.862 | 4.86 | 9.79 | 3.59 | 1.99 | 1.64 | 1.15 | 1.53 | 2.46 | 2.27 | 1.14 | 1.06 | 1.25 | 12.9 |
| 26. | 0.940 | 4.17 | 8.37 | 3.19 | 1.91 | 1.59 | 1.14 | 1.36 | 2.21 | 1.73 | 1.15 | 1.06 | 1.26 | 10.3 |
| 27. | 0.959 | 3.72 | 7.28 | 2.93 | 1.87 | 1.57 | 1.14 | 1.32 | 2.07 | 1.77 | 1.34 | 1.22 | 1.35 | 9.03 |
| 28. | 1.05 | 3.31 | 6.50 | 2.93 | 1.84 | 1.58 | 1.14 | 1.31 | 2.68 | 1.45 | 1.14 | 1.18 | 1.31 | 8.26 |
| 29. | 0.927 | 3.01 | R5.79 | 3.25 | 1.79 | 1.61 | 1.13 | 1.26 | 3.26 | 1.34 | 1.11 | 1.08 | 1.36 | 6.98 |
| 30. | 0.864 | 5.67 | R5.19 | | 1.93 | 1.60 | 1.10 | 1.24 | 2.47 | 1.37 | 1.08 | 1.38 | 1.30 | 6.33 |
| 31. | | 5.19 | R4.62 | | 1.88 | | 1.39 | | 2.12 | 1.32 | | 1.29 | | 5.83 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 1. | 18. | 12. | 29. | 27. | 30. | 18. | 4. | 23. | 30. | 3. | 1. | 1. |
| NQ | 0.862 | 0.934 | 4.10 | 2.56 | 1.79 | 1.57 | 1.10 | 1.16 | 1.27 | 1.28 | 1.08 | 1.04 | 1.18 | 1.21 |
| MQ | 0.987 | 3.12 | 8.41 | 3.16 | 2.54 | 1.83 | 1.51 | 1.52 | 3.03 | 1.60 | 1.20 | 1.22 | 1.54 | 5.67 |
| HQ | 3.04 | 12.4 | 21.8 | 6.91 | 4.30 | 3.65 | 4.73 | 6.07 | 22.0 | 4.85 | 2.15 | 3.04 | 4.30 | 33.7 |
| Tag | 28. | 16. | 22. | 17. | 5. | 4. | 5. | 20. | 14. | 6. | 29. | 4. | 3. | 23. |
| $h_N$ mm | 1 | 102 | 103 | 16 | 12 | 37 | 55 | 76 | 137 | 44 | 23 | 47 | 41 | 103 |
| $h_A$ mm | 6 | 19 | 52 | 18 | 16 | 11 | 9 | 9 | 19 | 10 | 7 | 8 | 9 | 35 |

| | 1959/2011 | | 1960/2012 53 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 1959 | 1977 | 1963 | 1963 | 1963 | 2012 | 1960 | 1960 | 1977 | 1991 | 1971 | 2011 | 1968 |
| NQ | 0.862 | 0.910 | 0.830 | 1.04 | 1.25 | 1.39 | 1.10 | 0.840 | 0.540 | 0.760 | 0.696 | 0.930 | 0.862 | 0.930 |
| MNQ | 1.77 | 2.34 | 2.62 | 2.96 | 3.11 | 3.29 | 2.65 | 2.14 | 1.75 | 1.44 | 1.38 | 1.49 | 1.77 | 2.35 |
| MQ | 2.86 | 4.30 | 4.90 | 4.98 | 5.39 | 4.68 | 3.68 | 3.15 | 2.36 | 1.96 | 1.86 | 2.08 | 2.86 | 4.38 |
| MHQ | 9.87 | 15.6 | 19.5 | 16.8 | 15.0 | 11.9 | 10.4 | 13.0 | 8.40 | 8.00 | 6.99 | 6.58 | 9.90 | 16.2 |
| HQ | 55.5 | 49.4 | 99.0 | 59.4 | 58.8 | 121 | 44.6 | 93.7 | 34.6 | 57.8 | 81.1 | 35.5 | 55.5 | 49.4 |
| Jahr | 1984 | 1986 | 1987 | 1984 | 1987 | 1961 | 1997 | 1981 | 1972 | 1981 | 2007 | 1970 | 1984 | 1986 |

| | 1959/2011 | | 1960/2012 53 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 67 | 72 | 61 | 49 | 57 | 56 | 70 | 79 | 78 | 69 | 60 | 56 | 67 | 73 |
| $Mh_A$ mm | 17 | 27 | 31 | 29 | 34 | 28 | 23 | 19 | 15 | 12 | 11 | 13 | 17 | 27 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.862 | am 25.11.2011 | 0.862 | 1.04 | 1.04 | am 03.10.2012 |
| MQ m³/s | 2.52 | | 3.36 | 1.68 | 2.78 | |
| HQ m³/s | 22.0 | am 14.07.2012 | 21.8 | 22.0 | 33.7 | am 23.12.2012 |
| Nq l/(s km²) | 2.01 | | 2.01 | 2.42 | 2.42 | |
| Mq l/(s km²) | 5.86 | | 7.83 | 3.92 | 6.47 | |
| Hq l/(s km²) | 51.2 | | 50.7 | 51.2 | 78.4 | |
| $h_N$ mm | 653 | | 271 | 382 | 694 | |
| $h_A$ mm | 185 | | 123 | 62 | 205 | |
| | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
| NQ m³/s | 0.540 | am 17.07.1960 | 0.830 | 0.540 | 0.540 | am 17.07.1960 |
| MNQ m³/s | 1.15 | | 1.62 | 1.27 | 1.23 | |
| MQ m³/s | 3.51 | | 4.52 | 2.52 | 3.52 | |
| MHQ m³/s | 39.3 | | 34.8 | 21.1 | 38.4 | |
| HQ m³/s | 121 | am 16.04.1961 | 121 | 93.7 | 121 | am 16.04.1961 |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(s km²) | 2.68 | | 3.77 | 2.96 | 2.86 | |
| Mq l/(s km²) | 8.17 | | 10.5 | 5.87 | 8.19 | |
| MHq l/(s km²) | 91.5 | | 81.0 | 49.1 | 89.4 | |
| | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
| $Mh_N$ mm | 775 | | 363 | 412 | 776 | |
| $Mh_A$ mm | 258 | | 165 | 93 | 259 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.540 | 1.26 | 17.07.1960 | 121 | 282 | 430 | 16.04.1961 |
| 2 | 0.696 | 1.62 | 13.09.1991 | 93.7 | 218 | 411 | 04.06.1981 |
| 3 | 0.760 | 1.77 | 01.08.1977 | 88.5 | 206 | 407 | 02.01.1987 |
| 4 | 0.830 | 1.93 | 22.08.1976 | 82.7 | 193 | 402 | 23.01.1995 |
| 5 | 0.862 | 2.01 | 25.11.2011 | 81.1 | 189 | 400 | 29.09.2007 |
| 6 | 0.900 | 2.09 | 06.11.1978 | 59.4 | 138 | 374 | 07.02.1984 |
| 7 | 0.910 | 2.12 | 15.12.1959 | 58.8 | 137 | 360 | 26.03.1987 |
| 8 | 0.923 | 2.15 | 25.08.1989 | 57.8 | 135 | 375 | 11.08.1981 |
| 9 | 0.930 | 2.16 | 29.10.1971 | 56.6 | 132 | 367 | 31.01.1982 |
| 10 | 0.930 | 2.16 | 30.12.1968 | 55.5 | 129 | 364 | 23.11.1984 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1960/2012 53 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 16.6 | 19.6 | | | |
| 364 | 15.9 | 19.0 | 60.6 | 21.7 | 7.56 |
| 363 | 14.1 | 16.6 | 47.8 | 18.6 | 6.59 |
| 362 | 12.1 | 15.9 | 46.4 | 16.2 | 6.17 |
| 361 | 11.7 | 14.1 | 42.8 | 15.0 | 6.04 |
| 360 | 11.4 | 12.9 | 32.3 | 13.7 | 5.75 |
| 359 | 11.2 | 12.1 | 30.9 | 12.8 | 5.12 |
| 358 | 10.8 | 11.7 | 23.5 | 12.2 | 4.60 |
| 357 | 10.6 | 11.4 | 21.8 | 11.6 | 4.60 |
| 356 | 10.5 | 11.3 | 21.6 | 11.3 | 4.60 |
| 350 | 7.65 | 10.1 | 17.1 | 9.34 | 4.25 |
| 340 | 5.79 | 7.47 | 13.8 | 7.62 | 3.68 |
| 330 | 5.18 | 6.29 | 12.0 | 6.66 | 3.56 |
| 320 | 4.43 | 5.19 | 10.9 | 5.99 | 3.24 |
| 300 | 3.28 | 3.47 | 9.32 | 5.01 | 2.40 |
| 270 | 2.71 | 2.71 | 7.32 | 4.14 | 2.10 |
| 240 | 2.15 | 2.19 | 6.59 | 3.48 | 1.92 |
| 210 | 1.83 | 1.81 | 5.89 | 3.04 | 1.80 |
| 183 | 1.69 | 1.70 | 5.33 | 2.66 | 1.52 |
| 150 | 1.50 | 1.53 | 4.42 | 2.25 | 1.29 |
| 130 | 1.40 | 1.44 | 4.22 | 2.01 | 1.20 |
| 120 | 1.37 | 1.40 | 4.09 | 1.94 | 1.17 |
| 110 | 1.34 | 1.38 | 4.05 | 1.86 | 1.14 |
| 100 | 1.27 | 1.36 | 3.96 | 1.81 | 1.12 |
| 90 | 1.23 | 1.33 | 3.83 | 1.71 | 1.10 |
| 80 | 1.21 | 1.30 | 3.70 | 1.64 | 1.08 |
| 70 | 1.17 | 1.26 | 3.57 | 1.58 | 1.05 |
| 60 | 1.15 | 1.23 | 3.44 | 1.50 | 1.03 |
| 50 | 1.13 | 1.21 | 3.32 | 1.44 | 1.01 |
| 40 | 1.09 | 1.18 | 3.20 | 1.36 | 0.991 |
| 30 | 1.05 | 1.16 | 3.08 | 1.29 | 0.960 |
| 25 | 1.04 | 1.15 | 2.96 | 1.25 | 0.912 |
| 20 | 1.02 | 1.14 | 2.96 | 1.21 | 0.900 |
| 15 | 0.997 | 1.12 | 2.84 | 1.15 | 0.890 |
| 10 | 0.977 | 1.09 | 2.72 | 1.11 | 0.830 |
| 9 | 0.962 | 1.09 | 2.72 | 1.09 | 0.780 |
| 8 | 0.959 | 1.09 | 2.72 | 1.08 | 0.780 |
| 7 | 0.944 | 1.09 | 2.60 | 1.05 | 0.780 |
| 6 | 0.940 | 1.08 | 2.54 | 1.05 | 0.780 |
| 5 | 0.934 | 1.08 | 2.54 | 1.01 | 0.660 |
| 4 | 0.931 | 1.08 | 2.51 | 0.978 | 0.660 |
| 3 | 0.931 | 1.06 | 2.48 | 0.973 | 0.600 |
| 2 | 0.927 | 1.06 | 2.41 | 0.902 | 0.600 |
| 1 | 0.864 | 1.05 | 2.39 | 0.862 | 0.600 |
| 0 | 0.862 | 1.04 | 2.38 | 0.540 | 0.540 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 14.2 km²
PNP : NHN + 191.43 m
Lage: 3.6 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Ziegenhagen 1 Nr. 41980355
Gewässer : Rautenbach
Gebiet : Werra

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | b 0.029 | b 0.016 | b 0.206 | R 0.186 | b 0.151 | b 0.065 | b 0.067 | b 0.061 | b 0.101 | e 0.048 | 0.024 | 0.010 | 0.025 | 0.024 |
| 2. | b 0.029 | b 0.022 | b 0.379 | R 0.161 | b 0.158 | b 0.063 | b 0.064 | b 0.043 | b 0.072 | e 0.041 | 0.024 | 0.009 | 0.023 | 0.027 |
| 3. | b 0.027 | b 0.025 | b 0.429 | R 0.141 | b 0.164 | b 0.062 | b 0.061 | b 0.055 | b 0.065 | e 0.037 | 0.023 | 0.008 | 0.043 | 0.028 |
| 4. | b 0.026 | b 0.039 | b 0.374 | R 0.124 | b 0.169 | b 0.078 | b 0.058 | b 0.084 | b 0.061 | e 0.035 | 0.022 | 0.030 | 0.043 | 0.035 |
| 5. | b 0.026 | b 0.081 | b 0.483 | R 0.110 | b 0.172 | b 0.064 | b 0.076 | b 0.162 | b 0.124 | e 0.032 | 0.023 | 0.032 | 0.036 | 0.056 |
| 6. | b 0.026 | b 0.052 | b 0.586 | R 0.098 | b 0.159 | b 0.062 | b 0.076 | b 0.108 | b 0.099 | e 0.040 | 0.020 | 0.043 | 0.034 | 0.041 |
| 7. | b 0.024 | b 0.062 | b 0.533 | R 0.088 | b 0.151 | b 0.063 | b 0.064 | b 0.094 | b 0.083 | e 0.029 | 0.019 | 0.028 | 0.075 | 0.033 |
| 8. | b 0.023 | b 0.054 | b 0.550 | R 0.081 | b 0.188 | b 0.058 | b 0.057 | b 0.078 | b 0.080 | e 0.029 | 0.018 | 0.020 | 0.064 | 0.029 |
| 9. | b 0.023 | b 0.087 | b 0.545 | R 0.075 | b 0.166 | b 0.063 | b 0.058 | b 0.067 | b 0.069 | e 0.028 | 0.019 | 0.018 | 0.050 | 0.027 |
| 10. | b 0.020 | b 0.068 | b 0.519 | R 0.070 | b 0.162 | b 0.068 | b 0.056 | b 0.061 | e 0.074 | e 0.028 | 0.016 | 0.016 | 0.051 | 0.063 |
| 11. | b 0.018 | b 0.055 | b 0.482 | R 0.066 | b 0.160 | b 0.067 | b 0.069 | b 0.060 | e 0.074 | e 0.027 | 0.038 | 0.015 | 0.049 | 0.050 |
| 12. | b 0.019 | b 0.052 | b 0.427 | R 0.063 | b 0.155 | b 0.066 | b 0.074 | b 0.056 | e 0.078 | e 0.026 | 0.028 | 0.019 | 0.040 | 0.041 |
| 13. | b 0.018 | b 0.057 | b 0.373 | R 0.061 | b 0.149 | b 0.074 | b 0.059 | b 0.051 | e 0.266 | e 0.026 | 0.018 | 0.016 | 0.035 | 0.038 |
| 14. | b 0.018 | b 0.097 | b 0.318 | R 0.061 | b 0.140 | b 0.070 | b 0.055 | b 0.049 | e 0.456 | e 0.025 | 0.015 | 0.018 | 0.032 | 0.039 |
| 15. | b 0.018 | b 0.094 | b 0.282 | R 0.060 | b 0.133 | b 0.067 | b 0.057 | b 0.048 | e 0.258 | e 0.025 | 0.015 | 0.040 | 0.030 | 0.193 |
| 16. | b 0.018 | b 0.143 | b 0.257 | R 0.060 | b 0.128 | b 0.067 | b 0.058 | b 0.055 | e 0.213 | e 0.024 | 0.013 | 0.025 | 0.029 | 0.254 |
| 17. | b 0.018 | b 0.183 | b 0.231 | R 0.063 | b 0.125 | b 0.067 | b 0.052 | b 0.045 | e 0.393 | e 0.023 | 0.013 | 0.020 | 0.028 | 0.280 |
| 18. | b 0.019 | b 0.156 | b 0.226 | R 0.065 | b 0.121 | b 0.070 | b 0.050 | b 0.039 | e 0.333 | e 0.023 | 0.013 | 0.017 | 0.027 | 0.335 |
| 19. | b 0.018 | b 0.125 | b 0.379 | R 0.067 | b 0.109 | b 0.072 | b 0.052 | b 0.040 | e 0.256 | e 0.020 | 0.013 | 0.015 | 0.026 | 0.293 |
| 20. | b 0.018 | b 0.107 | b 0.511 | R 0.070 | b 0.100 | b 0.072 | b 0.052 | b 0.159 | e 0.223 | e 0.019 | 0.012 | 0.015 | 0.024 | 0.253 |
| 21. | b 0.017 | b 0.162 | b 0.550 | b 0.073 | b 0.094 | b 0.077 | b 0.046 | b 0.150 | e 0.173 | e 0.022 | 0.011 | 0.014 | 0.023 | 0.216 |
| 22. | b 0.016 | b 0.199 | b 0.774 | b 0.071 | b 0.087 | b 0.095 | b 0.042 | b 0.119 | e 0.146 | e 0.020 | 0.010 | 0.013 | 0.022 | 0.231 |
| 23. | b 0.016 | b 0.223 | b 0.708 | b 0.081 | b 0.083 | b 0.086 | b 0.039 | b 0.096 | e 0.120 | e 0.021 | 0.010 | 0.013 | 0.021 | 0.614 |
| 24. | b 0.016 | b 0.224 | b 0.645 | b 0.110 | b 0.080 | b 0.085 | b 0.037 | b 0.091 | e 0.104 | e 0.029 | 0.019 | 0.013 | 0.033 | 0.859 |
| 25. | b 0.016 | b 0.205 | b 0.554 | b 0.136 | b 0.076 | b 0.084 | b 0.032 | b 0.101 | e 0.089 | e 0.033 | 0.016 | 0.012 | 0.027 | 0.751 |
| 26. | b 0.016 | b 0.173 | b 0.515 | b 0.132 | b 0.071 | b 0.083 | b 0.031 | b 0.089 | e 0.077 | e 0.028 | 0.013 | 0.011 | 0.026 | 0.537 |
| 27. | b 0.015 | b 0.152 | b 0.435 | b 0.125 | b 0.068 | b 0.079 | b 0.031 | b 0.083 | e 0.087 | e 0.027 | 0.017 | 0.013 | 0.028 | 0.486 |
| 28. | b 0.015 | b 0.135 | b 0.364 | b 0.131 | b 0.067 | b 0.079 | b 0.030 | b 0.076 | e 0.087 | e 0.026 | 0.015 | 0.013 | 0.027 | 0.439 |
| 29. | b 0.016 | b 0.125 | R 0.308 | b 0.143 | b 0.065 | b 0.075 | b 0.029 | b 0.069 | e 0.074 | e 0.023 | 0.012 | 0.013 | 0.026 | 0.388 |
| 30. | b 0.016 | b 0.227 | R 0.260 | | b 0.072 | b 0.071 | b 0.027 | b 0.063 | e 0.063 | e 0.027 | 0.011 | 0.033 | 0.026 | 0.345 |
| 31. | | b 0.218 | R 0.216 | | b 0.070 | | b 0.055 | | e 0.051 | 0.027 | | 0.029 | | 0.291 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27.+ | 1. | 1. | 15.+ | 29. | 8. | 30. | 18. | 31. | 20. | 22.+ | 3. | 23. | 1. |
| NQ | 0.015 | 0.016 | 0.206 | 0.060 | 0.065 | 0.058 | 0.027 | 0.039 | 0.051 | 0.019 | 0.010 | 0.008 | 0.021 | 0.024 |
| MQ | 0.020 | 0.117 | 0.433 | 0.096 | 0.122 | 0.072 | 0.052 | 0.078 | 0.144 | 0.028 | 0.017 | 0.019 | 0.034 | 0.235 |
| HQ | 0.029 | 0.261 | 0.887 | 0.199 | 0.209 | 0.145 | 0.181 | 0.350 | 1.16 | 0.091 | 0.119 | 0.117 | 0.104 | 0.938 |
| Tag | 1.+ | 25. | 6. | 1. | 8. | 21. | 31. | 20. | 14. | 25. | 11. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 22 | 82 | 17 | 23 | 13 | 10 | 14 | 27 | 5 | 3 | 4 | 6 | 44 |
| | 1957/2011 | | 1958/2012 55 Jahre | | | | | | | | | | | |
| Jahr | 1962 + | 1962 | 1963 | 1963 | 1963 | 1960 | 1959 | 1959 | 2003 + | 1959 + | 1959 + | 1959 | 1962 + | 1962 |
| NQ | 0.010 | 0.013 | 0.011 | 0.010 | 0.010 | 0.033 | 0.024 | 0.010 | 0.009 | 0.006 | 0.006 | 0.006 | 0.010 | 0.013 |
| MNQ | 0.045 | 0.080 | 0.099 | 0.114 | 0.113 | 0.120 | 0.069 | 0.044 | 0.034 | 0.025 | 0.023 | 0.031 | 0.044 | 0.079 |
| MQ | 0.128 | 0.218 | 0.257 | 0.244 | 0.279 | 0.229 | 0.150 | 0.114 | 0.089 | 0.055 | 0.052 | 0.079 | 0.127 | 0.219 |
| MHQ | 0.495 | 0.956 | 0.932 | 0.736 | 0.830 | 0.609 | 0.559 | 0.763 | 0.638 | 0.418 | 0.358 | 0.345 | 0.493 | 0.958 |
| HQ | 2.45 | 7.42 | 4.45 | 2.75 | 2.96 | 4.75 | 2.96 | 5.22 | 9.50 | 1.66 | 2.95 | 2.14 | 2.45 | 7.42 |
| Jahr | 1981 | 1986 | 1987 | 1980 | 1994 | 1961 | 1993 | 1981 | 1965 | 1981 | 2007 | 1960 | 1981 | 1986 |
| | 1957/2011 | | 1958/2012 55 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 23 | 41 | 48 | 43 | 52 | 42 | 28 | 21 | 17 | 10 | 9 | 15 | 23 | 41 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.008 | am 03.10.2012 | 0.015 | 0.008 | 0.008 | am 03.10.2012 |
| MQ m³/s | 0.100 | | 0.145 | 0.056 | 0.112 | |
| HQ m³/s | 1.16 | am 14.07.2012 bei W= 57 cm | 0.887 | 1.16 | 1.16 | am 14.07.2012 bei W= 57 cm |
| Nq l/(s km²) | 0.563 | | 1.06 | 0.563 | 0.563 | |
| Mq l/(s km²) | 7.04 | | 10.2 | 3.94 | 7.89 | |
| Hq l/(s km²) | 81.7 | | 62.5 | 81.7 | 81.7 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 222 | | 161 | 63 | 249 | |
| | 1958/2012 (*) 55 Jahre | | | | 1958/2012 | |
| NQ m³/s | 0.006 | am 28.08.1959 | 0.010 | 0.006 | 0.006 | am 28.08.1959 |
| MNQ m³/s | 0.015 | | 0.037 | 0.018 | 0.018 | |
| MQ m³/s | 0.157 | | 0.226 | 0.090 | 0.157 | |
| MHQ m³/s | 2.11 | | 1.72 | 1.37 | 2.13 | |
| HQ m³/s | 9.50 | am 21.07.1965 | 7.42 | 9.50 | 9.50 | am 21.07.1965 |
| $HQ_1$ m³/s | 0.671 | | 0.570 | 0.350 | 0.680 | |
| $HQ_5$ m³/s | 1.44 | | 1.30 | 0.805 | 1.44 | |
| MNq l/(s km²) | 1.06 | | 2.61 | 1.27 | 1.27 | |
| Mq l/(s km²) | 11.1 | | 15.9 | 6.34 | 11.1 | |
| MHq l/(s km²) | 149 | | 121 | 96.5 | 150 | |
| | 1958/2012 (*) 55 Jahre | | | | 1958/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 349 | | 250 | 101 | 350 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.006 | 0.423 | 29.08.2003 | 9.50 | 669 | | 21.07.1965 |
| 2 | 0.006 | 0.423 | 14.09.1991 | 7.42 | 523 | | 30.12.1986 |
| 3 | 0.006 | 0.423 | 28.08.1959 | 5.22 | 368 | | 04.06.1981 |
| 4 | 0.007 | 0.493 | 04.10.2011 | 4.75 | 335 | | 16.04.1961 |
| 5 | 0.007 | 0.493 | 10.08.2010 | 3.90 | 275 | | 19.12.1988 |
| 6 | 0.007 | 0.493 | 21.08.1989 | 3.60 | 254 | | 15.12.1980 |
| 7 | 0.007 | 0.493 | 29.08.1973 | 3.53 | 249 | | 05.06.1979 |
| 8 | 0.008 | 0.563 | 03.10.2012 | 3.15 | 222 | | 08.12.1974 |
| 9 | 0.008 | 0.563 | 03.08.1990 | 3.04 | 214 | | 04.12.1981 |
| 10 | 0.009 | 0.634 | 20.09.2008 | 2.96 | 208 | 82 | 16.03.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1958/2012 55 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 0.774 | 0.859 | | | |
| 364 | 0.708 | 0.774 | 5.26 | 1.38 | 0.497 |
| 363 | 0.645 | 0.751 | 3.68 | 1.14 | 0.449 |
| 362 | 0.586 | 0.708 | 2.31 | 0.971 | 0.422 |
| 361 | 0.554 | 0.645 | 2.21 | 0.897 | 0.346 |
| 360 | 0.554 | 0.614 | 1.90 | 0.847 | 0.346 |
| 359 | 0.550 | 0.586 | 1.89 | 0.792 | 0.346 |
| 358 | 0.545 | 0.554 | 1.70 | 0.758 | 0.294 |
| 357 | 0.533 | 0.554 | 1.67 | 0.723 | 0.276 |
| 356 | 0.519 | 0.550 | 1.60 | 0.701 | 0.276 |
| 350 | 0.435 | 0.511 | 1.29 | 0.566 | 0.264 |
| 340 | 0.318 | 0.388 | 0.954 | 0.454 | 0.233 |
| 330 | 0.226 | 0.308 | 0.790 | 0.372 | 0.174 |
| 320 | 0.188 | 0.254 | 0.689 | 0.323 | 0.150 |
| 300 | 0.152 | 0.161 | 0.595 | 0.255 | 0.106 |
| 270 | 0.104 | 0.104 | 0.422 | 0.186 | 0.068 |
| 240 | 0.081 | 0.079 | 0.322 | 0.145 | 0.055 |
| 210 | 0.071 | 0.070 | 0.276 | 0.115 | 0.045 |
| 183 | 0.064 | 0.064 | 0.213 | 0.093 | 0.036 |
| 150 | 0.054 | 0.052 | 0.174 | 0.068 | 0.024 |
| 130 | 0.040 | 0.041 | 0.159 | 0.057 | 0.017 |
| 120 | 0.033 | 0.037 | 0.153 | 0.053 | 0.017 |
| 110 | 0.030 | 0.033 | 0.145 | 0.048 | 0.016 |
| 100 | 0.028 | 0.030 | 0.140 | 0.044 | 0.015 |
| 90 | 0.026 | 0.029 | 0.134 | 0.039 | 0.013 |
| 80 | 0.024 | 0.028 | 0.129 | 0.035 | 0.011 |
| 70 | 0.021 | 0.026 | 0.120 | 0.032 | 0.011 |
| 60 | 0.020 | 0.024 | 0.115 | 0.028 | 0.011 |
| 50 | 0.019 | 0.022 | 0.109 | 0.025 | 0.011 |
| 40 | 0.017 | 0.020 | 0.105 | 0.022 | 0.007 |
| 30 | 0.016 | 0.017 | 0.098 | 0.019 | 0.007 |
| 25 | 0.016 | 0.016 | 0.095 | 0.017 | 0.007 |
| 20 | 0.014 | 0.014 | 0.091 | 0.016 | 0.007 |
| 15 | 0.014 | 0.014 | 0.086 | 0.015 | 0.007 |
| 10 | 0.013 | 0.013 | 0.083 | 0.013 | 0.007 |
| 9 | 0.013 | 0.013 | 0.082 | 0.012 | 0.007 |
| 8 | 0.012 | 0.012 | 0.081 | 0.012 | 0.007 |
| 7 | 0.012 | 0.012 | 0.081 | 0.012 | 0.007 |
| 6 | 0.012 | 0.012 | 0.081 | 0.011 | 0.007 |
| 5 | 0.011 | 0.011 | 0.080 | 0.011 | 0.007 |
| 4 | 0.011 | 0.011 | 0.078 | 0.011 | 0.007 |
| 3 | 0.011 | 0.011 | 0.078 | 0.011 | 0.007 |
| 2 | 0.010 | 0.010 | 0.077 | 0.009 | 0.007 |
| 1 | 0.009 | 0.009 | 0.076 | 0.008 | 0.007 |
| 0 | 0.008 | 0.008 | 0.073 | 0.006 | 0.006 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

01.01.2012 - 09.07.2012 Auflandung

10.07.2012 - 30.08.2012 Datenlücken der Ganglinie mit Daten des 2. Gebers und nach Erfahrungswerten ergänzt

HLUG Wiesbaden

$A_{Eo}$ : 55.5 km²
PNP : NN + 365.07 m
Lage: 202.0 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Hettenhausen Nr. 42110304
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.208 | 0.209 | 3.13 | R1.21 | 1.80 | 0.527 | 0.313 | 0.471 | 0.705 | 0.646 | 0.248 | 0.198 | 0.537 | 0.516 |
| 2. | 0.208 | 0.198 | 4.21 | R1.10 | 1.58 | 0.579 | 0.412 | 0.314 | 0.550 | 0.605 | 0.238 | 0.183 | 0.622 | 0.481 |
| 3. | 0.209 | 0.154 | 2.92 | R1.02 | 1.42 | 0.552 | 0.398 | 0.472 | 0.558 | 0.579 | 0.226 | 0.186 | 0.941 | 0.465 |
| 4. | 0.203 | 0.385 | 2.35 | R0.936 | 1.30 | 0.658 | 0.357 | 0.522 | 0.454 | 0.552 | 0.212 | 0.351 | 0.935 | 0.480 |
| 5. | 0.206 | 1.18 | 3.67 | R0.864 | 1.22 | 0.563 | 0.521 | 0.821 | 1.65 | 0.702 | 0.236 | 0.373 | 0.985 | 0.503 |
| 6. | 0.203 | 0.605 | 2.98 | R0.807 | 1.05 | 0.518 | 0.884 | 0.683 | 1.07 | 0.583 | 0.216 | 0.330 | 1.11 | R0.492 |
| 7. | 0.190 | 0.647 | 2.70 | R0.755 | 0.967 | 0.569 | 0.950 | 0.877 | 0.789 | 0.502 | 0.229 | 1.10 | 1.05 | R0.460 |
| 8. | 0.179 | 0.658 | 2.79 | R0.718 | 0.999 | 0.542 | 0.635 | 0.593 | 0.701 | 0.460 | 0.204 | 0.525 | 0.926 | R0.457 |
| 9. | 0.181 | 1.47 | 2.85 | R0.682 | 0.961 | 0.531 | 0.539 | 0.466 | 0.651 | 0.416 | 0.209 | 0.384 | 0.762 | R0.457 |
| 10. | 0.181 | 0.975 | 3.43 | R0.648 | 0.935 | 0.594 | 0.503 | 0.406 | 0.613 | 0.385 | 0.189 | 0.337 | 0.838 | R0.457 |
| 11. | 0.172 | 0.716 | 2.80 | R0.626 | 1.02 | 0.619 | 0.496 | 0.402 | 0.740 | 0.362 | 0.217 | 0.304 | 0.898 | R0.428 |
| 12. | 0.162 | 0.833 | 3.03 | R0.610 | 1.09 | 0.618 | 0.684 | 0.422 | 0.887 | 0.330 | 0.440 | 0.297 | 0.741 | R0.441 |
| 13. | 0.164 | 0.858 | 2.99 | R0.595 | 1.00 | 0.657 | 0.503 | 0.562 | 1.34 | 0.304 | 0.322 | 0.289 | 0.648 | 0.428 |
| 14. | 0.167 | 1.38 | 2.37 | R0.580 | 0.930 | 0.576 | 0.460 | 0.527 | 3.50 | 0.297 | 0.237 | 0.325 | 0.604 | 0.436 |
| 15. | 0.178 | 1.48 | 2.03 | R0.576 | 0.878 | 0.525 | 0.473 | 0.431 | 2.43 | 0.295 | 0.229 | 0.453 | 0.570 | 2.92 |
| 16. | 0.170 | 3.25 | 1.79 | R0.538 | 0.848 | 0.503 | 0.578 | 0.436 | 1.98 | 0.397 | 0.230 | 0.387 | 0.549 | 4.42 |
| 17. | 0.158 | 2.25 | 1.62 | R0.570 | 0.820 | 0.497 | 0.492 | 0.422 | 2.47 | 0.309 | 0.211 | 0.337 | 0.525 | 3.87 |
| 18. | 0.159 | 1.58 | 1.46 | 0.755 | 0.860 | 0.471 | 0.428 | 0.360 | 2.04 | 0.276 | 0.208 | 0.298 | 0.498 | 3.67 |
| 19. | 0.159 | 1.28 | 3.82 | 2.34 | 0.858 | 0.456 | 0.418 | 0.346 | 1.63 | 0.262 | 0.242 | 0.266 | 0.498 | 2.56 |
| 20. | 0.159 | 1.13 | 3.35 | 0.878 | 0.775 | 0.431 | 0.388 | 0.492 | 1.42 | 0.250 | 0.207 | 0.263 | 0.479 | 2.10 |
| 21. | 0.159 | 1.06 | 3.43 | 0.687 | 0.708 | 0.438 | 0.355 | 0.850 | 1.33 | 0.238 | 0.185 | 0.247 | 0.454 | 1.86 |
| 22. | 0.184 | 1.19 | 4.51 | 0.661 | 0.668 | 0.447 | 0.347 | 0.606 | 1.18 | 0.293 | 0.215 | 0.241 | 0.438 | 1.91 |
| 23. | 0.168 | 3.28 | 3.45 | 0.751 | 0.647 | 0.435 | 0.345 | 0.457 | 1.05 | 0.252 | 0.188 | 0.236 | 0.420 | 10.3 |
| 24. | 0.150 | 3.56 | 2.83 | 1.66 | 0.616 | 0.451 | 0.327 | 0.447 | 0.984 | 0.326 | 0.190 | 0.284 | 0.407 | 6.27 |
| 25. | 0.117 | 2.38 | 2.44 | 2.17 | 0.591 | 0.468 | 0.341 | 0.666 | 0.894 | 0.363 | 0.217 | 0.248 | 0.376 | 4.05 |
| 26. | 0.129 | 2.49 | 2.15 | 1.29 | 0.580 | 0.417 | 0.314 | 0.483 | 0.841 | 0.331 | 0.315 | 0.247 | 0.396 | 4.89 |
| 27. | 0.161 | 2.50 | 1.94 | 1.01 | 0.575 | 0.379 | 0.298 | 0.424 | 0.782 | 0.373 | 0.422 | 0.326 | 0.493 | 5.21 |
| 28. | 0.153 | 2.13 | R1.75 | 1.09 | 0.566 | 0.348 | 0.302 | 0.495 | 0.918 | 0.263 | 0.281 | 0.283 | 0.455 | 6.29 |
| 29. | 0.148 | 1.81 | R1.60 | 2.06 | 0.543 | 0.349 | 0.292 | 0.410 | 1.05 | 0.243 | 0.222 | 0.263 | 0.690 | 4.17 |
| 30. | 0.143 | 1.75 | R1.45 | | 0.785 | 0.331 | 0.291 | 0.413 | 0.820 | 0.310 | 0.205 | 0.358 | 0.615 | 3.48 |
| 31. | | 1.54 | R1.32 | | 0.705 | | 0.306 | | 0.700 | 0.266 | | 0.474 | | 2.90 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 3. | 31. | 16. | 29. | 30. | 30. | 2. | 4. | 21. | 21. | 2. | 25. | 11.+ |
| NQ | 0.117 | 0.154 | 1.32 | 0.538 | 0.543 | 0.331 | 0.291 | 0.314 | 0.454 | 0.238 | 0.185 | 0.183 | 0.376 | 0.428 |
| MQ | 0.171 | 1.45 | 2.68 | 0.972 | 0.913 | 0.502 | 0.450 | 0.509 | 1.18 | 0.380 | 0.240 | 0.335 | 0.649 | 2.50 |
| HQ | 0.351 | 7.01 | 9.63 | 4.84 | 2.31 | 0.929 | 1.32 | 1.71 | 5.12 | 1.15 | 0.811 | 1.71 | 1.63 | 20.2 |
| Tag | 7.+ | 16. | 19. | 19. | 1. | 17. | 6. | 6. | 14. | 5. | 11.+ | 7. | 3. | 23. |
| $h_N$ mm | 2 | 178 | 146 | 35 | 28 | 39 | 81 | 136 | 150 | 69 | 59 | 72 | 64 | 182 |
| $h_A$ mm | 8 | 70 | 129 | 44 | 44 | 23 | 22 | 24 | 57 | 18 | 11 | 16 | 30 | 121 |
| | 1971/2011 | | 1972/2012 41 Jahre | | | | | | | | | | | |
| Jahr | 2011 | 1991 | 1972 + | 1972 | 1972 | 1991 | 2011 | 2011 | 1976 | 1976 | 1976 + | 2003 | 2011 | 1991 |
| NQ | 0.117 | 0.124 | 0.200 | 0.200 | 0.200 | 0.254 | 0.169 | 0.109 | 0.090 | 0.080 | 0.090 | 0.083 | 0.117 | 0.124 |
| MNQ | 0.382 | 0.542 | 0.650 | 0.656 | 0.723 | 0.703 | 0.403 | 0.317 | 0.285 | 0.220 | 0.214 | 0.270 | 0.387 | 0.546 |
| MQ | 0.862 | 1.34 | 1.56 | 1.34 | 1.57 | 1.29 | 0.731 | 0.591 | 0.535 | 0.395 | 0.417 | 0.552 | 0.870 | 1.39 |
| MHQ | 3.98 | 6.39 | 7.83 | 5.60 | 5.42 | 4.52 | 2.75 | 2.84 | 3.56 | 2.29 | 2.65 | 2.59 | 3.95 | 6.84 |
| HQ | 12.4 | 19.1 | 24.5 | 20.2 | 16.0 | 18.0 | 13.3 | 13.1 | 26.0 | 22.7 | 30.4 | 9.90 | 12.4 | 20.2 |
| Jahr | 1998 | 1978 | 1995 | 2002 | 1979 | 1994 | 2004 | 1972 | 1980 | 1981 | 2007 | 1998 | 1998 | 2012 |
| | 1971/2011 | | 1972/2012 41 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 88 | 101 | 88 | 73 | 79 | 66 | 86 | 102 | 108 | 87 | 82 | 86 | 88 | 104 |
| $Mh_A$ mm | 40 | 65 | 75 | 60 | 76 | 60 | 35 | 28 | 26 | 19 | 19 | 27 | 41 | 67 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.117 | am 25.11.2011 | 0.117 | 0.183 | 0.183 | am 02.10.2012 |
| MQ m³/s | 0.820 | | 1.12 | 0.518 | 0.948 | |
| HQ m³/s | 9.63 | am 19.01.2012 bei W= 175 cm | 9.63 | 5.12 | 20.2 | am 23.12.2012 bei W= 218 cm |
| Nq l/(s km²) | 2.11 | | 2.11 | 3.30 | 3.30 | |
| Mq l/(s km²) | 14.8 | | 20.3 | 9.33 | 17.1 | |
| Hq l/(s km²) | 174 | | 174 | 92.3 | 364 | |
| $h_N$ mm | 995 | | 428 | 567 | 1061 | |
| $h_A$ mm | 466 | | 319 | 148 | 540 | |
| | 1972/2012 (*) 41 Jahre | | | | 1972/2012 | |
| NQ m³/s | 0.080 | am 25.08.1976 | 0.117 | 0.080 | 0.080 | am 25.08.1976 |
| MNQ m³/s | 0.172 | | 0.304 | 0.183 | 0.180 | |
| MQ m³/s | 0.930 | | 1.33 | 0.537 | 0.935 | |
| MHQ m³/s | 14.1 | | 11.9 | 7.21 | 14.3 | |
| HQ m³/s | 30.4 | am 28.09.2007 bei W= 251 cm | 24.5 | 30.4 | 30.4 | am 28.09.2007 bei W= 251 cm |
| $HQ_1$ m³/s | 8.33 | | 7.10 | 2.98 | 8.71 | |
| $HQ_5$ m³/s | 15.2 | | 14.8 | 8.26 | 17.5 | |
| MNq l/(s km²) | 3.10 | | 5.48 | 3.30 | 3.24 | |
| Mq l/(s km²) | 16.8 | | 24.0 | 9.68 | 16.8 | |
| MHq l/(s km²) | 254 | | 214 | 130 | 258 | |
| | 1972/2012 (*) 41 Jahre | | | | 1972/2012 | |
| $Mh_N$ mm | 1045 | | 495 | 550 | 1048 | |
| $Mh_A$ mm | 528 | | 377 | 154 | 533 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.080 | 1.44 | 25.08.1976 | 30.4 | 548 | 251 | 28.09.2007 |
| 2 | 0.083 | 1.50 | 03.10.2003 | 26.0 | 468 | 238 | 21.07.1980 |
| 3 | 0.089 | 1.60 | 14.08.2008 | 24.3 | 438 | 233 | 23.01.1995 |
| 4 | 0.090 | 1.62 | 01.09.1991 | 22.7 | 409 | 227 | 10.08.1981 |
| 5 | 0.109 | 1.96 | 16.06.2011 | 22.7 | 409 | 227 | 12.07.1978 |
| 6 | 0.119 | 2.14 | 21.09.1999 | 21.8 | 393 | 224 | 13.01.2011 |
| 7 | 0.120 | 2.16 | 31.08.1983 | 20.5 | 369 | 220 | 02.01.2003 |
| 8 | 0.120 | 2.16 | 18.09.1982 | 20.2 | 364 | 218 | 23.12.2012 |
| 9 | 0.120 | 2.16 | 08.08.1975 | 20.2 | 364 | 218 | 13.02.2002 |
| 10 | 0.120 | 2.16 | 04.10.1973 | 19.4 | 350 | 215 | 05.01.1982 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1972/2012 41 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.51 | 10.3 | | | |
| 364 | 4.21 | 6.29 | 15.6 | 7.33 | 3.12 |
| 363 | 3.82 | 6.27 | 12.0 | 6.26 | 2.80 |
| 362 | 3.67 | 5.21 | 10.0 | 5.67 | 2.20 |
| 361 | 3.56 | 4.89 | 9.78 | 5.00 | 2.00 |
| 360 | 3.50 | 4.51 | 8.96 | 4.62 | 1.92 |
| 359 | 3.45 | 4.42 | 7.18 | 4.35 | 1.92 |
| 358 | 3.45 | 4.21 | 6.83 | 4.10 | 1.84 |
| 357 | 3.43 | 4.17 | 6.46 | 3.93 | 1.84 |
| 356 | 3.35 | 4.05 | 6.26 | 3.73 | 1.76 |
| 350 | 2.98 | 3.48 | 5.80 | 3.01 | 1.68 |
| 340 | 2.44 | 2.92 | 4.38 | 2.43 | 1.46 |
| 330 | 2.06 | 2.43 | 3.40 | 2.05 | 0.983 |
| 320 | 1.66 | 1.98 | 3.00 | 1.79 | 0.895 |
| 300 | 1.28 | 1.30 | 2.40 | 1.45 | 0.651 |
| 270 | 0.894 | 0.926 | 1.71 | 1.12 | 0.479 |
| 240 | 0.705 | 0.718 | 1.33 | 0.872 | 0.387 |
| 210 | 0.594 | 0.610 | 1.13 | 0.711 | 0.318 |
| 183 | 0.527 | 0.549 | 0.990 | 0.597 | 0.281 |
| 150 | 0.438 | 0.479 | 0.860 | 0.481 | 0.200 |
| 130 | 0.388 | 0.453 | 0.800 | 0.424 | 0.180 |
| 120 | 0.360 | 0.435 | 0.750 | 0.401 | 0.167 |
| 110 | 0.341 | 0.420 | 0.700 | 0.371 | 0.167 |
| 100 | 0.325 | 0.398 | 0.650 | 0.347 | 0.147 |
| 90 | 0.304 | 0.373 | 0.650 | 0.327 | 0.147 |
| 80 | 0.289 | 0.347 | 0.600 | 0.301 | 0.145 |
| 70 | 0.262 | 0.327 | 0.600 | 0.277 | 0.132 |
| 60 | 0.241 | 0.309 | 0.560 | 0.257 | 0.132 |
| 50 | 0.222 | 0.293 | 0.520 | 0.237 | 0.120 |
| 40 | 0.209 | 0.266 | 0.480 | 0.218 | 0.116 |
| 30 | 0.198 | 0.243 | 0.480 | 0.201 | 0.116 |
| 25 | 0.185 | 0.237 | 0.480 | 0.185 | 0.100 |
| 20 | 0.179 | 0.229 | 0.440 | 0.176 | 0.100 |
| 15 | 0.167 | 0.216 | 0.440 | 0.161 | 0.100 |
| 10 | 0.161 | 0.208 | 0.400 | 0.143 | 0.100 |
| 9 | 0.161 | 0.207 | 0.400 | 0.141 | 0.100 |
| 8 | 0.159 | 0.205 | 0.400 | 0.140 | 0.100 |
| 7 | 0.158 | 0.204 | 0.400 | 0.131 | 0.098 |
| 6 | 0.154 | 0.198 | 0.400 | 0.130 | 0.098 |
| 5 | 0.153 | 0.190 | 0.400 | 0.121 | 0.096 |
| 4 | 0.150 | 0.189 | 0.400 | 0.120 | 0.094 |
| 3 | 0.148 | 0.188 | 0.400 | 0.113 | 0.093 |
| 2 | 0.143 | 0.186 | 0.400 | 0.101 | 0.090 |
| 1 | 0.129 | 0.185 | 0.400 | 0.100 | 0.089 |
| 0 | 0.117 | 0.183 | 0.370 | 0.080 | 0.080 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 561 km²
PNP : NN + 232.08 m
Lage: 172.0 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Kämmerzell Nr. 42350057
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.56 | 1.34 | 13.7 | R 6.30 | 5.87 | 3.00 | 2.39 | K 2.69 | K 3.88 | K 4.48 | K 1.96 | K 1.20 | K 2.79 | K 3.22 |
| 2. | 1.49 | 1.36 | 24.4 | 5.36 | 5.55 | 2.69 | 3.34 | K 1.51 | K 3.43 | K 3.73 | K 1.76 | K 1.17 | K 3.06 | K 2.98 |
| 3. | 1.47 | 1.58 | 24.0 | 4.31 | 5.11 | 2.69 | 3.05 | K 1.99 | K 3.12 | K 3.39 | K 1.62 | K 1.17 | K 6.33 | K 2.97 |
| 4. | 1.44 | 4.05 | 16.7 | 4.00 | 4.83 | 4.24 | 2.50 | K 3.56 | K 2.41 | K 3.10 | K 1.59 | K 3.52 | K 10.2 | K 3.35 |
| 5. | 1.47 | 15.3 | 32.4 | 3.64 | 4.93 | 3.10 | 3.24 | K 5.19 | K 6.19 | K 3.85 | K 1.51 | K 3.62 | K 8.50 | K 4.24 |
| 6. | 1.44 | 6.23 | 53.3 | 3.58 | 4.89 | 2.88 | 5.80 | K 2.80 | K 6.85 | K 4.76 | K 1.57 | K 2.12 | K 8.51 | K 4.07 |
| 7. | 1.42 | 6.46 | 25.0 | 3.48 | 4.51 | 3.00 | 6.34 | K 5.14 | K 4.44 | K 3.25 | K 1.47 | K 10.1 | K 6.33 | K 3.46 |
| 8. | 1.42 | 7.89 | 23.3 | 3.66 | 5.07 | 2.94 | 4.00 | K 3.28 | K 3.93 | K 2.86 | K 1.39 | K 4.18 | K 5.56 | K 3.18 |
| 9. | 1.43 | 10.5 | 20.3 | 3.44 | 4.82 | 2.71 | 3.35 | K 2.03 | K 3.91 | K 2.79 | K 1.29 | K 2.52 | K 4.66 | K 2.66 |
| 10. | 1.40 | 8.54 | 20.5 | 3.49 | 4.43 | 3.35 | 3.27 | K 1.61 | K 3.32 | K 2.64 | K 1.27 | K 1.87 | K 6.14 | K 3.58 |
| 11. | 1.38 | 5.00 | 16.4 | 3.02 | 4.49 | 3.81 | 4.20 | K 1.60 | K 7.05 | K 2.43 | K 1.64 | K 1.56 | K 8.45 | K 3.21 |
| 12. | 1.36 | 4.63 | 14.8 | 2.87 | 4.61 | 3.66 | 5.53 | K 1.87 | K 7.24 | K 2.31 | K 4.88 | K 1.95 | K 5.46 | K 3.04 |
| 13. | 1.31 | 6.10 | 17.2 | 3.27 | 4.39 | 3.99 | 3.32 | K 9.89 | K 11.1 | K 2.10 | K 3.35 | K 1.72 | K 4.51 | K 2.87 |
| 14. | 1.32 | 8.57 | 13.5 | 3.42 | 4.21 | 3.46 | 2.97 | K 5.77 | K 25.9 | K 2.07 | K 1.57 | K 2.37 | K 3.95 | K 3.45 |
| 15. | 1.33 | 13.1 | 11.4 | 3.78 | 4.00 | 3.19 | 3.28 | K 2.84 | K 22.0 | K 2.04 | K 1.32 | K 4.59 | K 3.61 | K 25.1 |
| 16. | 1.37 | 20.8 | 9.74 | 3.32 | 3.82 | 3.10 | 3.99 | K 3.40 | K 14.6 | K 3.15 | K 1.28 | K 2.76 | K 3.36 | K 37.7 |
| 17. | 1.33 | 28.4 | 8.48 | 3.65 | 3.78 | 2.95 | 3.10 | K 2.87 | K 12.9 | K 4.06 | K 1.20 | K 1.95 | K 3.14 | K 33.2 |
| 18. | 1.32 | 12.3 | 7.41 | 5.06 | 3.96 | 2.87 | 2.87 | K 1.93 | K 12.1 | K 2.30 | K 1.19 | K 1.64 | K 3.00 | K 24.8 |
| 19. | 1.42 | 8.87 | 13.9 | 17.6 | 4.36 | 2.95 | 3.11 | K 1.59 | K 8.80 | K 2.14 | K 1.18 | K 1.49 | K 2.87 | K 16.9 |
| 20. | 1.24 | 7.27 | 29.8 | 6.00 | 3.81 | 2.87 | K 2.95 | K 6.55 | K 7.20 | K 1.98 | K 1.13 | K 1.39 | K 2.72 | K 13.0 |
| 21. | 1.29 | 7.25 | 20.8 | 3.88 | 3.61 | 2.94 | K 2.80 | K 7.31 | K 7.31 | K 1.95 | K 1.11 | K 1.31 | K 2.63 | 11.5 |
| 22. | 1.29 | 10.2 | 39.2 | 3.38 | 3.46 | 3.16 | K 2.49 | K 4.29 | K 6.23 | K 2.17 | K 1.44 | K 1.29 | K 2.41 | 11.0 |
| 23. | 1.29 | 16.4 | 27.7 | 3.42 | 3.40 | 3.22 | K 2.19 | K 2.42 | K 5.19 | K 2.05 | K 1.09 | K 1.29 | K 2.41 | 28.7 |
| 24. | 1.29 | 19.2 | R 20.8 | 4.23 | 3.29 | 3.08 | K 1.85 | K 2.06 | K 4.67 | K 3.75 | K 1.13 | K 1.33 | K 2.32 | 57.2 |
| 25. | 1.24 | 13.8 | R 16.7 | 6.51 | 3.09 | 3.66 | K 1.70 | K 4.33 | K 4.21 | K 4.91 | K 1.34 | K 1.30 | K 2.29 | 23.1 |
| 26. | 1.21 | 11.5 | R 13.8 | 5.20 | 2.99 | 2.91 | K 1.62 | K 2.81 | K 3.97 | K 3.56 | K 2.04 | K 1.51 | K 2.35 | 27.1 |
| 27. | 1.22 | 10.8 | D 12.0 | 4.30 | 2.98 | 2.73 | K 1.52 | K 2.04 | K 3.62 | K 3.75 | K 2.95 | K 2.41 | K 3.04 | 35.5 |
| 28. | 1.27 | 9.56 | D 10.7 | 3.92 | 2.93 | 2.56 | K 1.47 | K 2.15 | K 5.85 | K 2.92 | K 1.86 | K 1.76 | K 3.01 | 56.6 |
| 29. | 1.29 | 8.46 | D 9.53 | 5.47 | 2.94 | 2.44 | K 1.44 | K 1.72 | K 16.8 | K 2.57 | K 1.28 | K 1.57 | K 3.50 | 29.8 |
| 30. | 1.28 | 12.9 | D 8.44 | | 3.06 | 2.34 | K 1.34 | K 3.00 | K 9.44 | K 2.61 | K 1.17 | K 2.26 | K 3.66 | 22.2 |
| 31. | | 11.1 | D 7.31 | | 3.25 | | K 1.52 | | K 5.56 | K 2.46 | | K 3.23 | | 18.8 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 1. | 31. | 12. | 28. | 30. | 30. | 2. | 4. | 21. | 23. | 2.+ | 25. | 9. |
| NQ | 1.21 | 1.34 | 7.31 | 2.87 | 2.93 | 2.34 | 1.34 | 1.51 | 2.41 | 1.95 | 1.09 | 1.17 | 2.29 | 2.66 |
| MQ | 1.35 | 9.98 | 18.8 | 4.61 | 4.08 | 3.08 | 2.99 | 3.34 | 7.85 | 2.97 | 1.65 | 2.33 | 4.36 | 16.7 |
| HQ | 2.26 | 39.1 | 73.2 | 30.4 | 6.71 | 5.25 | 14.4 | 13.7 | 36.0 | 8.99 | 5.29 | 14.8 | 16.7 | 75.0 |
| Tag | 7. | 17. | 6. | 19. | 1. | 4. | 11. | 13. | 14. | 6. | 12. | 7. | 4. | 28. |
| $h_N$ mm | 2 | 147 | 117 | 27 | 20 | 36 | 72 | 121 | 128 | 58 | 49 | 66 | 51 | 141 |
| $h_A$ mm | 6 | 48 | 90 | 21 | 19 | 14 | 14 | 15 | 37 | 14 | 8 | 11 | 20 | 80 |
| | 1953/2011 | | 1954/2012 59 Jahre | | | | | | | | | | | |
| Jahr | 1964 | 1991 | 1963 | 1963 | 1963 | 2011 | 2011 | 2004 | 1964 | 1991 | 2004 | 1976 | 1964 | 1991 |
| NQ | 1.00 | 0.955 | 1.28 | 1.20 | 1.20 | 1.82 | 1.27 | 1.02 | 0.830 | 0.845 | 0.603 | 0.900 | 1.00 | 0.955 |
| MNQ | 2.78 | 4.06 | 4.74 | 4.89 | 5.09 | 4.63 | 3.09 | 2.61 | 2.18 | 1.86 | 1.80 | 2.16 | 2.78 | 4.06 |
| MQ | 5.84 | 9.96 | 11.2 | 10.3 | 10.2 | 8.02 | 5.19 | 4.37 | 3.85 | 3.09 | 2.92 | 3.97 | 5.86 | 10.2 |
| MHQ | 25.5 | 47.0 | 53.1 | 40.9 | 35.7 | 25.4 | 17.5 | 16.5 | 15.9 | 14.0 | 11.9 | 16.0 | 25.7 | 48.2 |
| HQ | 133 | 170 | 198 | 170 | 126 | 123 | 77.0 | 63.5 | 69.1 | 112 | 86.8 | 89.4 | 133 | 170 |
| Jahr | 1998 | 1967 | 2003 | 1984 | 1986 | 1986 | 2004 | 1981 | 1980 | 1981 | 2007 | 1998 | 1998 | 1967 |
| | 1953/2011 | | 1954/2012 59 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 76 | 92 | 78 | 61 | 64 | 58 | 69 | 78 | 82 | 77 | 66 | 69 | 76 | 94 |
| $Mh_A$ mm | 27 | 48 | 53 | 46 | 49 | 37 | 25 | 20 | 18 | 15 | 13 | 19 | 27 | 49 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 1.09 | am 23.09.2012 | 1.21 | 1.09 | 1.09 | am 23.09.2012 |
| MQ m³/s | 5.29 | | 7.06 | 3.53 | 6.11 | |
| HQ m³/s | 73.2 | am 06.01.2012 bei W= 369 cm | 73.2 | 36.0 | 75.0 | am 28.12.2012 bei W= 371 cm |
| Nq l/(s km²) | 1.94 | | 2.16 | 1.94 | 1.94 | |
| Mq l/(s km²) | 9.43 | | 12.6 | 6.30 | 10.9 | |
| Hq l/(s km²) | 130 | | 130 | 64.2 | 134 | |
| $h_N$ mm | 843 | | 349 | 494 | 886 | |
| $h_A$ mm | 297 | | 198 | 100 | 344 | |
| | 1954/2012 (*) 59 Jahre | | | | 1954/2012 | |
| NQ m³/s | 0.603 | am 19.09.2004 | 0.955 | 0.603 | 0.603 | am 19.09.2004 |
| MNQ m³/s | 1.45 | | 2.46 | 1.55 | 1.54 | |
| MQ m³/s | 6.56 | | 9.25 | 3.90 | 6.58 | |
| MHQ m³/s | 90.2 | | 87.0 | 33.8 | 88.7 | |
| HQ m³/s | 198 | am 03.01.2003 bei W= 444 cm | 198 | 112 | 198 | am 03.01.2003 bei W= 444 cm |
| $HQ_1$ m³/s | 43.7 | | 40.5 | 16.8 | 43.8 | |
| $HQ_5$ m³/s | 102 | | 102 | 34.7 | 102 | |
| MNq l/(s km²) | 2.58 | | 4.39 | 2.76 | 2.75 | |
| Mq l/(s km²) | 11.7 | | 16.5 | 6.95 | 11.7 | |
| MHq l/(s km²) | 161 | | 155 | 60.2 | 158 | |
| | 1954/2012 (*) 59 Jahre | | | | 1954/2012 | |
| $Mh_N$ mm | 869 | | 428 | 441 | 872 | |
| $Mh_A$ mm | 369 | | 259 | 111 | 371 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.603 | 1.07 | 19.09.2004 | 198 | 353 | 444 | 03.01.2003 |
| 2 | 0.683 | 1.22 | 16.09.1991 | 191 | 340 | 443 | 23.01.1995 |
| 3 | 0.750 | 1.34 | 06.09.1964 | 170 | 303 | 432 | 07.02.1984 |
| 4 | 0.800 | 1.43 | 17.09.1976 | 170 | 303 | 432 | 24.12.1967 |
| 5 | 0.852 | 1.52 | 10.09.2001 | 154 | 275 | 421 | 06.12.1965 |
| 6 | 0.915 | 1.63 | 04.09.2011 | 139 | 248 | 409 | 23.02.1970 |
| 7 | 0.969 | 1.73 | 22.09.2003 | 134 | 239 | 416 | 12.01.1993 |
| 8 | 0.972 | 1.73 | 24.09.2006 | 134 | 239 | 404 | 17.12.1974 |
| 9 | 1.00 | 1.78 | 18.08.2008 | 133 | 237 | 413 | 21.12.1993 |
| 10 | 1.01 | 1.80 | 06.09.2005 | 133 | 237 | 405 | 11.12.1966 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalenderjahr 2012 | 1954/2012 59 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 53.3 | 57.2 | | | |
| 364 | 39.2 | 56.6 | 158 | 57.1 | 13.2 |
| 363 | 32.4 | 53.3 | 91.1 | 48.0 | 12.8 |
| 362 | 29.8 | 39.2 | 87.9 | 40.8 | 10.8 |
| 361 | 28.4 | 37.7 | 71.5 | 36.5 | 8.92 |
| 360 | 27.7 | 35.5 | 67.8 | 34.2 | 8.21 |
| 359 | 25.9 | 33.2 | 65.9 | 31.9 | 7.40 |
| 358 | 25.0 | 32.4 | 64.2 | 30.4 | 7.40 |
| 357 | 24.4 | 32.4 | 58.1 | 29.1 | 7.23 |
| 356 | 24.0 | 29.8 | 50.4 | 27.7 | 7.23 |
| 350 | 20.5 | 25.0 | 39.2 | 21.9 | 6.01 |
| 340 | 15.3 | 20.5 | 30.3 | 17.0 | 5.02 |
| 330 | 12.9 | 14.8 | 26.0 | 14.1 | 4.76 |
| 320 | 10.5 | 11.5 | 22.4 | 12.0 | 4.49 |
| 300 | 7.27 | 7.31 | 18.0 | 9.29 | 3.92 |
| 270 | 5.07 | 5.11 | 13.8 | 7.24 | 3.23 |
| 240 | 4.18 | 4.21 | 10.4 | 5.88 | 2.82 |
| 210 | 3.62 | 3.66 | 8.49 | 4.90 | 2.41 |
| 183 | 3.28 | 3.36 | 7.23 | 4.19 | 2.04 |
| 150 | 2.95 | 3.08 | 6.38 | 3.48 | 1.62 |
| 130 | 2.71 | 2.95 | 5.82 | 3.13 | 1.47 |
| 120 | 2.46 | 2.88 | 5.64 | 3.01 | 1.47 |
| 110 | 2.30 | 2.80 | 5.47 | 2.84 | 1.27 |
| 100 | 2.05 | 2.64 | 5.35 | 2.69 | 1.15 |
| 90 | 1.95 | 2.43 | 5.21 | 2.53 | 1.10 |
| 80 | 1.70 | 2.32 | 5.09 | 2.36 | 1.08 |
| 70 | 1.58 | 2.10 | 4.86 | 2.21 | 1.05 |
| 60 | 1.51 | 1.96 | 4.62 | 2.05 | 1.04 |
| 50 | 1.43 | 1.76 | 4.50 | 1.89 | 1.04 |
| 40 | 1.36 | 1.60 | 4.35 | 1.79 | 0.988 |
| 30 | 1.32 | 1.51 | 4.20 | 1.63 | 0.944 |
| 25 | 1.30 | 1.44 | 4.06 | 1.56 | 0.926 |
| 20 | 1.29 | 1.33 | 4.03 | 1.47 | 0.915 |
| 15 | 1.27 | 1.30 | 3.92 | 1.39 | 0.872 |
| 10 | 1.21 | 1.27 | 3.78 | 1.29 | 0.777 |
| 9 | 1.20 | 1.20 | 3.73 | 1.26 | 0.775 |
| 8 | 1.19 | 1.19 | 3.73 | 1.23 | 0.770 |
| 7 | 1.18 | 1.18 | 3.71 | 1.20 | 0.749 |
| 6 | 1.18 | 1.18 | 3.64 | 1.16 | 0.698 |
| 5 | 1.18 | 1.18 | 3.64 | 1.11 | 0.697 |
| 4 | 1.17 | 1.17 | 3.61 | 1.06 | 0.676 |
| 3 | 1.17 | 1.17 | 3.61 | 1.01 | 0.652 |
| 2 | 1.13 | 1.13 | 3.50 | 0.969 | 0.613 |
| 1 | 1.11 | 1.11 | 3.50 | 0.905 | 0.607 |
| 0 | 1.09 | 1.09 | 3.49 | 0.603 | 0.603 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 2120 km²
PNP : NN + 193.89 m
Lage: 119.8 km oberhalb der Mündung, links

Q
m³/s

Pegel : Bad Hersfeld 1 Nr. 42710050
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.19 | 4.47 | 31.6 | 18.7 | 16.8 | 8.31 | 6.63 | 9.19 | 12.3 | 14.4 | 5.55 | 4.49 | 12.6 | 9.46 |
| 2. | 5.23 | 4.83 | 52.1 | 16.5 | 16.4 | 7.85 | 8.82 | 7.78 | 10.6 | 12.4 | 4.84 | 4.33 | 13.0 | 8.65 |
| 3. | 4.92 | 4.82 | 73.3 | 15.5 | 15.7 | 7.71 | 12.0 | 6.26 | 9.42 | 10.7 | 5.02 | 4.39 | 18.8 | 8.62 |
| 4. | 4.83 | 7.67 | 56.5 | 14.6 | 15.0 | 11.6 | 8.09 | 9.51 | 8.28 | 9.80 | 4.73 | 5.64 | 32.5 | 8.74 |
| 5. | 4.72 | 26.6 | 58.8 | 14.0 | 14.9 | 11.4 | 9.52 | 14.2 | 9.22 | 9.32 | 4.54 | 15.6 | 27.3 | 10.4 |
| 6. | 4.72 | 29.0 | 121 | 13.0 | 14.4 | 8.81 | 13.9 | 11.6 | 23.8 | 13.2 | 4.68 | 10.8 | 22.4 | 11.0 |
| 7. | 4.84 | 15.9 | 106 | 12.0 | 13.4 | 8.78 | 16.5 | 11.9 | 13.0 | 11.1 | 4.72 | 13.7 | 19.5 | 10.2 |
| 8. | 4.15 | 22.8 | 76.2 | 12.5 | 14.9 | 8.68 | 13.1 | 11.3 | 10.3 | 9.30 | 4.49 | 18.2 | 17.0 | 9.19 |
| 9. | 4.62 | 17.9 | 66.9 | 12.8 | 15.1 | 8.41 | 10.3 | 8.54 | 9.68 | 8.31 | 4.22 | 10.7 | 15.2 | 7.79 |
| 10. | 4.37 | 31.5 | 60.0 | 13.2 | 14.0 | 9.32 | 9.09 | 6.95 | 8.62 | 7.97 | 4.18 | 8.53 | 14.3 | 9.35 |
| 11. | 4.30 | 17.3 | 48.2 | 12.1 | 13.5 | 11.6 | 9.00 | 6.16 | 11.1 | 6.94 | 4.30 | 7.19 | 23.4 | 10.3 |
| 12. | 4.07 | 13.5 | 39.4 | 10.9 | 13.1 | 11.7 | 14.3 | 7.54 | 13.4 | 6.87 | 10.9 | 6.95 | 18.4 | 8.81 |
| 13. | 4.40 | 15.1 | 43.1 | 10.7 | 13.2 | 10.5 | 11.2 | 9.88 | 15.5 | 6.51 | 11.8 | 8.01 | 14.6 | 8.69 |
| 14. | 4.26 | 22.6 | 39.5 | 11.3 | 12.5 | 10.0 | 8.93 | 22.6 | 46.6 | 6.13 | 7.74 | 8.23 | 12.7 | 8.25 |
| 15. | 4.24 | 33.0 | 32.7 | 12.6 | 12.0 | 9.08 | 8.42 | 12.5 | 69.3 | 6.12 | 5.30 | 12.8 | 11.8 | 34.0 |
| 16. | 4.63 | 37.5 | 28.2 | 12.6 | 11.6 | 8.40 | 9.74 | 9.79 | 41.3 | 6.90 | 5.21 | 14.4 | 11.2 | 95.0 |
| 17. | 4.61 | 77.1 | 24.3 | 12.9 | 11.2 | 8.08 | 9.36 | 11.0 | 33.2 | 8.91 | 4.73 | 10.6 | 10.6 | 109 |
| 18. | 4.37 | 60.3 | 21.2 | 16.1 | 11.0 | 7.72 | 8.01 | 9.23 | 42.0 | 6.69 | 4.80 | 8.95 | 10.1 | 87.5 |
| 19. | 4.58 | 29.6 | 30.3 | 31.7 | 12.1 | 7.73 | 8.49 | 8.16 | 26.2 | 5.27 | 4.54 | 7.68 | 9.70 | 66.5 |
| 20. | 4.52 | 21.9 | 76.6 | 33.0 | 11.5 | 7.95 | 8.91 | 17.1 | 20.1 | 5.21 | 5.06 | 6.87 | 9.34 | 41.9 |
| 21. | 4.05 | 20.0 | 76.7 | 15.5 | 10.3 | 7.95 | 9.08 | 20.8 | 19.1 | 4.76 | 4.62 | 6.39 | 9.08 | 33.9 |
| 22. | 4.13 | 21.8 | 90.8 | 13.3 | 10.0 | 8.45 | 7.36 | 16.1 | 18.0 | 4.92 | 4.72 | 5.98 | 8.10 | 33.5 |
| 23. | 3.97 | 36.6 | 101 | 12.6 | 9.68 | 10.4 | 7.10 | 11.5 | 14.4 | 5.32 | 5.00 | 5.64 | 8.27 | 58.0 |
| 24. | 3.97 | 42.2 | 76.3 | 13.2 | 9.49 | 10.4 | 6.22 | 9.32 | 12.9 | 8.73 | 4.52 | 5.90 | 7.99 | 109 |
| 25. | 4.06 | 43.6 | 55.7 | 16.5 | 9.03 | 11.2 | 5.44 | 10.4 | 11.6 | 12.2 | 4.42 | 5.92 | 7.78 | 123 |
| 26. | 4.15 | 29.8 | 43.4 | 16.6 | 9.92 | 10.4 | 5.18 | 11.1 | 10.5 | 8.80 | 5.71 | 5.54 | 7.49 | 73.5 |
| 27. | 4.04 | 26.6 | 36.3 | 15.1 | 8.01 | 8.96 | 4.91 | 8.87 | 9.68 | 7.86 | 7.17 | 7.92 | 8.49 | 81.2 |
| 28. | 4.41 | 23.7 | 31.8 | 13.7 | 8.52 | 8.51 | 4.95 | 8.09 | 11.3 | 7.69 | 7.67 | 8.50 | 9.43 | 100 |
| 29. | 4.39 | 21.0 | 28.2 | 14.5 | 7.07 | 7.52 | 5.05 | 7.99 | 29.9 | 5.83 | 5.65 | 7.37 | 9.41 | 106 |
| 30. | 4.67 | 26.5 | 25.0 | | 8.16 | 6.99 | 4.75 | 7.89 | 47.6 | 5.61 | 4.85 | 7.85 | 10.1 | 73.8 |
| 31. | | 34.2 | 22.2 | | 8.15 | | 5.53 | | 18.8 | 6.17 | | 11.8 | | 54.2 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23.+ | 1. | 18. | 13. | 29. | 30. | 30. | 11. | 4. | 21. | 10. | 2. | 26. | 9. |
| NQ | 3.97 | 4.47 | 21.2 | 10.7 | 7.07 | 6.99 | 4.75 | 6.16 | 8.28 | 4.76 | 4.18 | 4.33 | 7.49 | 7.79 |
| MQ | 4.45 | 26.4 | 54.0 | 15.1 | 12.0 | 9.15 | 8.71 | 10.8 | 20.6 | 8.06 | 5.52 | 8.61 | 13.7 | 45.5 |
| HQ | 6.94 | 86.4 | 161 | 59.8 | 20.6 | 16.3 | 20.0 | 30.2 | 73.5 | 15.7 | 16.9 | 26.4 | 39.8 | 148 |
| Tag | 2. | 17.+ | 6. | 19.+ | 8. | 4. | 2. | 14. | 15. | 1.+ | 12. | 8. | 4. | 25. |
| $h_N$ mm | 2 | 118 | 108 | 22 | 16 | 40 | 79 | 114 | 125 | 56 | 44 | 63 | 44 | 118 |
| $h_A$ mm | 5 | 33 | 68 | 18 | 15 | 11 | 11 | 13 | 26 | 10 | 7 | 11 | 17 | 57 |
| | 1967/2011 | | 1968/2012 45 Jahre | | | | | | | | | | | |
| Jahr | 2011 | 1976 | 1977 | 1972 | 1972 | 2011 | 2011 | 1976 | 1976 | 1976 | 1976 | 2011 | 2011 | 1976 |
| NQ | 3.97 | 3.60 | 3.60 | 5.50 | 5.25 | 5.31 | 3.95 | 3.40 | 2.62 | 2.44 | 2.62 | 3.22 | 3.97 | 3.60 |
| MNQ | 8.20 | 10.4 | 13.1 | 14.5 | 15.2 | 13.7 | 9.40 | 7.73 | 6.44 | 5.24 | 5.27 | 6.18 | 8.15 | 10.2 |
| MQ | 18.0 | 27.5 | 34.3 | 31.3 | 32.3 | 23.8 | 16.3 | 12.9 | 10.5 | 8.79 | 8.43 | 11.8 | 18.0 | 27.5 |
| MHQ | 63.7 | 114 | 146 | 111 | 92.5 | 68.7 | 48.7 | 41.0 | 32.4 | 30.5 | 25.3 | 40.7 | 63.6 | 107 |
| HQ | 310 | 450 | 594 | 490 | 254 | 430 | 180 | 226 | 159 | 303 | 129 | 212 | 310 | 337 |
| Jahr | 1998 | 1967 | 1995 | 1984 | 1988 | 1986 | 1984 | 1981 | 1980 | 1981 | 2007 | 1998 | 1998 | 1993 |
| | 1967/2011 | | 1968/2012 45 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 70 | 77 | 69 | 55 | 61 | 54 | 70 | 73 | 77 | 68 | 61 | 65 | 69 | 77 |
| $Mh_A$ mm | 22 | 35 | 43 | 37 | 41 | 29 | 21 | 16 | 13 | 11 | 10 | 15 | 22 | 35 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 3.97 | am 23.11.2011 | 3.97 | 4.18 | 4.18 | am 10.09.2012 |
| MQ m³/s | 15.4 | | 20.4 | 10.4 | 17.7 | |
| HQ m³/s | 161 | am 06.01.2012 bei W= 516 cm | 161 | 73.5 | 161 | am 06.01.2012 bei W= 516 cm |
| Nq l/(s km²) | 1.87 | | 1.87 | 1.97 | 1.97 | |
| Mq l/(s km²) | 7.25 | | 9.61 | 4.90 | 8.36 | |
| Hq l/(s km²) | 75.9 | | 75.9 | 34.7 | 75.9 | |
| $h_N$ mm | 787 | | 306 | 481 | 829 | |
| $h_A$ mm | 228 | | 151 | 78 | 264 | |
| | 1968/2012 (*) 45 Jahre | | | | 1968/2012 | |
| NQ m³/s | 2.44 | am 28.08.1976 | 3.60 | 2.44 | 2.44 | am 28.08.1976 |
| MNQ m³/s | 4.63 | | 7.25 | 4.77 | 4.71 | |
| MQ m³/s | 19.6 | | 27.9 | 11.5 | 19.6 | |
| MHQ m³/s | 236 | | 227 | 77.4 | 224 | |
| HQ m³/s | 594 | am 23.01.1995 bei W= 668 cm | 594 | 303 | 594 | am 23.01.1995 bei W= 668 cm |
| $HQ_1$ m³/s | 126 | | 115 | 32.9 | 127 | |
| $HQ_5$ m³/s | 297 | | 297 | 78.5 | 297 | |
| MNq l/(s km²) | 2.18 | | 3.42 | 2.25 | 2.22 | |
| Mq l/(s km²) | 9.24 | | 13.2 | 5.42 | 9.24 | |
| MHq l/(s km²) | 111 | | 107 | 36.5 | 106 | |
| | 1968/2012 (*) 45 Jahre | | | | 1968/2012 | |
| $Mh_N$ mm | 801 | | 387 | 414 | 800 | |
| $Mh_A$ mm | 292 | | 207 | 86 | 292 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.44 | 1.15 | 28.08.1976 | 594 | 280 | 668 | 23.01.1995 |
| 2 | 2.65 | 1.25 | 16.08.2003 | 490 | 231 | 629 | 07.02.1984 |
| 3 | 2.83 | 1.33 | 07.09.1991 | 450 | 212 | 616 | 24.12.1967 |
| 4 | 3.00 | 1.41 | 06.09.1973 | 430 | 203 | 616 | 01.04.1986 |
| 5 | 3.22 | 1.52 | 03.10.2011 | 398 | 188 | 610 | 12.01.1993 |
| 6 | 3.26 | 1.54 | 25.09.1997 | 390 | 184 | 595 | 23.02.1970 |
| 7 | 3.34 | 1.58 | 31.08.2008 | 366 | 173 | 592 | 08.01.2011 |
| 8 | 3.35 | 1.58 | 05.09.2005 | 366 | 173 | 617 | 03.01.2003 |
| 9 | 3.47 | 1.64 | 04.08.1990 | 337 | 159 | 596 | 22.12.1993 |
| 10 | 3.48 | 1.64 | 26.08.1989 | 326 | 154 | 577 | 19.01.2007 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1968/2012 45 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 121 | 123 | | | |
| 364 | 106 | 121 | 431 | 169 | 61.7 |
| 363 | 101 | 121 | 314 | 146 | 57.2 |
| 362 | 90.8 | 109 | 255 | 127 | 54.5 |
| 361 | 77.1 | 109 | 221 | 113 | 49.9 |
| 360 | 76.7 | 106 | 221 | 104 | 46.8 |
| 359 | 76.6 | 101 | 195 | 96.2 | 44.9 |
| 358 | 76.3 | 100 | 179 | 90.6 | 43.6 |
| 357 | 76.2 | 95.0 | 157 | 86.0 | 41.3 |
| 356 | 73.3 | 90.8 | 155 | 82.2 | 39.1 |
| 350 | 56.5 | 76.2 | 116 | 64.6 | 30.9 |
| 340 | 42.0 | 56.5 | 88.3 | 50.2 | 25.5 |
| 330 | 33.0 | 41.9 | 81.5 | 41.4 | 19.2 |
| 320 | 29.0 | 32.7 | 63.0 | 35.7 | 16.6 |
| 300 | 20.1 | 20.1 | 45.1 | 27.9 | 13.5 |
| 270 | 14.6 | 14.9 | 31.8 | 21.4 | 11.2 |
| 240 | 12.8 | 12.9 | 26.9 | 17.3 | 8.75 |
| 210 | 11.3 | 11.4 | 23.8 | 14.4 | 7.25 |
| 183 | 9.88 | 10.5 | 20.6 | 12.3 | 6.44 |
| 150 | 8.78 | 9.32 | 17.5 | 10.2 | 5.62 |
| 130 | 8.15 | 8.81 | 16.4 | 9.16 | 5.32 |
| 120 | 7.95 | 8.54 | 16.0 | 8.72 | 4.90 |
| 110 | 7.71 | 8.40 | 15.4 | 8.25 | 4.74 |
| 100 | 7.17 | 8.10 | 14.9 | 7.82 | 4.62 |
| 90 | 6.69 | 7.97 | 14.0 | 7.50 | 4.42 |
| 80 | 5.98 | 7.74 | 13.2 | 7.16 | 4.26 |
| 70 | 5.54 | 7.37 | 12.5 | 6.81 | 4.01 |
| 60 | 5.18 | 6.90 | 12.2 | 6.46 | 3.91 |
| 50 | 4.85 | 6.16 | 11.7 | 6.04 | 3.83 |
| 40 | 4.73 | 5.64 | 11.2 | 5.69 | 3.74 |
| 30 | 4.58 | 5.21 | 10.7 | 5.26 | 3.63 |
| 25 | 4.52 | 5.00 | 10.5 | 5.01 | 3.46 |
| 20 | 4.40 | 4.84 | 10.2 | 4.78 | 3.38 |
| 15 | 4.33 | 4.73 | 10.2 | 4.49 | 3.16 |
| 10 | 4.22 | 4.62 | 10.0 | 4.21 | 3.00 |
| 9 | 4.18 | 4.54 | 10.0 | 4.14 | 3.00 |
| 8 | 4.18 | 4.52 | 9.77 | 4.06 | 2.99 |
| 7 | 4.15 | 4.52 | 9.77 | 4.01 | 2.99 |
| 6 | 4.13 | 4.49 | 9.77 | 3.92 | 2.80 |
| 5 | 4.07 | 4.42 | 9.54 | 3.82 | 2.80 |
| 4 | 4.06 | 4.39 | 9.54 | 3.72 | 2.80 |
| 3 | 4.05 | 4.33 | 9.54 | 3.61 | 2.80 |
| 2 | 4.04 | 4.30 | 9.32 | 3.42 | 2.80 |
| 1 | 4.04 | 4.22 | 9.32 | 3.20 | 2.62 |
| 0 | 3.97 | 4.18 | 9.10 | 2.44 | 2.44 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 2523 km²
PNP : NN + 179.52 m
Lage: 95.7 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Rotenburg Nr. 42700100
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.06 | 5.11 | 33.8 | R 23.8 | 18.9 | 8.93 | 7.74 | 9.50 | 15.5 | 18.2 | 6.90 | 5.26 | 13.7 | 9.81 |
| 2. | 6.10 | 5.44 | 46.9 | R 18.3 | 19.4 | 8.64 | 7.78 | 9.60 | 12.5 | 15.5 | 6.32 | 5.15 | 13.0 | 8.96 |
| 3. | 5.89 | 5.66 | 66.9 | R 18.0 | 18.6 | 8.44 | 14.4 | 8.01 | 10.8 | 13.0 | 5.95 | 5.17 | 18.2 | 8.99 |
| 4. | 6.02 | 6.42 | 63.1 | R 18.7 | 17.7 | 11.5 | 10.1 | 8.91 | 9.92 | 11.5 | 5.70 | 5.78 | 30.0 | 8.76 |
| 5. | 5.61 | 17.9 | 59.3 | R 17.4 | 17.1 | 14.1 | 9.94 | 14.6 | 11.1 | 10.6 | 5.56 | 13.7 | 31.5 | 9.82 |
| 6. | 5.77 | 35.6 | 96.7 | R 15.7 | 16.5 | 10.1 | 16.5 | 15.4 | 23.9 | 14.3 | 5.54 | 13.6 | 26.1 | 11.2 |
| 7. | 5.61 | 19.7 | 141 | R 14.2 | 15.5 | 9.49 | 18.4 | 11.6 | 18.3 | 14.4 | 5.60 | 10.9 | 23.3 | 10.6 |
| 8. | 5.50 | 22.0 | 92.7 | R 14.1 | 15.8 | 9.36 | 17.0 | 13.8 | 13.4 | 10.7 | 5.33 | 21.4 | 19.5 | 9.37 |
| 9. | 5.61 | 22.8 | 72.7 | R 14.8 | 18.0 | 9.09 | 12.3 | 10.5 | 11.4 | 9.76 | 5.20 | 12.7 | 17.3 | 8.40 |
| 10. | 5.57 | 32.0 | 64.5 | R 14.0 | 16.4 | 9.63 | 10.4 | 8.51 | 10.7 | 9.26 | 5.03 | 9.36 | 15.6 | 9.05 |
| 11. | 5.55 | 23.3 | 57.3 | R 13.5 | 15.3 | 11.9 | 9.95 | 7.73 | 11.9 | 8.63 | 5.18 | 8.05 | 22.1 | 10.7 |
| 12. | 5.36 | 16.3 | 47.1 | R 12.5 | 14.8 | 12.4 | 13.8 | 8.38 | 16.3 | 7.69 | 8.01 | 7.61 | 22.9 | 9.43 |
| 13. | 5.51 | 16.1 | 46.1 | R 12.3 | 14.8 | 12.1 | 14.9 | 8.72 | 17.0 | 7.72 | 14.4 | 8.20 | 17.0 | 8.78 |
| 14. | 5.37 | 21.8 | 47.7 | R 12.7 | 14.3 | 10.5 | 10.3 | 22.0 | 38.3 | 7.35 | 9.38 | 8.50 | 14.2 | 8.44 |
| 15. | 5.49 | 33.7 | 39.0 | R 14.3 | 13.6 | 9.96 | 9.36 | 16.6 | 68.1 | 7.28 | 6.66 | 11.6 | 12.5 | 21.2 |
| 16. | 5.37 | 39.9 | 33.2 | R 15.0 | 12.8 | 9.29 | 10.1 | 11.2 | 53.1 | 7.74 | 6.04 | 16.2 | 11.5 | 78.6 |
| 17. | 5.39 | 63.3 | 29.1 | R 14.7 | 12.3 | 8.98 | 10.4 | 12.0 | 37.9 | 9.32 | 5.77 | 11.9 | 10.9 | 113 |
| 18. | 5.33 | 73.1 | 25.8 | 18.2 | 11.9 | 8.99 | 9.14 | 10.7 | 46.5 | 8.25 | 5.61 | 9.48 | 10.2 | 106 |
| 19. | 5.42 | 38.5 | 30.0 | 26.2 | 12.6 | 8.99 | 8.92 | 9.11 | 35.3 | 6.75 | 5.50 | 8.29 | 9.93 | 77.3 |
| 20. | 5.35 | 27.6 | 66.8 | 43.7 | 13.0 | 9.02 | 9.41 | 18.5 | 26.6 | 6.37 | 5.47 | 7.72 | 9.53 | 51.4 |
| 21. | 5.43 | 24.6 | 85.2 | 20.2 | 11.3 | 9.22 | 10.1 | 24.1 | 24.9 | 5.92 | 5.69 | 7.07 | 9.23 | 39.8 |
| 22. | 5.28 | 24.8 | 87.3 | 15.9 | 10.7 | 9.62 | 8.93 | 20.9 | 23.6 | 5.85 | 5.53 | 6.80 | 8.58 | 37.2 |
| 23. | 5.18 | 35.3 | 117 | 14.5 | 10.3 | 11.1 | 8.40 | 15.1 | 19.1 | 6.06 | 5.59 | 6.63 | 8.44 | 52.6 |
| 24. | 5.15 | 43.8 | 93.7 | 15.0 | 10.2 | 11.9 | 7.83 | 10.8 | 16.5 | 7.82 | 5.45 | 6.81 | 8.22 | 98.5 |
| 25. | 5.14 | 49.3 | 65.9 | 17.4 | 9.86 | 11.5 | 7.00 | 10.2 | 14.7 | 13.2 | 5.30 | 6.60 | 8.09 | 139 |
| 26. | 5.13 | 36.0 | 53.0 | 20.0 | 9.45 | 12.1 | 6.51 | 13.2 | 13.3 | 10.6 | 5.72 | 6.45 | 7.85 | 96.1 |
| 27. | 5.06 | 31.1 | 44.1 | 18.0 | 10.4 | 9.96 | 6.37 | 10.4 | 12.0 | 7.99 | 7.26 | 7.58 | 8.26 | 78.6 |
| 28. | 5.09 | 28.2 | 38.8 | 16.2 | 8.11 | 9.38 | 6.11 | 9.34 | 12.4 | 8.72 | 8.16 | 9.19 | 9.31 | 100 |
| 29. | 5.06 | 25.3 | 34.5 | 16.1 | 9.46 | 8.52 | 6.22 | 9.19 | 24.2 | 7.54 | 6.81 | 8.22 | 9.51 | 120 |
| 30. | 5.07 | 26.8 | 30.9 | | 8.24 | 7.90 | 6.25 | 8.60 | 46.5 | 6.58 | 5.86 | 8.17 | 9.77 | 95.3 |
| 31. | | 38.3 | 27.8 | | 9.41 | | 6.23 | | 28.1 | 7.09 | | 10.4 | | 62.5 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27.+ | 1. | 18. | 13. | 28. | 30. | 28. | 11. | 4. | 22. | 10. | 2. | 26. | 9. |
| NQ | 5.06 | 5.11 | 25.8 | 12.3 | 8.11 | 7.90 | 6.11 | 7.73 | 9.92 | 5.85 | 5.03 | 5.15 | 7.85 | 8.40 |
| MQ | 5.45 | 28.7 | 59.3 | 17.4 | 13.4 | 10.1 | 10.0 | 12.2 | 23.3 | 9.41 | 6.35 | 9.18 | 14.5 | 48.4 |
| HQ | 6.34 | 83.1 | 150 | 56.2 | 21.2 | 15.5 | 19.5 | 28.6 | 72.2 | 20.0 | 16.6 | 26.0 | 37.8 | 147 |
| Tag | 2.+ | 18. | 7. | 20. | 9. | 5. | 7. | 14. | 15. | 1. | 13. | 8. | 4.+ | 25. |
| $h_N$ mm / $h_A$ mm | 6 | 30 | 63 | 17 | 14 | 10 | 11 | 13 | 25 | 10 | 7 | 10 | 15 | 51 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1943 | 1953 | 1954 | 1947 | 1960 | 1945 | 1954 | 1959 | 1964 | 1949 | 1943 | 1964 | 1943 | 1953 |
| NQ | 3.00 | 3.40 | 4.10 | 3.80 | 6.45 | 5.40 | 4.10 | 3.04 | 2.89 | 2.30 | 2.30 | 2.50 | 3.00 | 3.40 |
| MNQ | 9.41 | 12.2 | 14.6 | 16.1 | 16.5 | 14.7 | 10.4 | 8.81 | 7.76 | 6.81 | 6.60 | 7.26 | 9.41 | 12.2 |
| MQ | 20.7 | 30.6 | 35.2 | 36.2 | 34.5 | 26.1 | 17.1 | 15.2 | 13.5 | 11.4 | 10.4 | 13.4 | 20.0 | 31.1 |
| MHQ | 69.9 | 112 | 128 | 115 | 99.1 | 68.4 | 42.9 | 41.3 | 35.7 | 31.8 | 26.7 | 40.0 | 64.0 | 113 |
| HQ | 460 | 430 | 660 | 537 | 396 | 419 | 225 | 294 | 207 | 311 | 161 | 210 | 370 | 430 |
| Jahr | 1940 | 1967 | 1995 | 1984 | 1947 | 1986 | 1984 | 1981 | 1966 | 1981 | 2007 | 1998 | 1998 | 1967 |
| $Mh_N$ mm / $Mh_A$ mm | 21 | 32 | 37 | 36 | 37 | 27 | 18 | 16 | 14 | 12 | 11 | 14 | 21 | 33 |

72 Jahre

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 5.03 | am 10.09.2012 | 5.06 | 5.03 | 5.03 | am 10.09.2012 |
| MQ m³/s | 17.2 | | 22.6 | 11.8 | 19.6 | |
| HQ m³/s | 150 | am 07.01.2012 bei W= 405 cm | 150 | 72.2 | 150 | am 07.01.2012 bei W= 405 cm |
| Nq l/(s km²) | 1.99 | | 2.01 | 1.99 | 1.99 | |
| Mq l/(s km²) | 6.81 | | 8.96 | 4.67 | 7.76 | |
| Hq l/(s km²) | 59.5 | | 59.5 | 28.6 | 59.5 | |
| $h_N$ mm / $h_A$ mm | 215 | | 141 | 74 | 245 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 2.30 | am 21.09.1943 | 3.00 | 2.30 | 2.30 | am 21.09.1943 |
| MNQ m³/s | 5.30 | | 8.03 | 5.72 | 5.58 | |
| MQ m³/s | 21.9 | | 30.5 | 13.5 | 21.9 | |
| MHQ m³/s | 233 | | 227 | 74.8 | 224 | |
| HQ m³/s | 660 | am 23.01.1995 bei W= 603 cm | 660 | 311 | 660 | am 23.01.1995 bei W= 603 cm |
| $HQ_1$ m³/s | 148 | | 141 | 47.0 | 148 | |
| $HQ_5$ m³/s | 315 | | 307 | 112 | 315 | |
| MNq l/(s km²) | 2.10 | | 3.18 | 2.27 | 2.21 | |
| Mq l/(s km²) | 8.68 | | 12.1 | 5.35 | 8.68 | |
| MHq l/(s km²) | 92.4 | | 90.0 | 29.6 | 88.8 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 274 | | 190 | 85 | 274 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.40 | 0.555 | 19.09.1921 | 660 | 262 | 603 | 23.01.1995 |
| 2 | 2.00 | 0.793 | 16.07.1934 | 537 | 213 | 558 | 08.02.1984 |
| 3 | 2.30 | 0.912 | 29.08.1949 | 507 | 201 | 553 | 13.01.1993 |
| 4 | 2.30 | 0.912 | 21.09.1943 | 460 | 182 | 540 | 09.02.1946 |
| 5 | 2.40 | 0.951 | 06.09.1937 | 460 | 182 | 540 | 05.11.1940 |
| 6 | 2.43 | 0.963 | 05.09.1991 | 452 | 179 | 530 | 31.12.1925 |
| 7 | 2.50 | 0.991 | 30.10.1964 | 430 | 170 | 531 | 25.12.1967 |
| 8 | 2.50 | 0.991 | 25.08.1947 | 419 | 166 | 538 | 01.04.1986 |
| 9 | 2.65 | 1.05 | 28.10.1976 | 398 | 158 | 532 | 24.02.1970 |
| 10 | 2.72 | 1.08 | 05.08.1963 | 396 | 157 | 496 | 12.03.1947 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 141 | 141 | | | |
| 364 | 117 | 139 | 415 | 181 | 54.3 |
| 363 | 96.7 | 120 | 342 | 151 | 53.5 |
| 362 | 93.7 | 117 | 277 | 135 | 48.0 |
| 361 | 92.7 | 113 | 235 | 123 | 40.8 |
| 360 | 87.3 | 106 | 226 | 113 | 40.0 |
| 359 | 85.2 | 100 | 200 | 107 | 39.3 |
| 358 | 73.1 | 98.5 | 186 | 99.4 | 36.9 |
| 357 | 72.7 | 96.7 | 176 | 95.0 | 33.2 |
| 356 | 68.1 | 96.1 | 169 | 90.4 | 32.1 |
| 350 | 63.1 | 85.2 | 143 | 70.8 | 22.8 |
| 340 | 46.5 | 62.5 | 109 | 55.6 | 16.6 |
| 330 | 38.3 | 46.9 | 93.3 | 46.4 | 15.5 |
| 320 | 32.0 | 37.2 | 73.7 | 40.0 | 14.9 |
| 300 | 23.8 | 23.8 | 56.7 | 31.7 | 13.0 |
| 270 | 17.1 | 17.3 | 45.2 | 24.3 | 9.60 |
| 240 | 14.7 | 14.8 | 37.7 | 19.6 | 8.10 |
| 210 | 12.5 | 12.8 | 31.2 | 16.4 | 7.20 |
| 183 | 10.8 | 11.3 | 26.1 | 14.1 | 6.00 |
| 150 | 9.49 | 10.1 | 22.5 | 11.9 | 5.40 |
| 130 | 9.09 | 9.45 | 21.0 | 10.8 | 5.18 |
| 120 | 8.72 | 9.34 | 20.0 | 10.2 | 5.00 |
| 110 | 8.29 | 9.11 | 19.2 | 9.63 | 4.90 |
| 100 | 8.01 | 8.93 | 18.8 | 9.21 | 4.50 |
| 90 | 7.72 | 8.58 | 18.0 | 8.71 | 4.50 |
| 80 | 7.00 | 8.29 | 16.9 | 8.30 | 4.30 |
| 70 | 6.51 | 8.09 | 16.1 | 7.81 | 4.12 |
| 60 | 6.10 | 7.78 | 15.8 | 7.36 | 3.94 |
| 50 | 5.78 | 7.28 | 15.2 | 6.81 | 3.61 |
| 40 | 5.61 | 6.66 | 14.6 | 6.34 | 3.56 |
| 30 | 5.50 | 6.23 | 13.6 | 5.91 | 3.52 |
| 25 | 5.43 | 5.95 | 12.9 | 5.59 | 3.34 |
| 20 | 5.36 | 5.77 | 12.7 | 5.24 | 3.25 |
| 15 | 5.28 | 5.60 | 12.6 | 4.91 | 3.16 |
| 10 | 5.17 | 5.50 | 12.4 | 4.41 | 3.10 |
| 9 | 5.17 | 5.47 | 12.4 | 4.30 | 3.10 |
| 8 | 5.15 | 5.45 | 12.4 | 4.21 | 3.10 |
| 7 | 5.14 | 5.33 | 12.3 | 4.11 | 3.10 |
| 6 | 5.13 | 5.30 | 12.3 | 4.01 | 3.02 |
| 5 | 5.11 | 5.26 | 12.1 | 3.91 | 2.94 |
| 4 | 5.09 | 5.20 | 12.1 | 3.82 | 2.89 |
| 3 | 5.07 | 5.18 | 11.9 | 3.70 | 2.75 |
| 2 | 5.07 | 5.17 | 11.9 | 3.52 | 2.70 |
| 1 | 5.06 | 5.15 | 11.8 | 3.26 | 2.40 |
| 0 | 5.03 | 5.03 | 11.6 | 2.30 | 2.30 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1921/2012
Extremwerte ab 1921
ab 1.09.1998 hat sich das Wasserstands / Abflussverhältnis duch Baumaßnahmen im Pegelbereich verändert
Ablesungen sind nicht mit denen früherer Jahre vergleichbar !
17 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 2975 km²
PNP : NN + 151.01 m
Lage: 55.5 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Grebenau Nr. 42700202
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 7.69 | 6.35 | 38.1 | 27.2 | 18.4 | 10.0 | 9.78 | 10.3 | 13.2 | 20.3 | 8.25 | 7.27 | 13.3 | 11.2 |
| 2. | 7.78 | 6.51 | 43.8 | 21.6 | 20.1 | 10.4 | 9.53 | 11.4 | 14.2 | 16.5 | 7.81 | 7.13 | 13.5 | 10.6 |
| 3. | 7.71 | 6.57 | 65.5 | 21.6 | 19.3 | 10.1 | 13.6 | 9.94 | 12.5 | 14.2 | 7.71 | 7.03 | 16.2 | 10.4 |
| 4. | 7.70 | 6.91 | 74.8 | 22.8 | 18.4 | 12.1 | 13.3 | 9.91 | 11.3 | 12.7 | 7.64 | 7.36 | 24.5 | 10.3 |
| 5. | 7.59 | 11.5 | 66.8 | 22.2 | 17.8 | 14.8 | 11.4 | 14.2 | 11.4 | 11.9 | 7.58 | 9.82 | 32.5 | 10.9 |
| 6. | 7.48 | 32.0 | 89.1 | 21.3 | 17.6 | 12.4 | 16.9 | 16.6 | 18.1 | 13.7 | 7.49 | 15.9 | 26.2 | 12.0 |
| 7. | 7.15 | 23.3 | 125 | 20.4 | 16.6 | 11.1 | 18.0 | 12.7 | 21.5 | 15.3 | 7.50 | 12.0 | 22.7 | 11.9 |
| 8. | 7.03 | 17.9 | 130 | 18.7 | 17.2 | 11.0 | 18.6 | 14.1 | 14.5 | 12.3 | 7.47 | 17.4 | 19.1 | 10.9 |
| 9. | 6.81 | 25.8 | 90.2 | 18.2 | 18.8 | 10.8 | 14.5 | 12.3 | 12.4 | 11.2 | 7.35 | 15.3 | 17.3 | 10.2 |
| 10. | 7.14 | 25.5 | 76.5 | 15.1 | 17.2 | 11.2 | 12.8 | 10.3 | 12.0 | 10.4 | 7.20 | 11.2 | 15.8 | 10.5 |
| 11. | 6.93 | 28.6 | 68.1 | 13.9 | 16.1 | 12.4 | 12.0 | 9.40 | 11.6 | 10.1 | 7.32 | 9.77 | 18.0 | 12.0 |
| 12. | 6.90 | 17.8 | 56.0 | 13.9 | 15.8 | 13.6 | 13.0 | 9.68 | 15.3 | 9.30 | 7.69 | 9.00 | 24.1 | 11.4 |
| 13. | 6.84 | 15.0 | 50.0 | 12.4 | 15.4 | 14.1 | 16.9 | 9.82 | 16.3 | 9.24 | 13.2 | 9.28 | 17.9 | 10.3 |
| 14. | 6.68 | 18.8 | 52.6 | 13.2 | 15.3 | 12.6 | 12.5 | 15.7 | 39.3 | 8.88 | 11.7 | 9.77 | 15.0 | 10.2 |
| 15. | 6.45 | 30.1 | 45.0 | 15.8 | 14.8 | 11.8 | 11.3 | 20.0 | 63.1 | 8.62 | 8.96 | 11.2 | 13.5 | 16.9 |
| 16. | 6.34 | 41.6 | 38.0 | 16.3 | 14.3 | 11.1 | 11.6 | 13.3 | 65.9 | 9.12 | 7.74 | 14.7 | 12.6 | 58.2 |
| 17. | 6.38 | 55.2 | 32.3 | 16.8 | 13.9 | 10.7 | 12.2 | 12.5 | 47.6 | 9.89 | 7.59 | 13.6 | 12.2 | 104 |
| 18. | 6.44 | 79.8 | 28.0 | 19.1 | 13.6 | 10.6 | 11.2 | 12.2 | 48.6 | 10.3 | 7.39 | 11.1 | 11.7 | 119 |
| 19. | 6.32 | 52.2 | 31.8 | 23.0 | 13.6 | 10.5 | 10.6 | 10.7 | 45.4 | 8.80 | 7.39 | 9.95 | 11.4 | 94.0 |
| 20. | 6.45 | 31.1 | 60.2 | 43.7 | 14.2 | 10.6 | 11.3 | 16.6 | 32.2 | 7.97 | 7.30 | 9.04 | 10.9 | 64.2 |
| 21. | 6.51 | 26.6 | 94.0 | 25.4 | 13.2 | 10.9 | 11.3 | 23.6 | 30.0 | 8.01 | 7.48 | 8.42 | 10.6 | 45.6 |
| 22. | 6.28 | 26.4 | 98.9 | 17.2 | 12.3 | 11.6 | 10.9 | 22.3 | 27.5 | 7.79 | 7.38 | 8.21 | 10.4 | 40.4 |
| 23. | 6.41 | 33.2 | 116 | 15.5 | 12.1 | 11.9 | 9.69 | 16.9 | 22.7 | 7.83 | 7.38 | 8.02 | 9.73 | 53.7 |
| 24. | 6.28 | 45.1 | 123 | 15.4 | 11.8 | 13.1 | 9.47 | 12.8 | 18.9 | 8.66 | 7.49 | 7.98 | 9.83 | 94.9 |
| 25. | 6.28 | 50.8 | 85.6 | 16.8 | 11.5 | 12.8 | 8.58 | 11.8 | 16.8 | 13.8 | 7.29 | 8.22 | 9.61 | 124 |
| 26. | 6.28 | 43.5 | 64.0 | 19.9 | 11.2 | 13.4 | 7.95 | 13.1 | 15.2 | 13.3 | 7.26 | 8.07 | 9.42 | 131 |
| 27. | 6.28 | 34.1 | 52.7 | 18.6 | 11.8 | 12.3 | 7.90 | 12.3 | 14.2 | 10.5 | 8.11 | 8.25 | 9.61 | 87.1 |
| 28. | 6.31 | 30.3 | 45.6 | 16.9 | 10.1 | 11.5 | 7.65 | 10.9 | 14.1 | 9.95 | 9.08 | 10.0 | 10.3 | 98.7 |
| 29. | 6.33 | 26.8 | 40.3 | 16.5 | 11.0 | 10.9 | 7.67 | 10.4 | 20.4 | 9.38 | 8.87 | 9.98 | 10.6 | 118 |
| 30. | 6.28 | 28.2 | 35.7 | | 9.78 | 10.1 | 7.65 | 10.1 | 43.1 | 8.18 | 7.64 | 9.67 | 10.9 | 120 |
| 31. | | 38.3 | 31.2 | | 11.2 | | 8.06 | | 39.2 | 8.08 | | 10.4 | | 76.9 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 22.+ | 1. | 18. | 13. | 30. | 1. | 28.+ | 11. | 4. | 22. | 10. | 3. | 26. | 9.+ |
| NQ | 6.28 | 6.35 | 28.0 | 12.4 | 9.78 | 10.0 | 7.65 | 9.40 | 11.3 | 7.79 | 7.20 | 7.03 | 9.42 | 10.2 |
| MQ | 6.77 | 29.5 | 66.1 | 19.3 | 14.7 | 11.7 | 11.5 | 13.2 | 25.4 | 10.8 | 8.01 | 10.2 | 15.0 | 51.6 |
| HQ | 8.47 | 87.0 | 145 | 53.8 | 21.2 | 15.5 | 19.5 | 26.7 | 73.8 | 25.6 | 15.9 | 23.1 | 36.2 | 143 |
| Tag | 7.+ | 18. | 8. | 20. | 9. | 5.+ | 8. | 14.+ | 16. | 1. | 13. | 8. | 5. | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 27 | 60 | 16 | 13 | 10 | 10 | 12 | 23 | 10 | 7 | 9 | 13 | 46 |

| | 1950/2011 | | 1951/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1953 | 1953 | 1954 | 1954 | 1963 | 1960 | 1954 | 1964 | 1952 | 1976 | 1976 | 1976 | 1953 | 1953 |
| NQ | 4.00 | 3.90 | 7.20 | 5.70 | 7.30 | 7.48 | 4.10 | 4.80 | 2.50 | 3.46 | 2.50 | 2.74 | 4.00 | 3.90 |
| MNQ | 12.2 | 16.1 | 18.5 | 20.2 | 20.4 | 18.7 | 13.3 | 11.5 | 10.1 | 9.01 | 8.86 | 9.73 | 12.2 | 16.0 |
| MQ | 23.8 | 36.2 | 42.6 | 39.7 | 40.4 | 31.9 | 21.5 | 18.5 | 16.6 | 13.5 | 12.9 | 16.3 | 23.1 | 36.3 |
| MHQ | 66.0 | 111 | 141 | 118 | 105 | 76.0 | 49.7 | 47.5 | 39.4 | 33.7 | 30.5 | 45.2 | 63.3 | 110 |
| HQ | 291 | 405 | 690 | 520 | 308 | 370 | 230 | 274 | 180 | 259 | 179 | 205 | 291 | 405 |
| Jahr | 1998 | 1960 | 1995 | 1984 | 2002 | 1986 | 1984 | 1981 | 1956 | 1981 | 2007 | 1998 | 1998 | 1960 |

| | 1950/2011 | | 1951/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 33 | 38 | 33 | 36 | 28 | 19 | 16 | 15 | 12 | 11 | 15 | 20 | 33 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 6.28 | am 22.11.2011 | 6.28 | 7.03 | 7.03 | am 03.10.2012 |
| MQ m³/s | 19.0 | | 24.9 | 13.2 | 21.6 | |
| HQ m³/s | 145 | am 08.01.2012 bei W= 324 cm | 145 | 73.8 | 145 | am 08.01.2012 bei W= 324 cm |
| Nq l/(s km²) | 2.11 | | 2.11 | 2.36 | 2.36 | |
| Mq l/(s km²) | 6.40 | | 8.37 | 4.45 | 7.25 | |
| Hq l/(s km²) | 48.7 | | 48.7 | 24.8 | 48.7 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 202 | | 132 | 71 | 229 | |

| | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 2.50 | am 08.07.1952 | 3.90 | 2.50 | 2.50 | am 08.07.1952 |
| MNQ m³/s | 7.38 | | 10.9 | 7.72 | 7.65 | |
| MQ m³/s | 26.1 | | 35.8 | 16.6 | 26.0 | |
| MHQ m³/s | 225 | | 218 | 84.6 | 223 | |
| HQ m³/s | 690 | am 24.01.1995 bei W= 523 cm | 690 | 274 | 690 | am 24.01.1995 bei W= 523 cm |
| $HQ_1$ m³/s | 161 | | 149 | 55.2 | 161 | |
| $HQ_5$ m³/s | 300 | | 297 | 128 | 300 | |
| MNq l/(s km²) | 2.48 | | 3.66 | 2.59 | 2.57 | |
| Mq l/(s km²) | 8.77 | | 12.0 | 5.58 | 8.74 | |
| MHq l/(s km²) | 75.6 | | 73.3 | 28.4 | 75.0 | |

| | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 277 | | 189 | 89 | 276 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.50 | 0.840 | 22.09.1976 | 690 | 232 | 523 | 24.01.1995 |
| 2 | 2.50 | 0.840 | 08.07.1952 | 520 | 175 | 480 | 08.02.1984 |
| 3 | 3.10 | 1.04 | 16.09.1953 | 455 | 153 | 461 | 04.01.2003 |
| 4 | 3.18 | 1.07 | 04.10.1964 | 454 | 153 | 456 | 24.02.1970 |
| 5 | 3.27 | 1.10 | 16.09.1959 | 420 | 141 | 461 | 09.01.2011 |
| 6 | 4.10 | 1.38 | 18.05.1954 | 408 | 137 | 450 | 13.01.1993 |
| 7 | 4.24 | 1.43 | 30.07.1963 | 405 | 136 | 429 | 06.12.1960 |
| 8 | 4.30 | 1.45 | 29.09.1951 | 370 | 124 | 435 | 02.04.1986 |
| 9 | 4.92 | 1.65 | 14.10.1962 | 336 | 113 | 419 | 28.02.2002 |
| 10 | 4.99 | 1.68 | 05.09.1991 | 331 | 111 | 417 | 22.12.1993 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1951/2012 62 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 130 | 131 | | | |
| 364 | 125 | 130 | 534 | 188 | 58.9 |
| 363 | 123 | 125 | 300 | 166 | 57.0 |
| 362 | 116 | 124 | 256 | 152 | 50.0 |
| 361 | 98.9 | 123 | 242 | 137 | 44.5 |
| 360 | 94.0 | 120 | 214 | 128 | 42.2 |
| 359 | 90.2 | 119 | 206 | 121 | 39.1 |
| 358 | 89.1 | 118 | 192 | 115 | 36.8 |
| 357 | 85.6 | 116 | 191 | 109 | 36.8 |
| 356 | 79.8 | 104 | 186 | 105 | 34.3 |
| 350 | 65.5 | 90.2 | 145 | 82.3 | 26.7 |
| 340 | 50.0 | 65.5 | 126 | 64.3 | 20.5 |
| 330 | 43.1 | 50.0 | 109 | 54.2 | 19.1 |
| 320 | 33.2 | 40.4 | 88.6 | 46.5 | 17.8 |
| 300 | 25.4 | 23.6 | 70.1 | 37.2 | 16.5 |
| 270 | 18.0 | 18.0 | 53.1 | 28.6 | 14.3 |
| 240 | 15.4 | 15.7 | 45.4 | 23.5 | 11.4 |
| 210 | 13.7 | 13.7 | 39.1 | 19.9 | 9.80 |
| 183 | 12.4 | 12.6 | 33.0 | 17.3 | 9.00 |
| 150 | 11.3 | 11.6 | 28.4 | 14.7 | 7.30 |
| 130 | 10.6 | 11.2 | 25.7 | 13.4 | 6.50 |
| 120 | 10.3 | 11.0 | 24.5 | 12.9 | 6.13 |
| 110 | 9.91 | 10.6 | 23.5 | 12.2 | 5.80 |
| 100 | 9.67 | 10.4 | 22.1 | 11.7 | 5.60 |
| 90 | 9.04 | 10.2 | 21.1 | 11.3 | 5.50 |
| 80 | 8.42 | 9.89 | 20.4 | 10.8 | 5.20 |
| 70 | 8.01 | 9.68 | 19.7 | 10.3 | 4.66 |
| 60 | 7.74 | 9.28 | 19.3 | 9.78 | 4.42 |
| 50 | 7.64 | 8.66 | 18.6 | 9.30 | 4.18 |
| 40 | 7.39 | 8.08 | 18.1 | 8.73 | 4.18 |
| 30 | 7.20 | 7.81 | 17.5 | 8.11 | 3.94 |
| 25 | 7.03 | 7.67 | 17.3 | 7.77 | 3.70 |
| 20 | 6.81 | 7.59 | 17.1 | 7.35 | 3.70 |
| 15 | 6.51 | 7.48 | 16.6 | 6.81 | 3.70 |
| 10 | 6.35 | 7.38 | 16.2 | 6.21 | 3.46 |
| 9 | 6.34 | 7.36 | 16.1 | 6.12 | 3.46 |
| 8 | 6.33 | 7.35 | 16.1 | 5.90 | 3.46 |
| 7 | 6.32 | 7.32 | 15.9 | 5.73 | 3.46 |
| 6 | 6.31 | 7.30 | 15.8 | 5.50 | 3.46 |
| 5 | 6.31 | 7.29 | 15.8 | 5.30 | 3.22 |
| 4 | 6.31 | 7.27 | 15.6 | 5.10 | 3.22 |
| 3 | 6.31 | 7.26 | 15.5 | 4.70 | 3.22 |
| 2 | 6.31 | 7.20 | 15.5 | 4.42 | 2.98 |
| 1 | 6.31 | 7.13 | 15.4 | 3.96 | 2.74 |
| 0 | 6.28 | 7.03 | 14.9 | 2.50 | 2.50 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5 : Jahresreihe 1951 bis 2012
Extremwerte ab 1951
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 6366 km²
PNP : NN + 140.90 m
Lage: 44.0 km oberhalb der Mündung, links

# Q

m³/s

Pegel : Guntershausen Nr. 42900100
Gewässer : Fulda
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 17.0 | 14.5 | 148 | 58.5 | 34.8 | 21.8 | 27.2 | 39.1 | 29.9 | 34.5 | 32.2 | 34.7 | 32.9 | 23.0 |
| 2. | 16.8 | 14.9 | 158 | 51.5 | 37.7 | 21.8 | 30.0 | 32.9 | 30.1 | 31.7 | 31.8 | 38.5 | 31.5 | 21.6 |
| 3. | 24.5 | 15.5 | 193 | R 49.8 | 37.6 | 21.5 | 33.7 | 29.9 | 26.8 | 32.9 | 32.5 | 38.3 | 35.4 | 21.6 |
| 4. | 30.8 | 16.2 | 216 | R 47.7 | 39.0 | 24.4 | 34.5 | 33.4 | 27.0 | 30.2 | 34.5 | 38.9 | 44.2 | 23.5 |
| 5. | 20.7 | 22.5 | 222 | R 48.6 | 38.5 | 30.3 | 32.0 | 34.8 | 28.7 | 27.4 | 41.1 | 42.3 | 51.3 | 23.5 |
| 6. | 15.5 | 51.2 | 271 | R 47.7 | 38.1 | 25.4 | 38.5 | 34.1 | 32.8 | 47.4 | 41.1 | 44.0 | 42.9 | 23.6 |
| 7. | 15.6 | 43.2 | 288 | R 46.6 | 36.2 | 23.0 | 38.0 | 28.5 | 36.7 | 47.2 | 41.8 | 36.9 | 36.9 | 23.7 |
| 8. | 15.8 | 34.4 | 291 | R 46.8 | 35.4 | 22.5 | 35.9 | 29.4 | 28.3 | 32.1 | 42.8 | 37.9 | 33.0 | 22.8 |
| 9. | 15.4 | 46.2 | 247 | R 39.8 | 35.8 | 22.6 | 29.9 | 27.8 | 27.3 | 29.4 | 53.6 | 30.5 | 30.0 | 25.5 |
| 10. | 15.7 | 44.9 | 231 | R 36.8 | 33.5 | 26.0 | 26.3 | 30.8 | 28.7 | 29.9 | 55.0 | 35.9 | 28.3 | 35.6 |
| 11. | 15.3 | 50.5 | 224 | R 36.6 | 31.6 | 24.5 | 25.0 | 32.6 | 29.7 | 29.4 | 51.4 | 36.3 | 30.4 | 39.0 |
| 12. | 15.3 | 34.4 | 204 | R 34.4 | 30.8 | 27.2 | 28.2 | 35.3 | 31.5 | 29.5 | 39.4 | 35.9 | 39.3 | 38.4 |
| 13. | 14.9 | 30.9 | 189 | R 30.7 | 30.5 | 27.9 | 33.2 | 34.7 | 32.2 | 30.7 | 40.0 | 36.8 | 31.7 | 38.2 |
| 14. | 14.7 | 37.8 | 169 | R 33.8 | 30.2 | 25.8 | 27.4 | 38.9 | 67.1 | 31.2 | 30.9 | 36.7 | 28.6 | 40.7 |
| 15. | 14.5 | 56.7 | 137 | R 40.4 | 29.3 | 24.5 | 27.1 | 39.7 | 103 | 31.8 | 32.0 | 38.0 | 27.3 | 66.9 |
| 16. | 14.5 | 73.2 | 118 | R 41.2 | 28.3 | 23.5 | 28.6 | 33.4 | 101 | 34.1 | 35.8 | 38.9 | 28.5 | 107 |
| 17. | 14.6 | 106 | 87.7 | R 41.7 | 27.7 | 22.5 | 29.5 | 33.6 | 77.7 | 35.2 | 35.4 | 32.0 | 28.4 | 149 |
| 18. | 14.7 | 126 | 74.6 | 53.6 | 27.3 | 22.0 | 28.7 | 33.2 | 79.8 | 33.1 | 35.2 | 35.9 | 28.2 | 158 |
| 19. | 14.3 | 88.8 | 96.1 | 62.0 | 27.5 | 22.4 | 29.3 | 32.5 | 71.0 | 32.3 | 35.2 | 35.8 | 29.5 | 131 |
| 20. | 14.6 | 60.5 | 153 | 93.2 | 27.5 | 22.3 | 30.5 | 39.7 | 50.8 | 35.6 | 35.6 | 35.9 | 27.1 | 94.6 |
| 21. | 14.7 | 53.2 | 196 | 68.4 | 26.5 | 22.9 | 30.7 | 48.7 | 49.7 | 35.6 | 36.6 | 36.0 | 27.0 | 70.6 |
| 22. | 14.8 | 52.5 | 218 | 43.9 | 25.3 | 25.8 | 29.7 | 41.9 | 47.1 | 36.0 | 37.4 | 36.3 | 27.6 | 64.7 |
| 23. | 14.4 | 63.5 | 236 | 35.4 | 25.0 | 25.3 | 29.2 | 33.5 | 39.5 | 36.2 | 37.4 | 36.6 | 26.9 | 91.2 |
| 24. | 14.3 | 78.8 | 245 | 33.5 | 24.4 | 25.1 | 32.2 | 27.3 | 33.2 | 36.5 | 37.8 | 38.0 | 27.2 | 157 |
| 25. | 14.2 | 84.6 | 199 | 32.4 | 23.7 | 24.7 | 34.1 | 25.3 | 31.6 | 40.6 | 37.1 | 38.4 | 27.8 | 188 |
| 26. | 14.3 | 76.1 | 165 | 36.9 | 23.4 | 25.1 | 34.5 | 25.4 | 32.0 | 30.2 | 35.9 | 38.6 | 27.9 | 193 |
| 27. | 14.3 | 63.2 | 115 | 35.4 | 24.3 | 24.3 | 36.0 | 25.4 | 33.0 | 30.6 | 36.7 | 39.2 | 28.1 | 155 |
| 28. | 14.3 | 69.8 | 89.4 | 33.0 | 21.6 | 23.7 | 37.2 | 25.5 | 36.9 | 32.4 | 34.9 | 38.6 | 28.5 | 172 |
| 29. | 14.0 | 77.0 | 79.8 | 32.4 | 22.5 | 23.4 | 36.7 | 27.3 | 41.9 | 32.0 | 31.7 | 33.0 | 27.2 | 190 |
| 30. | 13.9 | 105 | 72.6 | | 21.1 | 23.2 | 36.6 | 28.8 | 62.7 | 31.5 | 34.0 | 32.1 | 25.7 | 187 |
| 31. | | 144 | 65.6 | | 22.4 | | 36.8 | | 56.5 | 31.6 | | 33.1 | | 133 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 13. | 30. | 3. | 11. | 25. | 3. | 5. | 14. | 9. | 30. | 2.+ |
| NQ | 13.9 | 14.5 | 65.6 | 30.7 | 21.1 | 21.5 | 25.0 | 25.3 | 26.8 | 27.4 | 30.9 | 30.5 | 25.7 | 21.6 |
| MQ | 15.9 | 59.2 | 174 | 44.6 | 29.6 | 24.2 | 31.8 | 32.8 | 45.3 | 33.5 | 37.9 | 36.8 | 31.3 | 87.4 |
| HQ | 31.2 | 162 | 300 | 111 | 39.7 | 30.9 | 40.6 | 50.3 | 112 | 54.8 | 56.5 | 46.9 | 53.6 | 199 |
| Tag | 3.+ | 31. | 7.+ | 20. | 3.+ | 5. | 6. | 14. | 16. | 6. | 9. | 6. | 5. | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 25 | 73 | 18 | 12 | 10 | 13 | 13 | 19 | 14 | 15 | 15 | 13 | 37 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1954 | 1954 | 1947 | 1960 | 1953 | 1964 | 1964 | 1964 | 1959 | 1990 | 1959 | 1959 |
| NQ | 10.2 | 11.8 | 12.0 | 11.8 | 15.3 | 16.9 | 18.0 | 16.3 | 13.8 | 11.0 | 7.36 | 8.06 | 10.2 | 11.8 |
| MNQ | 28.2 | 34.8 | 37.7 | 41.4 | 39.3 | 35.5 | 27.3 | 26.0 | 26.0 | 26.4 | 26.9 | 25.5 | 28.0 | 34.6 |
| MQ | 53.4 | 73.8 | 86.5 | 88.2 | 82.1 | 64.0 | 44.3 | 40.6 | 40.9 | 38.5 | 38.6 | 40.6 | 51.8 | 74.3 |
| MHQ | 126 | 177 | 215 | 213 | 195 | 139 | 134 | 90.2 | 84.4 | 74.9 | 72.6 | 82.4 | 117 | 178 |
| HQ | 730 | 581 | 747 | 860 | 578 | 487 | 2800 | 622 | 543 | 354 | 281 | 394 | 482 | 581 |
| Jahr | 1940 | 1960 | 1995 | 1946 | 1942 | 1986 | 1943 | 1984 | 1956 | 1981 | 2007 | 1998 | 1998 | 1960 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 22 | 31 | 36 | 35 | 35 | 26 | 19 | 17 | 17 | 16 | 16 | 17 | 21 | 31 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 13.9 | am 30.11.2011 | 13.9 | 25.0 | 21.1 | am 30.03.2012 |
| MQ m³/s | 47.4 | | 58.5 | 36.4 | 51.0 | |
| HQ m³/s | 300 | am 07.01.2012 bei W= 334 cm | 300 | 112 | 300 | am 07.01.2012 bei W= 334 cm |
| Nq l/(s km²) | 2.18 | | 2.18 | 3.93 | 3.31 | |
| Mq l/(s km²) | 7.44 | | 9.19 | 5.71 | 8.01 | |
| Hq l/(s km²) | 47.1 | | 47.1 | 17.6 | 47.1 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 235 | | 145 | 91 | 253 | |

| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 7.36 | am 16.09.1959 | 10.2 | 7.36 | 7.36 | am 16.09.1959 |
| MNQ m³/s | 16.8 | | 21.8 | 19.5 | 17.8 | |
| MQ m³/s | 57.5 | | 74.7 | 40.6 | 57.4 | |
| MHQ m³/s | 398 | | 350 | 190 | 394 | |
| HQ m³/s | 2800 | am 17.05.1943 bei W= 829 cm | 860 | 2800 | 2800 | am 17.05.1943 bei W= 829 cm |
| $HQ_1$ m³/s | 261 | | 252 | 95.1 | 261 | |
| $HQ_5$ m³/s | 502 | | 485 | 219 | 502 | |
| MNq l/(s km²) | 2.64 | | 3.42 | 3.06 | 2.80 | |
| Mq l/(s km²) | 9.03 | | 11.7 | 6.38 | 9.02 | |
| MHq l/(s km²) | 62.5 | | 55.0 | 29.8 | 61.9 | |

| | 1941/2012 (*) 72 Jahre | 1941/2012 |
|---|---|---|
| $Mh_N$ mm | | |
| $Mh_A$ mm | 285 185 101 | 285 |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 6.20 | 0.974 | 09.10.1921 | 2800*) | 440 | 829 | 17.05.1943 |
| 2 | 7.36 | 1.16 | 16.09.1959 | 980 | 154 | 584 | 09.02.1946 |
| 3 | 8.06 | 1.27 | 25.10.1990 | 968 | 152 | 554 | 01.01.1926 |
| 4 | 9.00 | 1.41 | 04.10.1964 | 747 | 117 | 507 | 24.01.1995 |
| 5 | 9.60 | 1.51 | 09.09.1934 | 730 | 115 | 498 | 06.11.1940 |
| 6 | 10.0 | 1.57 | 27.10.1976 | 710 | 112 | 506 | 29.11.1939 |
| 7 | 10.2 | 1.60 | 25.11.1959 | 625 | 98.2 | 451 | 08.02.1984 |
| 8 | 10.5 | 1.65 | 15.09.1991 | 622 | 97.7 | 450 | 31.05.1984 |
| 9 | 10.8 | 1.70 | 23.10.1949 | 588 | 92.4 | 436 | 26.10.1923 |
| 10 | 11.2 | 1.76 | 05.09.1947 | 581 | 91.3 | 439 | 06.12.1960 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 291 | 291 | | | |
| 364 | 288 | 288 | 860 | 362 | 77.2 |
| 363 | 271 | 271 | 619 | 316 | 68.5 |
| 362 | 247 | 247 | 574 | 291 | 68.0 |
| 361 | 245 | 245 | 558 | 272 | 67.0 |
| 360 | 236 | 236 | 521 | 255 | 67.0 |
| 359 | 231 | 231 | 452 | 242 | 66.0 |
| 358 | 224 | 224 | 431 | 232 | 66.0 |
| 357 | 222 | 222 | 414 | 221 | 58.9 |
| 356 | 218 | 218 | 394 | 213 | 54.8 |
| 350 | 189 | 193 | 302 | 174 | 51.8 |
| 340 | 115 | 157 | 263 | 137 | 42.0 |
| 330 | 84.6 | 107 | 237 | 115 | 34.5 |
| 320 | 71.0 | 79.8 | 204 | 99.1 | 32.6 |
| 300 | 51.2 | 51.3 | 154 | 79.8 | 30.5 |
| 270 | 40.0 | 39.8 | 111 | 62.0 | 28.0 |
| 240 | 37.2 | 37.6 | 97.5 | 51.5 | 25.8 |
| 210 | 35.9 | 36.0 | 80.0 | 44.2 | 23.5 |
| 183 | 34.4 | 34.5 | 71.5 | 39.7 | 21.5 |
| 150 | 32.1 | 32.3 | 60.4 | 35.5 | 19.4 |
| 130 | 30.8 | 31.6 | 56.8 | 33.3 | 18.1 |
| 120 | 30.3 | 30.6 | 55.9 | 32.2 | 17.0 |
| 110 | 29.7 | 30.0 | 54.9 | 31.2 | 16.0 |
| 100 | 28.8 | 29.5 | 54.0 | 30.2 | 14.6 |
| 90 | 27.7 | 28.7 | 51.0 | 29.2 | 13.5 |
| 80 | 27.1 | 28.2 | 48.9 | 28.1 | 13.0 |
| 70 | 25.5 | 27.5 | 47.1 | 27.1 | 12.4 |
| 60 | 24.7 | 27.2 | 45.2 | 25.9 | 11.8 |
| 50 | 23.5 | 26.0 | 43.4 | 24.7 | 11.3 |
| 40 | 22.5 | 25.3 | 41.6 | 23.2 | 10.7 |
| 30 | 17.0 | 24.4 | 40.1 | 21.5 | 10.7 |
| 25 | 15.6 | 23.6 | 39.2 | 20.4 | 10.7 |
| 20 | 15.3 | 23.4 | 39.0 | 19.3 | 10.2 |
| 15 | 14.8 | 22.8 | 38.6 | 17.6 | 10.2 |
| 10 | 14.6 | 22.5 | 37.6 | 15.6 | 9.60 |
| 9 | 14.5 | 22.4 | 37.1 | 15.3 | 9.60 |
| 8 | 14.4 | 22.3 | 37.0 | 14.8 | 9.60 |
| 7 | 14.4 | 22.0 | 36.4 | 14.4 | 9.60 |
| 6 | 14.4 | 22.0 | 35.8 | 14.0 | 9.60 |
| 5 | 14.4 | 21.8 | 35.8 | 13.5 | 9.04 |
| 4 | 14.4 | 21.8 | 35.3 | 13.1 | 9.03 |
| 3 | 14.3 | 21.8 | 34.9 | 12.5 | 8.51 |
| 2 | 14.2 | 21.6 | 34.9 | 11.9 | 8.48 |
| 1 | 14.0 | 21.5 | 32.9 | 10.8 | 7.92 |
| 0 | 13.9 | 21.1 | 32.2 | 7.36 | 7.36 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1921
die Wasserstände sind durch Talsperrenbetrieb beeinflußt
*) durch Bruch der Edertalsperre
15 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 68.7 km²
PNP : NN + 286.92 m
Lage: 4.8 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Rothemann Nr. 42260250
Gewässer : Döllbach
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.168 | 0.159 | 2.12 | R 0.997 | 0.800 | 0.440 | 0.304 | 0.409 | 0.716 | 0.460 | 0.269 | 0.223 | 0.452 | 0.204 |
| 2. | 0.168 | 0.168 | 3.38 | R 0.908 | 0.775 | 0.424 | 0.361 | 0.324 | 0.502 | 0.421 | 0.240 | 0.216 | 0.476 | 0.173 |
| 3. | 0.168 | 0.220 | 2.37 | R 0.828 | 0.749 | 0.403 | 0.321 | 0.522 | 0.537 | 0.405 | 0.226 | 0.207 | 1.34 | 0.163 |
| 4. | 0.168 | 0.697 | 1.96 | R 0.771 | 0.749 | 0.588 | 0.308 | 0.445 | 0.460 | 0.388 | 0.235 | 0.498 | 1.27 | 0.222 |
| 5. | 0.168 | 2.42 | 6.40 | R 0.724 | 0.703 | 0.443 | 0.447 | 0.581 | 0.950 | 0.501 | 0.246 | 0.409 | 1.23 | 0.537 |
| 6. | 0.168 | 0.922 | 4.44 | D 0.679 | 0.699 | 0.422 | 0.881 | 0.524 | 0.748 | 0.450 | 0.237 | 0.490 | 1.40 | R 0.550 |
| 7. | 0.168 | 1.39 | 3.47 | D 0.639 | 0.696 | 0.426 | 1.22 | 0.615 | 0.548 | 0.398 | 0.221 | 1.76 | 0.787 | R 0.481 |
| 8. | 0.168 | 0.996 | 3.16 | D 0.601 | 0.714 | 0.415 | 0.628 | 0.416 | 0.547 | 0.367 | 0.229 | 0.547 | 0.646 | R 0.414 |
| 9. | 0.168 | 1.89 | 3.07 | D 0.567 | 0.694 | 0.403 | 0.516 | 0.321 | 0.502 | 0.353 | 0.222 | 0.384 | 0.568 | R 0.403 |
| 10. | 0.168 | 1.03 | 2.78 | R 0.541 | 0.651 | 0.515 | 0.444 | 0.285 | 0.467 | 0.344 | 0.214 | 0.327 | 0.812 | R 0.403 |
| 11. | 0.168 | 0.760 | 2.23 | R 0.522 | 0.651 | 0.620 | 0.467 | 0.292 | 0.646 | 0.326 | 0.243 | 0.284 | 0.852 | R 0.403 |
| 12. | 0.168 | 0.823 | 2.19 | R 0.504 | 0.636 | 0.597 | 0.665 | 0.375 | 0.758 | 0.314 | 0.479 | 0.313 | 0.596 | R 0.403 |
| 13. | 0.168 | 0.912 | 2.46 | R 0.489 | 0.606 | 0.658 | 0.432 | 0.956 | 1.48 | 0.299 | 0.301 | 0.318 | 0.488 | R 0.403 |
| 14. | 0.168 | 1.67 | 1.98 | R 0.484 | 0.604 | 0.542 | 0.396 | 0.523 | 4.21 | 0.289 | 0.255 | 0.392 | 0.423 | R 0.429 |
| 15. | 0.173 | 1.94 | 1.77 | R 0.479 | 0.565 | 0.477 | 0.441 | 0.364 | 1.70 | 0.287 | 0.237 | 0.582 | 0.386 | R 5.48 |
| 16. | 0.168 | 4.91 | 1.62 | R 0.485 | 0.561 | 0.443 | 0.471 | 0.558 | 1.38 | 0.388 | 0.223 | 0.404 | 0.359 | R 5.06 |
| 17. | 0.168 | 2.74 | 1.54 | R 0.578 | 0.561 | 0.414 | 0.397 | 0.393 | 1.13 | 0.320 | 0.230 | 0.335 | 0.339 | 3.59 |
| 18. | 0.156 | 1.65 | 1.43 | R 0.972 | 0.578 | 0.403 | 0.362 | 0.320 | 0.965 | 0.267 | 0.207 | 0.294 | 0.313 | 2.82 |
| 19. | 0.157 | 1.21 | 2.66 | R 2.76 | 0.612 | 0.403 | 0.387 | 0.279 | 0.757 | 0.248 | 0.220 | 0.263 | 0.298 | 1.88 |
| 20. | 0.146 | 1.15 | 3.21 | R 0.854 | 0.561 | 0.403 | 0.358 | 0.503 | 0.705 | 0.247 | 0.219 | 0.249 | 0.276 | 1.51 |
| 21. | 0.160 | 1.17 | 3.28 | 0.673 | 0.558 | 0.416 | 0.354 | 0.855 | 0.722 | 0.243 | 0.236 | 0.249 | 0.259 | 1.34 |
| 22. | 0.160 | 1.91 | 4.76 | 0.614 | 0.519 | 0.430 | 0.365 | 0.504 | 0.659 | 0.328 | 0.248 | 0.246 | 0.243 | 1.30 |
| 23. | 0.152 | 2.46 | 3.24 | 0.608 | 0.519 | 0.415 | 0.377 | 0.374 | 0.597 | 0.257 | 0.218 | 0.243 | 0.225 | 5.02 |
| 24. | 0.147 | 2.65 | 2.58 | 0.673 | 0.509 | 0.438 | 0.339 | 0.368 | 0.559 | 0.356 | 0.241 | 0.242 | 0.208 | 3.69 |
| 25. | 0.146 | 1.73 | 2.16 | 0.785 | 0.479 | 0.503 | 0.326 | 0.735 | 0.538 | 0.399 | 0.257 | 0.238 | 0.191 | 2.42 |
| 26. | 0.146 | 1.45 | 1.86 | 0.762 | 0.465 | 0.387 | 0.317 | 0.432 | 0.524 | 0.344 | 0.382 | 0.279 | 0.193 | 3.78 |
| 27. | 0.151 | 1.40 | R 1.64 | 0.689 | 0.440 | 0.349 | 0.309 | 0.358 | 0.489 | 0.359 | 0.426 | 0.424 | 0.280 | 4.63 |
| 28. | 0.146 | 1.29 | R 1.47 | 0.665 | 0.440 | 0.335 | 0.307 | 0.364 | 0.601 | 0.264 | 0.282 | 0.339 | 0.233 | 6.47 |
| 29. | 0.146 | 1.25 | R 1.33 | 0.756 | 0.440 | 0.317 | 0.297 | 0.330 | 1.17 | 0.249 | 0.229 | 0.324 | 0.302 | 3.46 |
| 30. | 0.146 | 1.93 | R 1.21 | | 0.440 | 0.314 | 0.302 | 0.383 | 0.636 | 0.363 | 0.232 | 0.529 | 0.281 | 2.91 |
| 31. | | 1.62 | R 1.10 | | 0.440 | | 0.320 | | 0.514 | 0.277 | | 0.585 | | 2.57 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 20.+ | 1. | 31. | 15. | 27.+ | 30. | 29. | 19. | 4. | 21. | 18. | 3. | 25. | 3. |
| NQ | 0.146 | 0.159 | 1.10 | 0.479 | 0.440 | 0.314 | 0.297 | 0.279 | 0.460 | 0.243 | 0.207 | 0.207 | 0.191 | 0.163 |
| MQ | 0.161 | 1.50 | 2.54 | 0.745 | 0.594 | 0.445 | 0.433 | 0.457 | 0.862 | 0.339 | 0.257 | 0.393 | 0.524 | 2.04 |
| HQ | 0.192 | 8.91 | 9.49 | 5.69 | 0.800 | 0.853 | 2.05 | 1.79 | 5.84 | 0.800 | 0.749 | 3.22 | 2.70 | 10.7 |
| Tag | 15.+ | 16. | 5. | 19. | 1.+ | 4. | 7. | 13. | 14. | 5. | 12. | 7. | 3. | 28. |
| $h_N$ mm | 2 | 159 | 119 | 28 | 20 | 34 | 69 | 124 | 129 | 55 | 50 | 64 | 57 | 148 |
| $h_A$ mm | 6 | 58 | 99 | 27 | 23 | 17 | 17 | 17 | 34 | 13 | 10 | 15 | 20 | 80 |
| | 1970/2011 | | 1971/2012 42 Jahre | | | | | | | | | | | |
| Jahr | 1993 | 1993 | 1977 | 1972 | 1972 | 2011 | 1990 | 1996 | 2003 | 1993 | 1991 | 1993 + | 1993 | 1993 |
| NQ | 0.083 | 0.111 | 0.170 | 0.190 | 0.190 | 0.274 | 0.229 | 0.128 | 0.097 | 0.078 | 0.081 | 0.097 | 0.083 | 0.111 |
| MNQ | 0.347 | 0.488 | 0.658 | 0.702 | 0.737 | 0.663 | 0.447 | 0.362 | 0.275 | 0.220 | 0.205 | 0.248 | 0.347 | 0.482 |
| MQ | 0.785 | 1.29 | 1.59 | 1.44 | 1.42 | 1.10 | 0.740 | 0.618 | 0.486 | 0.382 | 0.347 | 0.493 | 0.780 | 1.32 |
| MHQ | 4.64 | 8.25 | 9.09 | 6.53 | 5.14 | 4.41 | 3.66 | 3.14 | 3.06 | 2.71 | 1.99 | 2.86 | 4.56 | 8.28 |
| HQ | 21.4 | 26.8 | 38.4 | 30.4 | 14.6 | 24.4 | 14.3 | 14.1 | 14.0 | 17.0 | 9.42 | 15.5 | 21.4 | 26.8 |
| Jahr | 1998 | 1978 | 2003 | 1984 | 1988 | 1989 | 2004 | 1981 | 1992 | 2010 | 2007 | 1998 | 1998 | 1978 |
| | 1970/2011 | | 1971/2012 42 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 79 | 94 | 82 | 63 | 67 | 56 | 72 | 78 | 82 | 70 | 64 | 70 | 79 | 96 |
| $Mh_A$ mm | 30 | 50 | 62 | 53 | 55 | 42 | 29 | 23 | 19 | 15 | 13 | 19 | 29 | 51 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.146 | am 20.11.2011 | 0.146 | 0.207 | 0.163 | am 03.12.2012 |
| MQ m³/s | 0.732 | | 1.01 | 0.458 | 0.807 | |
| HQ m³/s | 9.49 | am 05.01.2012 bei W= 201 cm | 9.49 | 5.84 | 10.7 | am 28.12.2012 bei W= 207 cm |
| Nq l/(s km²) | 2.13 | | 2.13 | 3.01 | 2.37 | |
| Mq l/(s km²) | 10.7 | | 14.7 | 6.67 | 11.7 | |
| Hq l/(s km²) | 138 | | 138 | 85.0 | 156 | |
| $h_N$ mm | 853 | | 362 | 491 | 897 | |
| $h_A$ mm | 336 | | 231 | 106 | 371 | |
| | 1971/2012 (*) 42 Jahre | | | | 1971/2012 | |
| NQ m³/s | 0.078 | am 08.08.1993 | 0.083 | 0.078 | 0.078 | am 08.08.1993 |
| MNQ m³/s | 0.162 | | 0.301 | 0.178 | 0.175 | |
| MQ m³/s | 0.889 | | 1.27 | 0.511 | 0.890 | |
| MHQ m³/s | 15.6 | | 14.7 | 6.25 | 15.4 | |
| HQ m³/s | 38.4 | am 02.01.2003 bei W= 264 cm | 38.4 | 17.0 | 38.4 | am 02.01.2003 bei W= 264 cm |
| $HQ_1$ m³/s | 10.2 | | 9.10 | 3.84 | 10.2 | |
| $HQ_5$ m³/s | 17.6 | | 17.6 | 10.1 | 17.6 | |
| MNq l/(s km²) | 2.36 | | 4.38 | 2.59 | 2.55 | |
| Mq l/(s km²) | 12.9 | | 18.5 | 7.44 | 13.0 | |
| MHq l/(s km²) | 227 | | 214 | 91.0 | 224 | |
| | 1971/2012 (*) 42 Jahre | | | | 1971/2012 | |
| $Mh_N$ mm | 878 | | 440 | 438 | 879 | |
| $Mh_A$ mm | 408 | | 291 | 118 | 410 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.078 | 1.14 | 08.08.1993 | 38.4 | 559 | 264 | 02.01.2003 |
| 2 | 0.081 | 1.18 | 04.09.1991 | 30.4 | 443 | 248 | 07.02.1984 |
| 3 | 0.083 | 1.21 | 07.08.2003 | 29.2 | 425 | 246 | 23.01.1995 |
| 4 | 0.091 | 1.32 | 17.08.1998 | 26.8 | 390 | 242 | 31.12.1978 |
| 5 | 0.100 | 1.46 | 06.07.1976 | 26.1 | 380 | 241 | 21.12.1993 |
| 6 | 0.101 | 1.47 | 27.09.1997 | 25.8 | 376 | 240 | 17.12.1974 |
| 7 | 0.105 | 1.53 | 07.09.2001 | 25.3 | 368 | 239 | 11.12.1979 |
| 8 | 0.105 | 1.53 | 11.08.1995 | 24.4 | 355 | 237 | 22.04.1989 |
| 9 | 0.110 | 1.60 | 19.08.2009 | 23.5 | 342 | 235 | 14.01.1984 |
| 10 | 0.118 | 1.72 | 13.09.1988 | 21.4 | 311 | 233 | 01.11.1998 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1971/2012 42 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 6.40 | 6.47 | | | |
| 364 | 4.91 | 6.40 | 17.2 | 7.36 | 3.17 |
| 363 | 4.76 | 5.48 | 12.3 | 6.25 | 2.56 |
| 362 | 4.44 | 5.06 | 11.3 | 5.48 | 2.44 |
| 361 | 4.21 | 5.02 | 10.7 | 5.05 | 2.32 |
| 360 | 3.47 | 4.76 | 9.51 | 4.68 | 2.20 |
| 359 | 3.38 | 4.63 | 8.96 | 4.31 | 2.00 |
| 358 | 3.28 | 4.44 | 8.36 | 4.15 | 1.82 |
| 357 | 3.24 | 4.21 | 8.06 | 3.87 | 1.82 |
| 356 | 3.21 | 3.78 | 6.64 | 3.71 | 1.64 |
| 350 | 2.66 | 3.28 | 5.57 | 2.98 | 1.32 |
| 340 | 2.12 | 2.58 | 4.31 | 2.29 | 1.18 |
| 330 | 1.73 | 1.96 | 3.59 | 1.92 | 0.960 |
| 320 | 1.45 | 1.48 | 3.09 | 1.65 | 0.826 |
| 300 | 0.965 | 0.950 | 2.12 | 1.31 | 0.645 |
| 270 | 0.699 | 0.689 | 1.70 | 1.03 | 0.496 |
| 240 | 0.588 | 0.582 | 1.30 | 0.832 | 0.390 |
| 210 | 0.515 | 0.516 | 1.16 | 0.670 | 0.310 |
| 183 | 0.447 | 0.465 | 1.02 | 0.558 | 0.270 |
| 150 | 0.404 | 0.415 | 0.900 | 0.451 | 0.254 |
| 130 | 0.367 | 0.393 | 0.840 | 0.404 | 0.210 |
| 120 | 0.356 | 0.377 | 0.780 | 0.380 | 0.198 |
| 110 | 0.330 | 0.361 | 0.730 | 0.359 | 0.166 |
| 100 | 0.321 | 0.344 | 0.730 | 0.339 | 0.160 |
| 90 | 0.307 | 0.326 | 0.680 | 0.315 | 0.160 |
| 80 | 0.285 | 0.317 | 0.680 | 0.295 | 0.156 |
| 70 | 0.263 | 0.302 | 0.680 | 0.277 | 0.129 |
| 60 | 0.246 | 0.284 | 0.630 | 0.258 | 0.114 |
| 50 | 0.236 | 0.264 | 0.630 | 0.239 | 0.100 |
| 40 | 0.221 | 0.248 | 0.580 | 0.221 | 0.100 |
| 30 | 0.173 | 0.240 | 0.530 | 0.201 | 0.100 |
| 25 | 0.173 | 0.235 | 0.530 | 0.193 | 0.100 |
| 20 | 0.173 | 0.229 | 0.480 | 0.176 | 0.098 |
| 15 | 0.173 | 0.223 | 0.480 | 0.161 | 0.097 |
| 10 | 0.157 | 0.218 | 0.480 | 0.147 | 0.088 |
| 9 | 0.156 | 0.216 | 0.480 | 0.142 | 0.088 |
| 8 | 0.152 | 0.214 | 0.480 | 0.141 | 0.088 |
| 7 | 0.151 | 0.208 | 0.480 | 0.140 | 0.087 |
| 6 | 0.147 | 0.208 | 0.480 | 0.130 | 0.087 |
| 5 | 0.147 | 0.207 | 0.450 | 0.123 | 0.087 |
| 4 | 0.147 | 0.204 | 0.450 | 0.121 | 0.084 |
| 3 | 0.147 | 0.193 | 0.450 | 0.112 | 0.083 |
| 2 | 0.147 | 0.191 | 0.450 | 0.098 | 0.081 |
| 1 | 0.147 | 0.173 | 0.450 | 0.098 | 0.079 |
| 0 | 0.146 | 0.163 | 0.430 | 0.078 | 0.078 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 182 km²
PNP : NN + 231.83 m
Lage: 3.0 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Lütterz Nr. 42360550
Gewässer : Lüder
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K 0.289 | K 0.248 | K 6.36 | R 1.97 | K 1.34 | K 0.424 | K 0.452 | K 0.580 | K 1.07 | K 1.63 | K 0.397 | K 0.294 | K 1.99 | K 0.689 |
| 2. | K 0.311 | K 0.266 | K 10.9 | R 1.73 | K 1.31 | K 0.408 | K 0.953 | K 0.516 | K 0.976 | K 1.27 | K 0.361 | K 0.321 | K 2.19 | K 0.677 |
| 3. | K 0.310 | K 0.311 | K 7.87 | R 1.54 | K 1.26 | K 0.420 | K 0.700 | K 0.475 | K 0.831 | K 1.02 | K 0.329 | K 0.273 | K 4.30 | K 0.704 |
| 4. | K 0.291 | K 1.05 | K 7.09 | R 1.36 | K 1.20 | K 0.710 | K 0.530 | K 0.712 | K 0.707 | K 0.892 | K 0.343 | K 1.24 | K 5.22 | K 0.771 |
| 5. | K 0.334 | K 4.36 | K 28.9 | R 1.21 | K 1.23 | K 0.644 | K 0.582 | K 1.21 | K 3.59 | K 0.868 | K 0.318 | K 1.86 | K 3.86 | K 1.02 |
| 6. | K 0.315 | K 2.17 | K 17.4 | R 1.07 | K 1.22 | K 0.489 | K 1.04 | K 0.875 | K 2.62 | K 1.10 | K 0.355 | K 1.14 | K 3.16 | 1.17 |
| 7. | K 0.309 | K 2.42 | K 9.99 | R 0.981 | K 1.10 | K 0.463 | K 1.02 | K 1.16 | K 1.66 | K 0.951 | K 0.326 | K 2.33 | K 2.75 | R 1.10 |
| 8. | K 0.295 | K 3.23 | K 9.29 | R 0.897 | K 1.42 | K 0.463 | K 0.753 | K 0.995 | K 1.30 | K 0.785 | K 0.275 | K 1.58 | K 2.56 | R 1.07 |
| 9. | K 0.316 | K 3.79 | K 7.26 | R 0.833 | K 1.53 | K 0.425 | K 0.623 | K 0.720 | K 1.17 | K 0.699 | K 0.312 | K 1.10 | K 2.11 | R 1.04 |
| 10. | K 0.293 | K 3.04 | K 5.94 | R 0.801 | K 1.30 | K 0.817 | K 0.565 | K 0.578 | K 1.09 | K 0.629 | K 0.268 | K 0.848 | K 2.28 | R 1.05 |
| 11. | K 0.241 | K 1.81 | K 4.67 | R 0.769 | K 1.21 | K 1.04 | K 0.625 | K 0.543 | K 1.15 | K 0.544 | K 0.536 | K 0.730 | K 3.29 | R 1.07 |
| 12. | K 0.317 | K 1.66 | K 4.20 | R 0.738 | K 1.13 | K 0.896 | K 0.739 | K 0.651 | K 1.76 | K 0.503 | K 1.12 | K 0.688 | K 2.31 | R 0.939 |
| 13. | K 0.326 | K 2.31 | K 5.17 | R 0.735 | K 1.07 | K 0.728 | K 0.585 | K 2.26 | K 3.52 | K 0.542 | K 0.732 | K 0.792 | K 1.84 | R 0.915 |
| 14. | K 0.292 | K 4.10 | K 4.06 | R 0.787 | K 1.01 | K 0.636 | K 0.470 | K 2.53 | K 8.97 | K 0.485 | K 0.493 | K 0.904 | K 1.54 | R 1.04 |
| 15. | K 0.271 | K 5.21 | K 3.21 | R 0.871 | K 0.931 | K 0.563 | K 0.474 | K 1.44 | K 6.72 | K 0.452 | K 0.425 | K 2.17 | K 1.35 | R 14.6 |
| 16. | K 0.280 | K 15.2 | K 2.73 | R 0.838 | K 0.890 | K 0.521 | K 0.562 | K 1.14 | K 5.22 | K 0.552 | K 0.415 | K 1.75 | K 1.21 | R 25.0 |
| 17. | K 0.287 | K 11.8 | K 2.38 | R 0.945 | K 0.824 | K 0.474 | K 0.494 | K 1.11 | K 6.05 | K 0.591 | K 0.376 | K 1.26 | K 1.08 | R 14.9 |
| 18. | K 0.290 | K 5.18 | K 2.11 | 1.46 | K 0.804 | K 0.409 | K 0.432 | K 0.886 | K 5.45 | K 0.411 | K 0.354 | K 1.01 | K 0.996 | R 13.5 |
| 19. | K 0.294 | K 3.61 | K 4.86 | 5.27 | K 0.896 | K 0.473 | K 0.515 | K 0.761 | K 3.18 | K 0.383 | K 0.328 | K 0.862 | K 0.916 | 7.08 |
| 20. | K 0.274 | K 2.91 | K 13.0 | 2.29 | K 0.768 | K 0.495 | K 0.888 | K 1.51 | K 2.33 | K 0.349 | K 0.338 | K 0.728 | K 0.827 | 5.00 |
| 21. | K 0.293 | K 2.71 | 9.37 | K 1.54 | K 0.694 | K 0.478 | K 0.778 | K 2.05 | K 2.06 | K 0.336 | K 0.303 | K 0.657 | K 0.757 | 4.21 |
| 22. | K 0.270 | K 3.57 | 16.8 | K 1.30 | K 0.636 | K 0.596 | K 0.600 | K 1.41 | K 1.68 | K 0.325 | K 0.352 | K 0.646 | K 0.680 | 3.94 |
| 23. | K 0.254 | K 4.86 | 12.0 | K 1.24 | K 0.630 | K 0.976 | K 0.486 | K 1.02 | K 1.28 | K 0.277 | K 0.290 | K 0.586 | K 0.660 | 18.3 |
| 24. | K 0.251 | K 6.21 | 7.93 | K 1.27 | K 0.588 | K 1.00 | K 0.436 | K 0.858 | K 1.04 | K 1.02 | K 0.317 | K 0.587 | K 0.622 | 20.9 |
| 25. | K 0.252 | K 4.60 | 5.79 | K 1.58 | K 0.541 | K 1.05 | K 0.404 | K 1.09 | K 0.870 | K 0.761 | K 0.340 | K 0.548 | K 0.580 | 8.61 |
| 26. | K 0.233 | K 3.99 | 4.70 | K 1.44 | K 0.526 | K 0.873 | K 0.383 | K 0.963 | K 0.742 | K 0.513 | K 0.442 | K 0.584 | K 0.631 | 9.62 |
| 27. | K 0.255 | K 3.40 | R 3.94 | K 1.30 | K 0.481 | K 0.702 | K 0.352 | K 0.785 | K 0.633 | K 0.622 | K 0.474 | K 0.854 | K 0.753 | 15.5 |
| 28. | K 0.262 | K 2.92 | R 3.44 | K 1.21 | K 0.480 | K 0.612 | K 0.347 | K 0.763 | K 0.755 | K 0.521 | K 0.448 | K 0.798 | K 0.828 | 18.9 |
| 29. | K 0.252 | K 2.62 | R 3.05 | K 1.28 | K 0.445 | K 0.539 | K 0.368 | K 0.697 | K 6.25 | K 0.437 | K 0.438 | K 0.707 | K 0.805 | 8.69 |
| 30. | K 0.230 | K 5.19 | R 2.67 | | K 0.441 | K 0.502 | K 0.364 | K 0.797 | K 4.83 | K 0.423 | K 0.360 | K 0.922 | K 0.771 | 6.47 |
| 31. | | K 4.38 | R 2.33 | | K 0.437 | | K 0.380 | | K 2.22 | K 0.421 | | K 2.04 | | 5.36 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 18. | 13. | 31. | 2. | 28. | 3. | 27. | 23. | 10. | 3. | 25. | 2. |
| NQ | 0.230 | 0.248 | 2.11 | 0.735 | 0.437 | 0.408 | 0.347 | 0.475 | 0.633 | 0.277 | 0.268 | 0.273 | 0.580 | 0.677 |
| MQ | 0.283 | 3.84 | 7.40 | 1.35 | 0.914 | 0.628 | 0.577 | 1.04 | 2.64 | 0.655 | 0.406 | 0.994 | 1.76 | 6.90 |
| HQ | 0.498 | 31.2 | 54.0 | 8.42 | 1.78 | 1.31 | 3.61 | 4.54 | 12.0 | 2.14 | 2.38 | 3.02 | 6.92 | 39.0 |
| Tag | 2.+ | 16. | 5. | 19. | 8. | 23. | 2. | 13. | 29. | 24. | 11. | 7. | 3.+ | 23. |
| $h_N$ mm | 2 | 133 | 109 | 25 | 18 | 47 | 84 | 119 | 134 | 58 | 46 | 75 | 48 | 132 |
| $h_A$ mm | 4 | 57 | 109 | 19 | 13 | 9 | 9 | 15 | 39 | 10 | 6 | 15 | 25 | 102 |
| | 1959/2011 | | 1960/2012 53 Jahre | | | | | | | | | | | |
| Jahr | 2011 | 1959 | 1963 | 1963 | 1963 | 2012 | 2011 | 1960 | 1960 | 1976 | 2008 | 1964 | 2011 | 2011 |
| NQ | 0.230 | 0.140 | 0.380 | 0.260 | 0.260 | 0.408 | 0.266 | 0.140 | 0.140 | 0.160 | 0.151 | 0.160 | 0.230 | 0.248 |
| MNQ | 0.812 | 1.16 | 1.30 | 1.38 | 1.34 | 1.18 | 0.742 | 0.601 | 0.496 | 0.404 | 0.405 | 0.537 | 0.819 | 1.17 |
| MQ | 2.38 | 4.06 | 4.38 | 3.81 | 3.71 | 2.37 | 1.37 | 1.05 | 0.883 | 0.680 | 0.755 | 1.41 | 2.41 | 4.16 |
| MHQ | 16.8 | 31.0 | 31.9 | 24.0 | 22.1 | 10.2 | 5.25 | 5.33 | 3.83 | 2.85 | 3.63 | 7.62 | 16.9 | 31.6 |
| HQ | 96.5 | 116 | 125 | 123 | 99.0 | 70.6 | 22.1 | 54.5 | 32.0 | 27.4 | 51.6 | 71.8 | 96.5 | 116 |
| Jahr | 1998 | 1967 | 1995 | 1984 | 1986 | 1986 | 1984 | 1975 | 1966 | 1981 | 1998 | 1998 | 1998 | 1967 |
| | 1959/2011 | | 1960/2012 53 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 83 | 98 | 82 | 64 | 69 | 59 | 68 | 72 | 76 | 72 | 65 | 78 | 83 | 99 |
| $Mh_A$ mm | 34 | 60 | 65 | 53 | 55 | 34 | 20 | 15 | 13 | 10 | 11 | 21 | 34 | 61 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.230 | am 30.11.2011 | 0.230 | 0.268 | 0.268 | am 10.09.2012 |
| MQ | m³/s | 1.74 | | 2.44 | 1.05 | 2.12 | |
| HQ | m³/s | 54.0 | am 05.01.2012 bei W= 408 cm | 54.0 | 12.0 | 54.0 | am 05.01.2012 bei W= 408 cm |
| Nq | l/(s km²) | 1.27 | | 1.27 | 1.48 | 1.48 | |
| Mq | l/(s km²) | 9.60 | | 13.4 | 5.81 | 11.7 | |
| Hq | l/(s km²) | 298 | | 298 | 66.1 | 298 | |
| $h_N$ | mm | 850 | | 334 | 516 | 895 | |
| $h_A$ | mm | 303 | | 211 | 92 | 370 | |
| | | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
| NQ | m³/s | 0.140 | am 10.12.1959 | 0.140 | 0.140 | 0.140 | am 29.06.1960 |
| MNQ | m³/s | 0.337 | | 0.642 | 0.350 | 0.349 | |
| MQ | m³/s | 2.23 | | 3.46 | 1.03 | 2.24 | |
| MHQ | m³/s | 59.7 | | 58.2 | 13.1 | 59.8 | |
| HQ | m³/s | 125 | am 23.01.1995 bei W= 475 cm | 125 | 71.8 | 125 | am 23.01.1995 bei W= 475 cm |
| $HQ_1$ | m³/s | 29.4 | | 27.4 | 3.18 | 30.8 | |
| $HQ_5$ | m³/s | 75.4 | | 75.4 | 15.3 | 75.4 | |
| MNq | l/(s km²) | 1.86 | | 3.54 | 1.93 | 1.92 | |
| Mq | l/(s km²) | 12.3 | | 19.1 | 5.67 | 12.3 | |
| MHq | l/(s km²) | 329 | | 321 | 72.2 | 329 | |
| | | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
| $Mh_N$ | mm | 885 | | 456 | 429 | 886 | |
| $Mh_A$ | mm | 387 | | 300 | 90 | 390 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.140 | 0.771 | 29.06.1960 | 125 | 689 | 475 | 23.01.1995 |
| 2 | 0.140 | 0.771 | 10.12.1959 | 123 | 678 | 473 | 07.02.1984 |
| 3 | 0.151 | 0.832 | 04.09.2008 | 116 | 639 | 466 | 24.12.1967 |
| 4 | 0.159 | 0.876 | 26.09.2011 | 107 | 590 | 457 | 06.12.1965 |
| 5 | 0.160 | 0.882 | 08.08.1976 | 99.0 | 545 | 447 | 31.03.1986 |
| 6 | 0.160 | 0.882 | 04.10.1964 | 97.4 | 537 | 445 | 14.01.1984 |
| 7 | 0.220 | 1.21 | 09.09.1973 | 96.5 | 532 | 450 | 01.11.1998 |
| 8 | 0.224 | 1.23 | 02.09.2009 | 89.5 | 493 | 435 | 17.12.1974 |
| 9 | 0.231 | 1.27 | 11.08.2010 | 87.4 | 482 | 432 | 23.02.1970 |
| 10 | 0.240 | 1.32 | 12.10.1962 | 86.6 | 477 | 431 | 13.02.2005 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1960/2012 53 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 28.9 | 28.9 | | | |
| 364 | 17.4 | 25.0 | 81.6 | 27.0 | 9.71 |
| 363 | 16.8 | 20.9 | 53.7 | 22.4 | 7.02 |
| 362 | 15.2 | 18.9 | 51.8 | 18.8 | 5.81 |
| 361 | 13.0 | 18.3 | 41.8 | 16.9 | 5.44 |
| 360 | 12.0 | 17.4 | 41.6 | 15.4 | 4.33 |
| 359 | 11.8 | 16.8 | 36.2 | 14.1 | 3.99 |
| 358 | 10.9 | 15.5 | 33.7 | 13.0 | 3.82 |
| 357 | 9.99 | 14.9 | 30.0 | 12.1 | 3.66 |
| 356 | 9.37 | 14.6 | 25.5 | 11.5 | 3.58 |
| 350 | 7.09 | 9.62 | 19.6 | 8.69 | 2.70 |
| 340 | 5.22 | 7.08 | 13.2 | 6.30 | 2.18 |
| 330 | 4.60 | 5.27 | 10.5 | 5.15 | 1.74 |
| 320 | 3.59 | 4.21 | 7.84 | 4.31 | 1.52 |
| 300 | 2.38 | 2.38 | 5.62 | 3.19 | 1.25 |
| 270 | 1.46 | 1.54 | 3.92 | 2.25 | 0.950 |
| 240 | 1.14 | 1.21 | 2.91 | 1.70 | 0.610 |
| 210 | 0.951 | 1.04 | 2.28 | 1.35 | 0.464 |
| 183 | 0.801 | 0.890 | 1.97 | 1.10 | 0.389 |
| 150 | 0.688 | 0.763 | 1.76 | 0.851 | 0.334 |
| 130 | 0.585 | 0.704 | 1.55 | 0.748 | 0.320 |
| 120 | 0.544 | 0.660 | 1.55 | 0.701 | 0.315 |
| 110 | 0.516 | 0.629 | 1.41 | 0.661 | 0.305 |
| 100 | 0.485 | 0.587 | 1.39 | 0.621 | 0.294 |
| 90 | 0.470 | 0.562 | 1.32 | 0.589 | 0.289 |
| 80 | 0.437 | 0.526 | 1.27 | 0.561 | 0.282 |
| 70 | 0.411 | 0.493 | 1.22 | 0.522 | 0.272 |
| 60 | 0.364 | 0.474 | 1.20 | 0.494 | 0.260 |
| 50 | 0.340 | 0.441 | 1.10 | 0.462 | 0.254 |
| 40 | 0.318 | 0.421 | 1.06 | 0.431 | 0.240 |
| 30 | 0.303 | 0.380 | 1.05 | 0.389 | 0.220 |
| 25 | 0.293 | 0.360 | 0.970 | 0.361 | 0.220 |
| 20 | 0.289 | 0.349 | 0.970 | 0.346 | 0.220 |
| 15 | 0.274 | 0.336 | 0.940 | 0.328 | 0.200 |
| 10 | 0.266 | 0.321 | 0.910 | 0.301 | 0.200 |
| 9 | 0.262 | 0.318 | 0.910 | 0.292 | 0.200 |
| 8 | 0.255 | 0.317 | 0.870 | 0.283 | 0.200 |
| 7 | 0.254 | 0.312 | 0.870 | 0.281 | 0.200 |
| 6 | 0.254 | 0.303 | 0.870 | 0.271 | 0.180 |
| 5 | 0.252 | 0.294 | 0.840 | 0.262 | 0.180 |
| 4 | 0.251 | 0.290 | 0.800 | 0.256 | 0.180 |
| 3 | 0.248 | 0.277 | 0.770 | 0.241 | 0.160 |
| 2 | 0.241 | 0.275 | 0.770 | 0.223 | 0.160 |
| 1 | 0.233 | 0.273 | 0.740 | 0.201 | 0.160 |
| 0 | 0.230 | 0.268 | 0.710 | 0.140 | 0.140 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 29.1 km²
PNP : NN + 364.71 m
Lage: 16.0 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Schlechtenwegen Nr. 42410104
Gewässer : Altefeld
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.055 | 0.072 | 2.41 | R0.940 | 0.537 | 0.185 | 0.207 | 0.182 | 0.163 | 0.483 | 0.242 | 0.185 | 0.769 | 0.349 |
| 2. | 0.054 | 0.075 | 3.04 | R0.911 | 0.492 | 0.185 | 0.241 | 0.113 | 0.156 | 0.392 | 0.229 | 0.184 | 1.23 | 0.341 |
| 3. | 0.056 | 0.153 | 2.03 | R0.882 | 0.467 | 0.181 | 0.230 | 0.154 | 0.154 | 0.375 | 0.217 | 0.184 | 1.75 | 0.341 |
| 4. | 0.052 | 0.777 | 2.22 | R0.854 | 0.442 | 0.297 | 0.212 | 0.233 | 0.114 | 0.343 | 0.207 | 1.10 | 1.56 | 0.356 |
| 5. | 0.054 | 1.47 | 7.68 | R0.827 | 0.449 | 0.217 | 0.269 | 0.405 | 0.593 | 0.333 | 0.201 | 0.927 | 1.23 | 0.387 |
| 6. | 0.051 | 0.642 | 3.53 | R0.799 | 0.410 | 0.186 | 0.454 | 0.245 | 0.377 | 0.544 | 0.212 | 0.623 | 1.02 | 0.385 |
| 7. | 0.052 | 1.01 | 2.72 | R0.772 | 0.378 | 0.189 | 0.387 | 0.320 | 0.263 | 0.389 | 0.192 | 1.23 | 0.919 | 0.373 |
| 8. | 0.054 | 0.938 | 2.63 | D0.746 | 0.546 | 0.187 | 0.257 | 0.226 | 0.211 | 0.328 | 0.189 | 0.778 | 0.829 | 0.332 |
| 9. | 0.054 | 1.39 | 2.29 | D0.720 | 0.517 | 0.200 | 0.212 | 0.152 | 0.195 | 0.280 | 0.188 | 0.602 | 0.712 | 0.323 |
| 10. | 0.054 | 0.908 | 2.01 | D0.694 | 0.465 | 0.671 | 0.205 | 0.126 | 0.201 | 0.268 | 0.172 | 0.492 | 0.843 | 0.382 |
| 11. | 0.054 | 0.607 | 1.68 | D0.669 | 0.477 | 0.548 | 0.190 | 0.146 | 0.172 | 0.247 | 0.280 | 0.424 | 0.961 | 0.388 |
| 12. | 0.054 | 0.682 | 1.66 | R0.644 | 0.453 | 0.437 | 0.371 | 0.161 | 0.409 | 0.240 | 0.527 | 0.413 | 0.742 | 0.359 |
| 13. | 0.054 | 0.871 | 1.92 | R0.619 | 0.415 | 0.356 | 0.210 | 0.651 | 0.984 | 0.228 | 0.375 | 0.462 | 0.651 | 0.377 |
| 14. | 0.054 | 1.36 | 1.52 | R0.595 | 0.383 | 0.309 | 0.182 | 0.456 | 3.01 | 0.219 | 0.280 | 0.578 | 0.588 | 0.384 |
| 15. | 0.055 | 1.44 | 1.34 | R0.582 | 0.365 | 0.279 | 0.185 | 0.300 | 1.24 | 0.211 | 0.258 | 1.12 | 0.548 | 4.49 |
| 16. | 0.054 | 3.90 | 1.20 | R0.545 | 0.341 | 0.253 | 0.213 | 0.307 | 1.57 | 0.256 | 0.238 | 0.767 | 0.511 | 5.03 |
| 17. | 0.055 | 1.98 | 1.09 | R0.779 | 0.331 | 0.212 | 0.181 | 0.353 | 2.76 | 0.220 | 0.214 | 0.601 | 0.496 | 2.94 |
| 18. | 0.054 | 1.15 | 1.00 | R0.944 | 0.358 | 0.213 | 0.161 | 0.234 | 1.36 | 0.193 | 0.213 | 0.509 | 0.456 | 3.07 |
| 19. | 0.054 | 0.918 | 2.45 | 2.21 | 0.404 | 0.221 | 0.205 | 0.188 | 0.732 | 0.177 | 0.213 | 0.464 | 0.429 | 1.68 |
| 20. | 0.054 | 0.857 | 2.88 | 0.971 | 0.324 | 0.219 | 0.372 | 0.396 | 0.567 | 0.171 | 0.189 | 0.367 | 0.410 | 1.33 |
| 21. | 0.054 | 0.902 | 2.81 | 0.735 | 0.298 | 0.225 | 0.236 | 0.390 | 0.509 | 0.169 | 0.186 | 0.315 | 0.377 | 1.17 |
| 22. | 0.054 | 1.21 | 3.66 | 0.633 | 0.281 | 0.333 | 0.179 | 0.309 | 0.412 | 0.167 | 0.194 | 0.290 | 0.370 | 1.16 |
| 23. | 0.054 | 1.57 | 2.85 | 0.555 | 0.267 | 0.595 | 0.122 | 0.208 | 0.332 | 0.160 | 0.200 | 0.273 | 0.341 | 5.32 |
| 24. | 0.054 | 2.14 | 2.05 | 0.648 | 0.242 | 0.533 | 0.102 | 0.204 | 0.265 | 0.468 | 0.197 | 0.265 | 0.344 | 4.49 |
| 25. | 0.054 | 1.46 | 1.64 | 0.736 | 0.222 | 0.570 | 0.082 | 0.376 | 0.228 | 0.580 | 0.205 | 0.243 | 0.341 | 2.08 |
| 26. | 0.054 | 1.36 | R1.42 | 0.606 | 0.212 | 0.447 | 0.077 | 0.267 | 0.190 | 0.404 | 0.232 | 0.286 | 0.328 | 2.59 |
| 27. | 0.056 | 1.17 | R1.27 | 0.537 | 0.200 | 0.369 | 0.079 | 0.196 | 0.167 | 0.547 | 0.262 | 0.392 | 0.477 | 3.84 |
| 28. | 0.071 | 1.04 | R1.18 | 0.510 | 0.185 | 0.299 | 0.076 | 0.227 | 0.269 | 0.343 | 0.241 | 0.349 | 0.400 | 4.21 |
| 29. | 0.071 | 0.979 | R1.09 | 0.581 | 0.184 | 0.265 | 0.075 | 0.176 | 3.79 | 0.283 | 0.212 | 0.341 | 0.406 | 2.03 |
| 30. | 0.071 | 1.61 | R1.00 | | 0.192 | 0.236 | 0.064 | 0.165 | 0.979 | 0.273 | 0.188 | 0.554 | 0.380 | 1.58 |
| 31. | | 1.31 | R0.969 | | 0.190 | | 0.077 | | 0.634 | 0.255 | | 0.842 | | 1.35 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 6. | 1. | 31. | 28. | 29. | 3. | 30. | 2. | 4. | 23. | 10. | 2.+ | 26. | 9. |
| NQ | 0.051 | 0.072 | 0.969 | 0.510 | 0.184 | 0.181 | 0.064 | 0.113 | 0.114 | 0.160 | 0.172 | 0.184 | 0.328 | 0.323 |
| MQ | 0.056 | 1.16 | 2.17 | 0.767 | 0.356 | 0.314 | 0.197 | 0.262 | 0.742 | 0.308 | 0.232 | 0.521 | 0.681 | 1.72 |
| HQ | 0.071 | 8.53 | 13.4 | 3.55 | 0.627 | 0.876 | 0.582 | 1.10 | 10.6 | 0.985 | 0.930 | 2.72 | 2.29 | 9.40 |
| Tag | 1.+ | 16. | 5. | 19. | 8. | 10. | 6.+ | 13. | 29. | 25. | 11. | 4. | 3. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 107 | 200 | 66 | 33 | 28 | 18 | 23 | 68 | 28 | 21 | 48 | 61 | 158 |
| | 1971/2011 | | 1972/2012 40 Jahre | | | | | | | | | | | |
| Jahr | 1971 | 1990 | 1972 | 1972 | 1972 | 1997 | 1997 | 1997 + | 1976 | 1973 + | 1973 | 1973 | 2005 | 1990 |
| NQ | 0.020 | 0.040 | 0.040 | 0.040 | 0.050 | 0.045 | 0.030 | 0.018 | 0.010 | 0.010 | 0.010 | 0.010 | 0.018 | 0.040 |
| MNQ | 0.145 | 0.213 | 0.254 | 0.264 | 0.265 | 0.230 | 0.119 | 0.085 | 0.065 | 0.052 | 0.061 | 0.092 | 0.150 | 0.213 |
| MQ | 0.608 | 0.974 | 1.10 | 0.872 | 0.914 | 0.538 | 0.294 | 0.198 | 0.185 | 0.127 | 0.188 | 0.370 | 0.606 | 0.996 |
| MHQ | 5.86 | 9.23 | 10.0 | 7.32 | 6.57 | 3.03 | 1.67 | 1.42 | 1.32 | 0.928 | 1.66 | 3.02 | 5.66 | 9.31 |
| HQ | 30.0 | 26.3 | 31.6 | 49.0 | 26.3 | 14.8 | 7.12 | 16.9 | 10.6 | 6.00 | 23.5 | 17.5 | 30.0 | 26.3 |
| Jahr | 1977 | 1974 | 2007 | 1984 | 1986 | 1983 | 1984 | 1981 | 2012 | 1981 | 1998 | 1998 | 1977 | 1974 |
| | 1971/2011 | | 1972/2012 40 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 54 | 90 | 101 | 75 | 84 | 48 | 27 | 18 | 17 | 12 | 17 | 34 | 54 | 92 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.051 | am 06.11.2011 | 0.051 | 0.064 | 0.064 | am 30.05.2012 |
| MQ m³/s | 0.593 | | 0.811 | 0.379 | 0.692 | |
| HQ m³/s | 13.4 | am 05.01.2012 bei W= 150 cm | 13.4 | 10.6 | 13.4 | am 05.01.2012 bei W= 150 cm |
| Nq l/(s km²) | 1.75 | | 1.75 | 2.20 | 2.20 | |
| Mq l/(s km²) | 20.4 | | 27.9 | 13.0 | 23.8 | |
| Hq l/(s km²) | 460 | | 460 | 364 | 460 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 643 | | 438 | 207 | 752 | |
| | 1972/2012 (*) 39 Jahre | | | | 1972/2012 | |
| NQ m³/s | 0.010 | am 24.08.1973 | 0.020 | 0.010 | 0.010 | am 24.08.1973 |
| MNQ m³/s | 0.038 | | 0.100 | 0.041 | 0.039 | |
| MQ m³/s | 0.527 | | 0.831 | 0.228 | 0.515 | |
| MHQ m³/s | 17.2 | | 16.7 | 4.93 | 16.3 | |
| HQ m³/s | 49.0 | am 07.02.1984 | 49.0 | 23.5 | 49.0 | am 07.02.1984 |
| $HQ_1$ m³/s | 11.5 | | 11.4 | 1.73 | 11.5 | |
| $HQ_5$ m³/s | 21.1 | | 20.8 | 5.97 | 21.1 | |
| MNq l/(s km²) | 1.31 | | 3.44 | 1.41 | 1.34 | |
| Mq l/(s km²) | 18.1 | | 28.6 | 7.84 | 17.7 | |
| MHq l/(s km²) | 591 | | 574 | 169 | 560 | |
| | 1972/2012 (*) 39 Jahre | | | | 1972/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 571 | | 449 | 125 | 560 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.010 | 0.344 | 04.07.1976 | 49.0 | 1680 | 219 | 07.02.1984 |
| 2 | 0.010 | 0.344 | 24.08.1973 | 31.6 | 1090 | | 18.01.2007 |
| 3 | 0.012 | 0.412 | 21.10.2003 | 30.0 | 1030 | 194 | 03.11.1977 |
| 4 | 0.013 | 0.447 | 13.09.2005 | 28.4 | 976 | 192 | 01.11.1998 |
| 5 | 0.014 | 0.481 | 20.09.1996 | 26.6 | 914 | 191 | 26.02.2002 |
| 6 | 0.016 | 0.550 | 01.07.2008 | 26.6 | 914 | 191 | 27.01.2002 |
| 7 | 0.018 | 0.619 | 13.06.1997 | 26.6 | 914 | 191 | 26.01.2002 |
| 8 | 0.020 | 0.687 | 02.11.1971 | 26.6 | 914 | 189 | 23.01.1995 |
| 9 | 0.022 | 0.756 | 01.08.1999 | 26.3 | 904 | 188 | 31.03.1986 |
| 10 | 0.027 | 0.928 | 19.07.2010 | 26.3 | 904 | 188 | 17.12.1974 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1972/2012 40 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 7.68 | 7.68 | | | |
| 364 | 3.90 | 5.32 | 17.6 | 7.68 | 2.12 |
| 363 | 3.79 | 5.03 | 13.4 | 5.99 | 2.06 |
| 362 | 3.66 | 5.03 | 11.5 | 4.95 | 1.75 |
| 361 | 3.53 | 4.49 | 10.1 | 4.32 | 1.75 |
| 360 | 3.04 | 4.21 | 9.78 | 3.93 | 1.53 |
| 359 | 3.01 | 3.84 | 9.40 | 3.64 | 1.49 |
| 358 | 2.88 | 3.79 | 8.71 | 3.36 | 1.36 |
| 357 | 2.85 | 3.66 | 8.66 | 3.17 | 1.36 |
| 356 | 2.81 | 3.53 | 6.88 | 3.00 | 1.35 |
| 350 | 2.29 | 2.85 | 4.28 | 2.21 | 0.900 |
| 340 | 1.66 | 2.21 | 3.21 | 1.61 | 0.600 |
| 330 | 1.39 | 1.66 | 2.34 | 1.26 | 0.550 |
| 320 | 1.20 | 1.33 | 2.02 | 1.06 | 0.380 |
| 300 | 0.927 | 0.969 | 1.44 | 0.765 | 0.260 |
| 270 | 0.634 | 0.651 | 1.03 | 0.536 | 0.213 |
| 240 | 0.510 | 0.533 | 0.687 | 0.391 | 0.135 |
| 210 | 0.390 | 0.412 | 0.505 | 0.298 | 0.109 |
| 183 | 0.324 | 0.376 | 0.390 | 0.223 | 0.091 |
| 150 | 0.255 | 0.323 | 0.340 | 0.161 | 0.072 |
| 130 | 0.227 | 0.273 | 0.300 | 0.136 | 0.063 |
| 120 | 0.214 | 0.258 | 0.300 | 0.124 | 0.057 |
| 110 | 0.212 | 0.242 | 0.260 | 0.112 | 0.051 |
| 100 | 0.204 | 0.229 | 0.260 | 0.101 | 0.047 |
| 90 | 0.193 | 0.219 | 0.260 | 0.094 | 0.041 |
| 80 | 0.189 | 0.213 | 0.222 | 0.082 | 0.037 |
| 70 | 0.185 | 0.207 | 0.220 | 0.081 | 0.033 |
| 60 | 0.176 | 0.196 | 0.196 | 0.072 | 0.023 |
| 50 | 0.160 | 0.190 | 0.190 | 0.066 | 0.020 |
| 40 | 0.113 | 0.186 | 0.186 | 0.061 | 0.019 |
| 30 | 0.072 | 0.179 | 0.179 | 0.051 | 0.018 |
| 25 | 0.056 | 0.171 | 0.171 | 0.046 | 0.017 |
| 20 | 0.055 | 0.163 | 0.163 | 0.041 | 0.017 |
| 15 | 0.055 | 0.156 | 0.156 | 0.038 | 0.017 |
| 10 | 0.055 | 0.122 | 0.122 | 0.031 | 0.017 |
| 9 | 0.055 | 0.114 | 0.114 | 0.031 | 0.017 |
| 8 | 0.055 | 0.113 | 0.113 | 0.030 | 0.016 |
| 7 | 0.055 | 0.102 | 0.102 | 0.028 | 0.016 |
| 6 | 0.055 | 0.082 | 0.100 | 0.025 | 0.016 |
| 5 | 0.055 | 0.079 | 0.100 | 0.023 | 0.016 |
| 4 | 0.055 | 0.079 | 0.100 | 0.021 | 0.015 |
| 3 | 0.054 | 0.077 | 0.100 | 0.020 | 0.014 |
| 2 | 0.054 | 0.076 | 0.100 | 0.018 | 0.014 |
| 1 | 0.052 | 0.075 | 0.080 | 0.017 | 0.013 |
| 0 | 0.051 | 0.064 | 0.070 | 0.010 | 0.010 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 2006; AJ 2006-2007;

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 135 km²
PNP : NN + 238.09 m
Lage: 0.5 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Bad Salzschlirf Nr. 42430156
Gewässer : Altefeld
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.257 | 0.252 | 5.47 | R1.30 | 0.992 | 0.352 | 0.416 | 0.497 | 0.541 | 1.30 | 0.331 | 0.281 | 1.54 | 0.599 |
| 2. | 0.265 | 0.232 | 8.01 | R1.17 | 0.928 | 0.339 | 0.639 | 0.358 | 0.508 | 0.940 | 0.308 | 0.279 | 3.20 | 0.580 |
| 3. | 0.263 | 0.273 | 6.23 | R1.09 | 0.901 | 0.330 | 0.616 | 0.337 | 0.459 | 0.726 | 0.288 | 0.272 | 5.05 | 0.565 |
| 4. | 0.265 | 1.81 | 7.07 | R1.01 | 0.860 | 0.565 | 0.458 | 0.622 | 0.369 | 0.612 | 0.275 | 2.45 | 5.50 | 0.579 |
| 5. | 0.263 | 4.47 | 20.9 | R0.932 | 0.898 | 0.486 | 0.523 | 1.04 | 3.98 | 0.556 | 0.274 | 3.23 | 4.07 | R0.670 |
| 6. | 0.263 | 2.05 | 12.7 | R0.860 | 0.851 | 0.400 | 0.962 | 0.637 | 1.91 | 1.09 | 0.285 | 1.56 | 3.02 | R0.689 |
| 7. | 0.263 | 2.41 | 8.02 | D0.804 | 0.748 | 0.399 | 0.992 | 0.722 | 1.02 | 0.766 | 0.269 | 3.55 | 2.39 | R0.636 |
| 8. | 0.272 | 2.94 | 7.44 | D0.756 | 1.03 | 0.393 | 0.664 | 0.540 | 0.729 | 0.577 | 0.253 | 1.99 | 2.03 | R0.572 |
| 9. | 0.263 | 4.15 | 6.14 | D0.710 | 1.06 | 0.365 | 0.557 | 0.408 | 0.649 | 0.483 | 0.239 | 1.22 | 1.64 | R0.522 |
| 10. | 0.265 | 3.03 | 5.16 | R0.666 | 0.898 | 1.11 | 0.538 | 0.357 | 0.669 | 0.440 | 0.228 | 0.875 | 1.74 | R0.625 |
| 11. | 0.263 | 1.70 | 4.01 | R0.628 | 0.921 | 1.06 | 0.487 | 0.376 | 0.704 | 0.390 | 0.304 | 0.715 | 2.69 | R0.617 |
| 12. | 0.263 | 1.66 | 3.52 | R0.600 | 0.863 | 0.855 | 0.948 | 0.455 | 1.07 | 0.374 | 1.07 | 0.653 | 1.84 | R0.537 |
| 13. | 0.265 | 2.52 | 4.59 | R0.572 | 0.807 | 0.659 | 0.613 | 1.51 | 2.59 | 0.348 | 0.717 | 0.725 | 1.42 | R0.584 |
| 14. | 0.262 | 4.74 | 3.36 | R0.545 | 0.741 | 0.569 | 0.503 | 1.39 | 8.68 | 0.322 | 0.452 | 0.864 | 1.22 | R0.644 |
| 15. | 0.263 | 5.11 | 2.66 | R0.519 | 0.684 | 0.512 | 0.474 | 0.810 | 5.17 | 0.301 | 0.382 | 2.60 | 1.09 | R12.7 |
| 16. | 0.263 | 11.7 | 2.13 | R0.493 | 0.641 | 0.457 | 0.543 | 0.727 | 4.40 | 0.379 | 0.347 | 1.82 | 0.989 | 15.9 |
| 17. | 0.263 | 8.57 | 1.75 | R0.613 | 0.599 | 0.423 | 0.505 | 1.02 | 5.68 | 0.388 | 0.315 | 1.20 | 0.904 | 9.69 |
| 18. | 0.263 | 4.30 | 1.49 | R0.882 | 0.585 | 0.423 | 0.437 | 0.651 | 4.22 | 0.312 | 0.302 | 0.923 | 0.834 | 9.22 |
| 19. | 0.263 | 2.95 | 3.29 | R3.23 | 0.802 | 0.445 | 0.475 | 0.567 | 2.34 | 0.267 | 0.322 | 0.772 | 0.769 | 5.64 |
| 20. | 0.267 | 2.26 | 7.68 | 1.42 | 0.602 | 0.446 | 0.885 | 1.18 | 1.66 | 0.243 | 0.342 | 0.619 | 0.711 | 4.28 |
| 21. | 0.263 | 2.05 | 6.22 | 0.898 | 0.538 | 0.429 | 0.611 | 1.22 | 1.40 | 0.240 | 0.364 | 0.528 | 0.663 | 3.60 |
| 22. | 0.263 | 2.84 | 10.7 | 0.776 | 0.495 | 0.610 | 0.451 | 0.960 | 1.11 | 0.235 | 0.331 | 0.482 | 0.625 | 3.52 |
| 23. | 0.263 | 4.13 | 7.74 | 0.725 | 0.466 | 1.18 | 0.372 | 0.687 | 0.877 | 0.243 | 0.298 | 0.439 | 0.584 | 11.6 |
| 24. | 0.263 | 5.24 | 5.52 | 0.813 | 0.451 | 1.18 | 0.319 | 0.560 | 0.716 | 0.956 | 0.288 | 0.424 | 0.567 | 14.6 |
| 25. | 0.263 | 3.73 | 4.10 | 1.15 | 0.421 | 1.26 | 0.286 | 1.02 | 0.608 | 1.12 | 0.389 | 0.407 | 0.554 | 7.10 |
| 26. | 0.261 | 3.10 | 3.21 | 0.956 | 0.387 | 0.995 | 0.267 | 0.759 | 0.524 | 0.553 | 0.405 | 0.428 | 0.535 | 7.62 |
| 27. | 0.251 | 2.54 | 2.60 | 0.848 | 0.366 | 0.776 | 0.255 | 0.548 | 0.456 | 1.05 | 0.415 | 0.691 | 0.726 | 11.0 |
| 28. | 0.259 | 2.12 | R2.22 | 0.782 | 0.354 | 0.631 | 0.252 | 0.553 | 0.746 | 0.540 | 0.401 | 0.656 | 0.689 | 13.9 |
| 29. | 0.258 | 1.89 | R1.94 | 0.946 | 0.344 | 0.536 | 0.247 | 0.468 | 10.2 | 0.410 | 0.330 | 0.600 | 0.682 | 7.05 |
| 30. | 0.249 | 4.21 | R1.67 | | 0.345 | 0.466 | 0.236 | 0.468 | 4.16 | 0.362 | 0.309 | 0.778 | 0.658 | 5.49 |
| 31. | | 3.62 | R1.46 | | 0.358 | | 0.261 | | 1.96 | 0.359 | | 1.65 | | 4.69 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 2. | 31. | 16. | 29. | 3. | 30. | 3. | 4. | 22. | 10. | 3. | 26. | 9. |
| NQ | 0.249 | 0.232 | 1.46 | 0.493 | 0.344 | 0.330 | 0.236 | 0.337 | 0.369 | 0.235 | 0.228 | 0.272 | 0.535 | 0.522 |
| MQ | 0.262 | 3.31 | 5.45 | 0.920 | 0.675 | 0.622 | 0.509 | 0.715 | 2.26 | 0.545 | 0.361 | 1.09 | 1.63 | 5.03 |
| HQ | 0.374 | 23.8 | 37.0 | 5.26 | 1.21 | 1.65 | 1.53 | 3.08 | 20.4 | 1.86 | 1.58 | 7.34 | 7.34 | 23.8 |
| Tag | 8. | 16. | 5. | 19. | 8.+ | 10. | 2. | 13. | 29. | 6.+ | 12. | 4. | 3.+ | 15. |
| $h_N$ mm | 3 | 126 | 110 | 25 | 18 | 51 | 92 | 118 | 139 | 60 | 46 | 79 | 48 | 129 |
| $h_A$ mm | 5 | 66 | 108 | 17 | 13 | 12 | 10 | 14 | 45 | 11 | 7 | 22 | 31 | 100 |

| | 1964/2011 | | 1965/2012 48 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2006 | 2003 | 1996 | 1996 | 1972 | 2011 | 2011 | 1976 | 1976 | 1999 | 1973 + | 1976 | 2006 | 2003 |
| NQ | 0.162 | 0.178 | 0.207 | 0.098 | 0.290 | 0.279 | 0.156 | 0.050 | 0.040 | 0.062 | 0.100 | 0.130 | 0.162 | 0.178 |
| MNQ | 0.526 | 0.733 | 0.813 | 0.919 | 0.940 | 0.794 | 0.419 | 0.314 | 0.264 | 0.216 | 0.230 | 0.327 | 0.532 | 0.734 |
| MQ | 1.81 | 3.08 | 3.35 | 2.75 | 2.98 | 1.93 | 1.05 | 0.682 | 0.649 | 0.443 | 0.530 | 1.04 | 1.79 | 3.16 |
| MHQ | 11.9 | 22.1 | 24.1 | 16.7 | 16.6 | 8.31 | 5.02 | 4.02 | 3.84 | 2.33 | 2.95 | 6.08 | 11.2 | 22.5 |
| HQ | 66.6 | 111 | 102 | 97.0 | 89.8 | 36.6 | 22.6 | 42.0 | 25.0 | 23.6 | 23.7 | 38.7 | 66.6 | 111 |
| Jahr | 1998 | 1967 | 1995 | 1984 | 1986 | 1986 | 1984 | 1981 | 1966 | 1981 | 1998 | 1998 | 1998 | 1967 |

| | 1964/2011 | | 1965/2012 48 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 88 | 106 | 91 | 67 | 75 | 63 | 72 | 71 | 80 | 69 | 65 | 78 | 86 | 108 |
| $Mh_A$ mm | 35 | 61 | 66 | 51 | 59 | 37 | 21 | 13 | 13 | 9 | 10 | 21 | 34 | 63 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.228 | am 10.09.2012 | 0.232 | 0.228 | 0.228 | am 10.09.2012 |
| MQ m³/s | 1.41 | | 1.90 | 0.917 | 1.66 | |
| HQ m³/s | 37.0 | am 05.01.2012 bei W= 262 cm | 37.0 | 20.4 | 37.0 | am 05.01.2012 bei W= 262 cm |
| Nq l/(s km²) | 1.69 | | 1.72 | 1.69 | 1.69 | |
| Mq l/(s km²) | 10.4 | | 14.1 | 6.79 | 12.3 | |
| Hq l/(s km²) | 274 | | 274 | 151 | 274 | |
| $h_N$ mm | 867 | | 333 | 534 | 915 | |
| $h_A$ mm | 328 | | 221 | 108 | 389 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| NQ m³/s | 0.040 | am 04.07.1976 | 0.098 | 0.040 | 0.040 | am 04.07.1976 |
| MNQ m³/s | 0.179 | | 0.380 | 0.187 | 0.185 | |
| MQ m³/s | 1.69 | | 2.66 | 0.733 | 1.69 | |
| MHQ m³/s | 42.9 | | 42.3 | 11.6 | 41.6 | |
| HQ m³/s | 111 | am 25.12.1967 | 111 | 42.0 | 111 | am 25.12.1967 |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(s km²) | 1.32 | | 2.81 | 1.38 | 1.37 | |
| Mq l/(s km²) | 12.5 | | 19.7 | 5.43 | 12.5 | |
| MHq l/(s km²) | 318 | | 313 | 85.9 | 308 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| $Mh_N$ mm | 926 | | 490 | 436 | 926 | |
| $Mh_A$ mm | 394 | | 310 | 86 | 396 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.040 | 0.296 | 04.07.1976 | 111 | 822 | 350 | 25.12.1967 |
| 2 | 0.062 | 0.459 | 08.08.1999 | 102 | 755 | 342 | 23.01.1995 |
| 3 | 0.069 | 0.511 | 20.07.2003 | 97.0 | 718 | 337 | 07.02.1984 |
| 4 | 0.098 | 0.725 | 05.02.1996 | 89.8 | 665 | 330 | 31.03.1986 |
| 5 | 0.100 | 0.740 | 27.08.1973 | 89.8 | 665 | 330 | 05.12.1965 |
| 6 | 0.109 | 0.807 | 06.09.1991 | 82.7 | 612 | 319 | 18.01.2007 |
| 7 | 0.121 | 0.896 | 11.07.2010 | 66.6 | 493 | 304 | 01.11.1998 |
| 8 | 0.127 | 0.940 | 09.08.1997 | 63.4 | 469 | 300 | 27.01.2002 |
| 9 | 0.130 | 0.962 | 20.07.1967 | 63.4 | 469 | 300 | 12.01.1993 |
| 10 | 0.141 | 1.04 | 10.07.2011 | 62.6 | 463 | 299 | 31.12.1993 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1965/2012 48 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 20.9 | 20.9 | | | |
| 364 | 12.7 | 15.9 | 52.1 | 21.6 | 6.72 |
| 363 | 11.7 | 14.6 | 37.4 | 17.3 | 6.38 |
| 362 | 10.7 | 13.9 | 30.6 | 15.2 | 6.38 |
| 361 | 10.2 | 13.9 | 24.2 | 13.4 | 5.45 |
| 360 | 8.68 | 12.7 | 23.6 | 12.4 | 5.30 |
| 359 | 8.57 | 11.6 | 21.6 | 11.3 | 4.87 |
| 358 | 8.02 | 11.0 | 20.3 | 10.6 | 4.48 |
| 357 | 8.01 | 10.7 | 18.4 | 9.80 | 4.28 |
| 356 | 7.74 | 10.2 | 17.2 | 9.32 | 4.19 |
| 350 | 6.14 | 7.74 | 12.8 | 6.97 | 2.82 |
| 340 | 4.47 | 5.68 | 9.32 | 5.03 | 2.06 |
| 330 | 3.98 | 4.59 | 7.21 | 4.10 | 1.63 |
| 320 | 3.10 | 3.55 | 6.01 | 3.43 | 1.21 |
| 300 | 1.99 | 2.03 | 4.63 | 2.52 | 0.850 |
| 270 | 1.15 | 1.20 | 3.26 | 1.72 | 0.675 |
| 240 | 0.921 | 0.946 | 2.42 | 1.29 | 0.457 |
| 210 | 0.746 | 0.778 | 1.79 | 0.952 | 0.367 |
| 183 | 0.631 | 0.684 | 1.49 | 0.741 | 0.311 |
| 150 | 0.538 | 0.602 | 1.21 | 0.551 | 0.266 |
| 130 | 0.468 | 0.554 | 1.14 | 0.471 | 0.230 |
| 120 | 0.451 | 0.538 | 1.01 | 0.441 | 0.230 |
| 110 | 0.423 | 0.508 | 0.980 | 0.411 | 0.200 |
| 100 | 0.399 | 0.475 | 0.900 | 0.381 | 0.200 |
| 90 | 0.372 | 0.455 | 0.850 | 0.355 | 0.189 |
| 80 | 0.354 | 0.428 | 0.800 | 0.331 | 0.170 |
| 70 | 0.331 | 0.405 | 0.750 | 0.313 | 0.150 |
| 60 | 0.304 | 0.379 | 0.700 | 0.291 | 0.150 |
| 50 | 0.275 | 0.359 | 0.600 | 0.261 | 0.150 |
| 40 | 0.267 | 0.339 | 0.560 | 0.242 | 0.130 |
| 30 | 0.265 | 0.312 | 0.520 | 0.222 | 0.130 |
| 25 | 0.265 | 0.301 | 0.520 | 0.202 | 0.110 |
| 20 | 0.262 | 0.285 | 0.470 | 0.201 | 0.100 |
| 15 | 0.257 | 0.272 | 0.450 | 0.181 | 0.080 |
| 10 | 0.251 | 0.255 | 0.450 | 0.170 | 0.070 |
| 9 | 0.249 | 0.253 | 0.450 | 0.165 | 0.070 |
| 8 | 0.247 | 0.252 | 0.450 | 0.161 | 0.070 |
| 7 | 0.247 | 0.247 | 0.450 | 0.156 | 0.070 |
| 6 | 0.243 | 0.247 | 0.450 | 0.151 | 0.070 |
| 5 | 0.240 | 0.243 | 0.430 | 0.151 | 0.070 |
| 4 | 0.239 | 0.240 | 0.420 | 0.142 | 0.060 |
| 3 | 0.236 | 0.239 | 0.410 | 0.131 | 0.060 |
| 2 | 0.235 | 0.236 | 0.410 | 0.125 | 0.060 |
| 1 | 0.232 | 0.235 | 0.410 | 0.108 | 0.050 |
| 0 | 0.228 | 0.228 | 0.400 | 0.040 | 0.040 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 108 km²
PNP : NN + 291.62 m
Lage: 47.0 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Melzdorf Nr. 42650050
Gewässer : Haune
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.172 | 0.150 | 1.86 | R 0.951 | 1.13 | 0.422 | 0.295 | 0.570 | 0.708 | 0.588 | 0.286 | 0.209 | 0.760 | 0.601 |
| 2. | 0.170 | 0.167 | 4.66 | R 0.876 | 1.03 | 0.413 | 0.357 | 0.333 | 0.654 | 0.497 | 0.249 | 0.192 | 0.689 | 0.547 |
| 3. | 0.179 | 0.186 | 3.04 | R 0.802 | 0.961 | 0.406 | 0.359 | 0.458 | 0.643 | 0.458 | 0.245 | 0.190 | 1.41 | 0.527 |
| 4. | 0.179 | 0.473 | 2.06 | R 0.746 | 0.932 | 0.708 | 0.297 | 0.652 | 0.514 | 0.440 | 0.233 | 0.482 | 1.74 | 0.662 |
| 5. | 0.183 | 1.85 | 6.19 | R 0.699 | 0.931 | 0.512 | 0.423 | 1.58 | 1.18 | 0.573 | 0.260 | 0.476 | 1.30 | R 0.864 |
| 6. | 0.182 | 0.654 | 5.04 | R 0.652 | 0.825 | 0.449 | 0.852 | 0.771 | 0.973 | 0.643 | 0.274 | 0.364 | 1.14 | R 0.763 |
| 7. | 0.170 | 0.662 | 3.48 | D 0.609 | 0.748 | 0.469 | 0.980 | 0.849 | 0.684 | 0.460 | 0.234 | 1.38 | 0.948 | R 0.671 |
| 8. | 0.168 | 0.729 | 3.05 | D 0.586 | 0.924 | 0.456 | 0.581 | 0.641 | 0.634 | 0.417 | 0.222 | 0.612 | 0.849 | R 0.571 |
| 9. | 0.162 | 1.26 | 3.03 | D 0.569 | 0.843 | 0.430 | 0.467 | 0.469 | 0.608 | 0.397 | 0.206 | 0.421 | 0.744 | R 0.516 |
| 10. | 0.162 | 0.935 | 3.04 | D 0.551 | 0.785 | 0.495 | 0.409 | 0.398 | 0.511 | 0.385 | 0.191 | 0.341 | 1.26 | R 0.599 |
| 11. | 0.156 | 0.624 | 2.19 | R 0.534 | 0.765 | 0.522 | 0.522 | 0.413 | 0.685 | 0.360 | 0.554 | 0.305 | 1.47 | R 0.543 |
| 12. | 0.146 | 0.548 | 1.90 | R 0.517 | 0.755 | 0.518 | 0.975 | 0.432 | 0.992 | 0.345 | 1.07 | 0.357 | 0.959 | R 0.532 |
| 13. | 0.148 | 0.625 | 2.02 | R 0.500 | 0.706 | 0.526 | 0.502 | 3.02 | 1.50 | 0.329 | 0.552 | 0.406 | 0.766 | R 0.588 |
| 14. | 0.144 | 1.72 | 1.64 | R 0.496 | 0.675 | 0.446 | 0.411 | 1.39 | 5.57 | 0.327 | 0.315 | 0.493 | 0.676 | R 0.668 |
| 15. | 0.141 | 1.54 | 1.41 | R 0.557 | 0.646 | 0.412 | 0.413 | 0.808 | 2.69 | 0.321 | 0.284 | 0.840 | 0.633 | R 13.4 |
| 16. | 0.141 | 5.05 | 1.20 | R 0.518 | 0.618 | 0.384 | 0.560 | 0.719 | 1.88 | 0.525 | 0.248 | 0.544 | 0.598 | R 7.80 |
| 17. | 0.141 | 2.70 | 1.04 | R 0.821 | 0.598 | 0.363 | 0.437 | 0.640 | 2.31 | 0.377 | 0.223 | 0.416 | 0.555 | 4.33 |
| 18. | 0.148 | 1.50 | 0.934 | R 1.49 | 0.634 | 0.361 | 0.360 | 0.513 | 1.79 | 0.312 | 0.219 | 0.348 | 0.545 | 3.61 |
| 19. | 0.157 | 1.08 | 5.90 | 3.33 | 0.695 | 0.363 | 0.360 | 0.459 | 1.20 | 0.286 | 0.213 | 0.313 | 0.532 | 2.36 |
| 20. | 0.155 | 0.878 | 5.91 | 1.00 | 0.576 | 0.371 | 0.311 | 1.65 | 0.957 | 0.276 | 0.195 | 0.294 | 0.495 | 1.81 |
| 21. | 0.154 | 0.860 | 5.52 | 0.697 | 0.536 | 0.369 | 0.299 | 1.51 | 1.01 | 0.280 | 0.190 | 0.288 | 0.482 | 1.62 |
| 22. | 0.150 | 1.64 | 9.10 | 0.644 | 0.519 | 0.376 | 0.327 | 1.12 | 0.819 | 0.298 | 0.267 | 0.313 | 0.464 | 2.06 |
| 23. | 0.143 | 2.56 | 3.84 | 0.770 | 0.506 | 0.426 | 0.323 | 0.720 | 0.699 | 0.283 | 0.212 | 0.296 | 0.445 | 15.2 |
| 24. | 0.140 | 2.26 | 2.82 | 1.14 | 0.487 | 0.426 | 0.267 | 0.615 | 0.622 | 0.500 | 0.215 | 0.302 | 0.441 | 7.09 |
| 25. | 0.140 | 1.65 | 2.22 | 1.19 | 0.461 | 0.661 | 0.259 | 0.696 | 0.568 | 0.606 | 0.208 | 0.338 | 0.436 | 3.59 |
| 26. | 0.152 | 1.41 | 1.81 | 0.907 | 0.440 | 0.462 | 0.252 | 0.562 | 0.521 | 0.374 | 0.307 | 0.355 | 0.433 | 5.30 |
| 27. | 0.154 | 1.20 | R 1.55 | 0.776 | 0.425 | 0.396 | 0.250 | 0.504 | 0.483 | 0.387 | 0.599 | 0.490 | 0.547 | 5.48 |
| 28. | 0.146 | 1.07 | R 1.39 | 0.806 | 0.421 | 0.373 | 0.251 | 0.536 | 1.31 | 0.283 | 0.371 | 0.428 | 0.530 | 8.78 |
| 29. | 0.144 | 0.951 | R 1.26 | 1.11 | 0.415 | 0.340 | 0.242 | 0.458 | 2.42 | 0.269 | 0.266 | 0.381 | 0.742 | 3.62 |
| 30. | 0.153 | 1.54 | R 1.12 | | 0.495 | 0.314 | 0.239 | 0.680 | 1.07 | 0.326 | 0.228 | 0.789 | 0.731 | 2.76 |
| 31. | | 1.40 | R 1.03 | | 0.462 | | 0.289 | | 0.717 | 0.318 | | 0.918 | | 2.31 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24.+ | 1. | 18. | 14. | 29. | 30. | 30. | 2. | 27. | 29. | 21. | 3. | 26. | 9. |
| NQ | 0.140 | 0.150 | 0.934 | 0.496 | 0.415 | 0.314 | 0.239 | 0.333 | 0.483 | 0.269 | 0.190 | 0.190 | 0.433 | 0.516 |
| MQ | 0.156 | 1.29 | 2.94 | 0.857 | 0.676 | 0.439 | 0.415 | 0.806 | 1.19 | 0.395 | 0.305 | 0.448 | 0.777 | 3.22 |
| HQ | 0.208 | 11.3 | 20.2 | 6.72 | 1.22 | 0.933 | 1.98 | 6.41 | 8.43 | 0.938 | 2.95 | 1.93 | 3.42 | 27.9 |
| Tag | 6. | 16. | 22. | 19. | 1. | 4. | 11. | 13. | 14. | 6. | 11. | 7. | 3. | 23. |
| $h_N$ mm | 2 | 133 | 120 | 28 | 22 | 34 | 72 | 104 | 124 | 60 | 52 | 63 | 47 | 141 |
| $h_A$ mm | 4 | 32 | 73 | 20 | 17 | 11 | 10 | 19 | 30 | 10 | 7 | 11 | 19 | 80 |
| | 1975/2011 | | 1976/2012 37 Jahre | | | | | | | | | | | |
| Jahr | 1991 | 2011 | 1977 | 1996 | 1996 | 2011 | 2011 | 2011 | 1976 | 1990 | 1991 | 1991 | 1991 | 2011 |
| NQ | 0.103 | 0.150 | 0.190 | 0.270 | 0.340 | 0.268 | 0.139 | 0.107 | 0.060 | 0.050 | 0.051 | 0.095 | 0.103 | 0.150 |
| MNQ | 0.428 | 0.547 | 0.675 | 0.735 | 0.775 | 0.722 | 0.465 | 0.346 | 0.285 | 0.235 | 0.243 | 0.318 | 0.435 | 0.554 |
| MQ | 0.979 | 1.45 | 1.78 | 1.68 | 1.79 | 1.29 | 0.906 | 0.647 | 0.572 | 0.477 | 0.469 | 0.599 | 0.990 | 1.53 |
| MHQ | 5.39 | 8.77 | 12.3 | 9.63 | 8.42 | 6.73 | 6.22 | 3.48 | 4.38 | 4.43 | 3.26 | 3.26 | 5.44 | 9.48 |
| HQ | 18.6 | 29.0 | 47.6 | 30.4 | 33.6 | 46.4 | 47.6 | 30.4 | 30.4 | 64.5 | 47.6 | 21.8 | 18.6 | 29.0 |
| Jahr | 1977 | 1993 | 1995 | 1984 | 1986 | 1994 | 2004 | 1981 | 2009 | 1981 | 2007 | 1998 | 1977 | 1993 |
| | 1975/2011 | | 1976/2012 37 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 70 | 74 | 68 | 56 | 66 | 53 | 76 | 76 | 92 | 75 | 68 | 66 | 70 | 77 |
| $Mh_A$ mm | 24 | 36 | 44 | 39 | 44 | 31 | 23 | 16 | 14 | 12 | 11 | 15 | 24 | 38 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.140 | am 24.11.2011 | 0.140 | 0.190 | 0.190 | am 21.09.2012 |
| MQ m³/s | 0.831 | | 1.07 | 0.594 | 1.04 | |
| HQ m³/s | 20.2 | am 22.01.2012 bei W= 270 cm | 20.2 | 8.43 | 27.9 | am 23.12.2012 bei W= 289 cm |
| Nq l/(s km²) | 1.30 | | 1.30 | 1.76 | 1.76 | |
| Mq l/(s km²) | 7.72 | | 9.94 | 5.52 | 9.70 | |
| Hq l/(s km²) | 188 | | 188 | 78.3 | 259 | |
| $h_N$ mm | 814 | | 339 | 475 | 867 | |
| $h_A$ mm | 243 | | 156 | 88 | 307 | |
| | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
| NQ m³/s | 0.050 | am 05.08.1990 | 0.103 | 0.050 | 0.050 | am 05.08.1990 |
| MNQ m³/s | 0.192 | | 0.372 | 0.205 | 0.203 | |
| MQ m³/s | 1.05 | | 1.49 | 0.612 | 1.06 | |
| MHQ m³/s | 24.9 | | 21.0 | 11.9 | 24.3 | |
| HQ m³/s | 64.5 | am 11.08.1981 | 47.6 | 64.5 | 64.5 | am 11.08.1981 |
| $HQ_1$ m³/s | 17.1 | | 12.0 | 4.40 | 18.0 | |
| $HQ_5$ m³/s | 30.4 | | 28.3 | 16.8 | 30.4 | |
| MNq l/(s km²) | 1.78 | | 3.45 | 1.90 | 1.88 | |
| Mq l/(s km²) | 9.75 | | 13.8 | 5.68 | 9.84 | |
| MHq l/(s km²) | 231 | | 195 | 110 | 226 | |
| | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
| $Mh_N$ mm | 842 | | 387 | 454 | 845 | |
| $Mh_A$ mm | 307 | | 218 | 90 | 311 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.050 | 0.464 | 05.08.1990 | 64.5 | 599 | 321 | 11.08.1981 |
| 2 | 0.051 | 0.474 | 03.09.1991 | 47.6 | 442 | 317 | 28.09.2007 |
| 3 | 0.060 | 0.557 | 16.07.1976 | 47.6 | 442 | 313 | 07.05.2004 |
| 4 | 0.066 | 0.613 | 12.09.1989 | 47.6 | 442 | 309 | 22.01.1995 |
| 5 | 0.102 | 0.947 | 06.08.2004 | 46.4 | 431 | 308 | 13.04.1994 |
| 6 | 0.104 | 0.966 | 23.08.2011 | 39.9 | 370 | 302 | 29.01.1993 |
| 7 | 0.118 | 1.10 | 01.09.2005 | 38.9 | 361 | 301 | 12.01.1993 |
| 8 | 0.132 | 1.23 | 26.06.2003 | 33.6 | 312 | 297 | 31.03.1986 |
| 9 | 0.156 | 1.45 | 10.07.1994 | 31.3 | 291 | 296 | 13.01.2011 |
| 10 | 0.160 | 1.49 | 13.09.2006 | 30.4 | 282 | 297 | 24.07.2009 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1976/2012 37 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 9.10 | 15.2 | | | |
| 364 | 6.19 | 13.4 | 31.8 | 10.6 | 3.76 |
| 363 | 5.91 | 9.10 | 21.5 | 8.60 | 2.80 |
| 362 | 5.90 | 8.78 | 18.5 | 7.15 | 2.40 |
| 361 | 5.57 | 7.80 | 12.0 | 6.52 | 2.40 |
| 360 | 5.52 | 7.09 | 10.7 | 5.89 | 2.24 |
| 359 | 5.05 | 6.19 | 9.94 | 5.47 | 2.24 |
| 358 | 5.04 | 5.91 | 9.20 | 5.15 | 2.08 |
| 357 | 4.66 | 5.90 | 8.99 | 4.89 | 2.00 |
| 356 | 3.84 | 5.57 | 8.54 | 4.64 | 1.92 |
| 350 | 3.03 | 4.33 | 6.65 | 3.61 | 1.60 |
| 340 | 2.19 | 3.03 | 4.57 | 2.71 | 1.06 |
| 330 | 1.72 | 2.19 | 3.86 | 2.21 | 0.850 |
| 320 | 1.50 | 1.74 | 3.13 | 1.90 | 0.720 |
| 300 | 1.11 | 1.20 | 2.38 | 1.49 | 0.590 |
| 270 | 0.843 | 0.907 | 1.77 | 1.13 | 0.500 |
| 240 | 0.684 | 0.719 | 1.60 | 0.922 | 0.420 |
| 210 | 0.581 | 0.634 | 1.38 | 0.763 | 0.340 |
| 183 | 0.513 | 0.555 | 1.18 | 0.661 | 0.278 |
| 150 | 0.446 | 0.502 | 1.06 | 0.540 | 0.220 |
| 130 | 0.411 | 0.461 | 1.00 | 0.471 | 0.200 |
| 120 | 0.381 | 0.441 | 0.950 | 0.451 | 0.190 |
| 110 | 0.363 | 0.426 | 0.950 | 0.421 | 0.176 |
| 100 | 0.345 | 0.415 | 0.900 | 0.394 | 0.164 |
| 90 | 0.321 | 0.387 | 0.900 | 0.369 | 0.154 |
| 80 | 0.302 | 0.369 | 0.850 | 0.341 | 0.138 |
| 70 | 0.286 | 0.357 | 0.800 | 0.313 | 0.133 |
| 60 | 0.266 | 0.327 | 0.760 | 0.295 | 0.123 |
| 50 | 0.239 | 0.311 | 0.720 | 0.269 | 0.112 |
| 40 | 0.209 | 0.289 | 0.670 | 0.249 | 0.101 |
| 30 | 0.182 | 0.269 | 0.630 | 0.221 | 0.096 |
| 25 | 0.170 | 0.259 | 0.630 | 0.208 | 0.090 |
| 20 | 0.157 | 0.248 | 0.630 | 0.191 | 0.081 |
| 15 | 0.153 | 0.233 | 0.630 | 0.173 | 0.068 |
| 10 | 0.148 | 0.215 | 0.590 | 0.155 | 0.055 |
| 9 | 0.148 | 0.213 | 0.590 | 0.147 | 0.055 |
| 8 | 0.146 | 0.212 | 0.590 | 0.141 | 0.054 |
| 7 | 0.146 | 0.209 | 0.590 | 0.133 | 0.054 |
| 6 | 0.144 | 0.208 | 0.590 | 0.131 | 0.054 |
| 5 | 0.143 | 0.206 | 0.550 | 0.120 | 0.053 |
| 4 | 0.143 | 0.195 | 0.550 | 0.107 | 0.053 |
| 3 | 0.143 | 0.192 | 0.550 | 0.101 | 0.052 |
| 2 | 0.141 | 0.191 | 0.550 | 0.086 | 0.052 |
| 1 | 0.141 | 0.191 | 0.550 | 0.069 | 0.052 |
| 0 | 0.140 | 0.190 | 0.500 | 0.050 | 0.050 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 422 km²
PNP : NN + 209.09 m
Lage: 8.2 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Hermannspiegel Nr. 42670557
Gewässer : Haune
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.07 | 0.919 | 4.32 | R2.83 | 3.46 | 1.57 | 1.16 | 1.76 | 1.70 | 1.85 | 0.976 | 0.980 | 1.86 | 1.70 |
| 2. | 0.961 | 0.959 | 6.27 | R2.74 | 3.31 | 1.50 | 1.25 | 1.34 | 1.56 | 1.49 | 0.870 | 0.898 | 1.70 | 1.58 |
| 3. | 0.985 | 0.958 | 10.8 | R2.78 | 3.13 | 1.48 | 1.30 | 1.30 | 1.57 | 1.40 | 0.863 | 0.866 | 2.22 | 1.58 |
| 4. | 0.932 | 1.39 | 6.41 | R2.72 | 2.97 | 2.44 | 1.02 | 1.68 | 1.31 | 1.38 | 0.836 | 1.21 | 3.88 | 1.61 |
| 5. | 0.874 | 4.16 | 8.34 | R2.52 | 2.91 | 2.12 | 1.46 | 3.27 | 1.53 | 1.38 | 0.834 | 1.97 | 3.24 | 2.11 |
| 6. | 0.845 | 3.18 | 16.3 | R2.32 | 2.79 | 1.72 | 2.11 | 2.15 | 2.61 | 1.88 | 0.861 | 1.34 | 2.64 | 2.12 |
| 7. | 0.863 | 2.06 | 10.5 | R2.20 | 2.50 | 1.72 | 2.59 | 2.23 | 1.58 | 1.43 | 0.853 | 2.32 | 2.08 | 1.89 |
| 8. | 0.933 | 2.43 | 9.85 | R2.32 | 2.87 | 1.70 | 1.85 | 1.97 | 1.40 | 1.41 | 0.818 | 2.20 | 2.03 | 1.69 |
| 9. | 0.991 | 2.41 | 8.81 | R2.25 | 3.10 | 1.62 | 1.57 | 1.49 | 1.42 | 1.26 | 0.804 | 1.39 | 1.79 | 1.43 |
| 10. | 0.920 | 3.34 | 9.69 | R2.24 | 2.68 | 1.73 | 1.32 | 1.40 | 1.35 | 1.06 | 0.759 | 1.16 | 1.86 | 1.88 |
| 11. | 0.897 | 2.18 | 7.02 | R2.09 | 2.55 | 1.62 | 1.36 | 1.04 | 1.70 | 0.990 | 0.827 | 1.08 | 3.81 | 1.75 |
| 12. | 0.875 | 1.76 | 5.62 | R2.03 | 2.47 | 1.82 | 2.78 | 1.28 | 2.10 | 1.22 | 2.73 | 1.13 | 2.65 | 1.57 |
| 13. | 0.948 | 1.68 | 6.06 | R2.07 | 2.37 | 1.67 | 1.69 | 1.53 | 2.45 | 1.19 | 1.90 | 1.30 | 2.07 | 1.47 |
| 14. | 0.889 | 2.80 | 5.30 | R2.07 | 2.26 | 1.59 | 1.50 | 4.68 | 6.57 | 1.01 | 1.18 | 1.38 | 1.86 | 1.72 |
| 15. | 0.868 | 3.35 | 4.55 | R2.38 | 2.14 | 1.49 | 1.35 | 2.00 | 7.76 | 0.857 | 1.07 | 2.19 | 1.68 | 10.7 |
| 16. | 0.909 | 5.92 | 3.97 | 2.19 | 2.01 | 1.45 | 1.53 | 1.70 | 4.21 | 1.21 | 0.968 | 1.69 | 1.66 | 23.2 |
| 17. | 0.926 | 10.9 | 3.50 | 2.58 | 2.04 | 1.39 | 1.45 | 1.64 | 3.62 | 1.28 | 0.918 | 1.36 | 1.54 | 17.1 |
| 18. | 0.902 | 5.04 | 2.86 | 4.31 | 1.98 | 1.37 | 1.31 | 1.40 | 4.86 | 1.16 | 0.913 | 1.27 | 1.55 | 11.4 |
| 19. | 0.928 | 3.63 | 7.16 | 9.93 | 2.33 | 1.39 | 1.36 | 1.35 | 3.06 | 0.796 | 0.886 | 1.08 | 1.46 | 8.50 |
| 20. | 0.915 | 2.77 | 19.4 | 4.88 | 1.99 | 1.38 | 1.24 | 3.12 | 2.30 | 0.832 | 0.915 | 0.997 | 1.46 | 6.16 |
| 21. | 0.931 | 2.58 | 11.8 | 2.80 | 1.85 | 1.38 | 1.16 | 3.86 | 2.50 | 0.803 | 0.903 | 0.990 | 1.40 | 5.12 |
| 22. | 0.915 | 3.08 | 22.6 | 2.35 | 1.81 | 1.41 | 1.08 | 2.75 | 2.38 | 0.844 | 0.971 | 0.941 | 1.28 | 5.63 |
| 23. | 0.879 | 5.89 | 15.1 | 2.44 | 1.73 | 1.69 | 1.19 | 1.95 | 1.77 | 0.802 | 0.982 | 0.984 | 1.31 | 14.9 |
| 24. | 0.909 | 5.72 | 10.4 | 2.80 | 1.71 | 1.43 | 1.07 | 1.50 | 1.57 | 1.70 | 0.959 | 0.984 | 1.31 | 27.4 |
| 25. | 0.898 | 5.16 | 8.63 | 3.50 | 1.68 | 1.67 | 0.957 | 1.69 | 1.44 | 1.96 | 0.876 | 1.03 | 1.28 | 18.2 |
| 26. | 0.850 | 3.98 | 6.76 | 3.08 | 1.57 | 1.75 | 0.871 | 1.36 | 1.33 | 1.34 | 1.08 | 0.906 | 1.25 | 11.5 |
| 27. | 0.949 | 3.34 | 5.70 | 2.77 | 1.55 | 1.54 | 0.841 | 1.29 | 1.28 | 1.33 | 1.41 | 1.28 | 1.48 | 12.9 |
| 28. | 0.906 | 3.03 | R5.02 | 2.60 | 1.51 | 1.49 | 0.970 | 1.30 | 1.73 | 1.20 | 1.58 | 1.27 | 1.48 | 18.3 |
| 29. | 0.917 | 2.76 | R4.58 | 2.94 | 1.52 | 1.25 | 1.10 | 1.24 | 5.68 | 0.946 | 1.15 | 1.16 | 1.68 | 12.4 |
| 30. | 0.847 | 3.54 | R4.12 | | 1.59 | 1.20 | 0.916 | 1.39 | 4.64 | 1.02 | 0.922 | 1.39 | 1.93 | 9.30 |
| 31. | | 4.16 | R3.70 | | 1.76 | | 0.917 | | 2.24 | 1.00 | | 2.28 | | 7.52 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 6. | 1. | 18. | 12. | 28. | 30. | 27. | 11. | 27. | 19. | 10. | 3. | 26. | 9. |
| NQ | 0.845 | 0.919 | 2.86 | 2.03 | 1.51 | 1.20 | 0.841 | 1.04 | 1.28 | 0.796 | 0.759 | 0.866 | 1.25 | 1.43 |
| MQ | 0.914 | 3.39 | 8.23 | 2.92 | 2.26 | 1.59 | 1.36 | 1.89 | 2.62 | 1.23 | 1.05 | 1.32 | 1.91 | 7.88 |
| HQ | 1.68 | 17.7 | 25.8 | 12.7 | 3.60 | 3.10 | 4.01 | 9.90 | 11.7 | 3.06 | 3.91 | 3.88 | 4.94 | 29.1 |
| Tag | 15. | 17. | 22. | 19. | 1. | 4. | 12. | 14. | 15. | 25. | 12. | 7. | 4. | 24. |
| $h_N$ mm | 1 | 114 | 110 | 21 | 16 | 37 | 73 | 105 | 115 | 56 | 47 | 59 | 42 | 120 |
| $h_A$ mm | 6 | 22 | 52 | 17 | 14 | 10 | 9 | 12 | 17 | 8 | 6 | 8 | 12 | 50 |

| | 1958/2011 | | 1959/2012 54 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1959 | 1963 | 1963 | 1972 | 1960 + | 1976 | 1976 | 1976 | 1976 | 1959 | 1964 | 1976 | 1959 |
| NQ | 0.560 | 0.600 | 0.720 | 0.680 | 0.740 | 1.08 | 0.760 | 0.350 | 0.350 | 0.300 | 0.340 | 0.380 | 0.560 | 0.600 |
| MNQ | 1.45 | 1.98 | 2.25 | 2.49 | 2.65 | 2.51 | 1.83 | 1.44 | 1.21 | 1.02 | 1.02 | 1.12 | 1.43 | 1.98 |
| MQ | 2.91 | 4.58 | 5.16 | 5.08 | 5.26 | 4.20 | 3.11 | 2.52 | 2.07 | 1.79 | 1.61 | 1.97 | 2.90 | 4.65 |
| MHQ | 12.1 | 18.8 | 22.3 | 19.5 | 17.2 | 14.0 | 11.2 | 8.58 | 8.57 | 8.35 | 5.86 | 7.29 | 12.1 | 19.1 |
| HQ | 41.4 | 73.8 | 80.5 | 62.2 | 55.5 | 76.3 | 52.4 | 51.2 | 71.0 | 114 | 48.5 | 27.7 | 41.4 | 73.8 |
| Jahr | 1977 | 1981 | 1995 | 1984 | 1988 | 1994 | 2004 | 1981 | 1966 | 1981 | 2007 | 1998 | 1977 | 1981 |
| | 1958/2011 | | 1959/2012 54 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 64 | 69 | 59 | 48 | 54 | 54 | 71 | 75 | 80 | 73 | 58 | 60 | 64 | 70 |
| $Mh_A$ mm | 18 | 29 | 33 | 30 | 33 | 26 | 20 | 15 | 13 | 11 | 10 | 12 | 18 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.759 | am 10.09.2012 | 0.845 | 0.759 | 0.759 | am 10.09.2012 |
| MQ m³/s | 2.41 | | 3.24 | 1.58 | 2.87 | |
| HQ m³/s | 25.8 | am 22.01.2012 | 25.8 | 11.7 | 29.1 | am 24.12.2012 |
| Nq l/(s km²) | 1.80 | | 2.00 | 1.80 | 1.80 | |
| Mq l/(s km²) | 5.71 | | 7.69 | 3.75 | 6.80 | |
| Hq l/(s km²) | 61.2 | | 61.2 | 27.7 | 69.0 | |
| $h_N$ mm | 754 | | 299 | 455 | 801 | |
| $h_A$ mm | 180 | | 121 | 60 | 215 | |
| | 1959/2012 (*) 54 Jahre | | | | 1959/2012 | |
| NQ m³/s | 0.300 | am 18.08.1976 | 0.560 | 0.300 | 0.300 | am 18.08.1976 |
| MNQ m³/s | 0.818 | | 1.29 | 0.874 | 0.857 | |
| MQ m³/s | 3.35 | | 4.53 | 2.18 | 3.35 | |
| MHQ m³/s | 41.0 | | 36.4 | 20.1 | 40.5 | |
| HQ m³/s | 114 | am 11.08.1981 | 80.5 | 114 | 114 | am 11.08.1981 |
| $HQ_1$ m³/s | 23.2 | | 21.7 | 7.05 | 23.9 | |
| $HQ_5$ m³/s | 44.5 | | 37.2 | 19.5 | 44.5 | |
| MNq l/(s km²) | 1.94 | | 3.06 | 2.07 | 2.03 | |
| Mq l/(s km²) | 7.94 | | 10.7 | 5.17 | 7.94 | |
| MHq l/(s km²) | 97.2 | | 86.3 | 47.7 | 96.0 | |
| | 1959/2012 (*) 54 Jahre | | | | 1959/2012 | |
| $Mh_N$ mm | 765 | | 348 | 416 | 766 | |
| $Mh_A$ mm | 250 | | 169 | 82 | 251 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.300 | 0.711 | 18.08.1976 | 114 | 270 | 425 | 11.08.1981 |
| 2 | 0.340 | 0.806 | 14.09.1959 | 80.5 | 191 | 393 | 23.01.1995 |
| 3 | 0.360 | 0.853 | 30.08.1964 | 76.3 | 181 | 388 | 13.04.1994 |
| 4 | 0.360 | 0.853 | 27.06.1960 | 73.8 | 175 | 385 | 31.12.1981 |
| 5 | 0.497 | 1.18 | 02.09.1991 | 71.0 | 168 | 392 | 24.12.1967 |
| 6 | 0.510 | 1.21 | 27.07.1963 | 71.0 | 168 | 392 | 19.07.1966 |
| 7 | 0.533 | 1.26 | 16.08.2003 | 68.2 | 162 | 378 | 01.04.1986 |
| 8 | 0.574 | 1.36 | 10.08.1990 | 62.2 | 147 | 370 | 07.02.1984 |
| 9 | 0.589 | 1.40 | 26.09.1997 | 57.5 | 136 | 372 | 23.02.1970 |
| 10 | 0.600 | 1.42 | 18.08.1973 | 56.0 | 133 | 360 | 09.12.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1959/2012 54 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 22.6 | 27.4 | | | |
| 364 | 19.4 | 23.2 | 67.3 | 30.0 | 10.9 |
| 363 | 16.3 | 22.6 | 47.7 | 26.2 | 10.5 |
| 362 | 15.1 | 19.4 | 38.4 | 22.5 | 8.22 |
| 361 | 11.8 | 18.3 | 37.8 | 19.9 | 7.52 |
| 360 | 10.9 | 18.2 | 33.9 | 18.1 | 6.91 |
| 359 | 10.8 | 17.1 | 32.8 | 16.7 | 5.83 |
| 358 | 10.5 | 16.3 | 31.8 | 15.4 | 4.54 |
| 357 | 10.4 | 15.1 | 28.8 | 14.4 | 4.16 |
| 356 | 9.93 | 14.9 | 27.5 | 13.5 | 3.81 |
| 350 | 7.76 | 10.8 | 22.9 | 10.5 | 2.74 |
| 340 | 5.72 | 8.50 | 15.6 | 7.97 | 2.47 |
| 330 | 4.68 | 6.16 | 13.1 | 6.59 | 2.18 |
| 320 | 3.98 | 4.86 | 11.3 | 5.78 | 1.98 |
| 300 | 3.08 | 3.24 | 9.48 | 4.68 | 1.84 |
| 270 | 2.52 | 2.52 | 7.02 | 3.70 | 1.54 |
| 240 | 2.12 | 2.12 | 5.64 | 3.05 | 1.37 |
| 210 | 1.75 | 1.85 | 4.64 | 2.59 | 1.20 |
| 183 | 1.58 | 1.69 | 4.02 | 2.21 | 0.990 |
| 150 | 1.40 | 1.51 | 3.60 | 1.83 | 0.860 |
| 130 | 1.35 | 1.43 | 3.24 | 1.66 | 0.780 |
| 120 | 1.31 | 1.40 | 3.15 | 1.57 | 0.740 |
| 110 | 1.26 | 1.37 | 3.00 | 1.50 | 0.710 |
| 100 | 1.19 | 1.34 | 2.90 | 1.44 | 0.680 |
| 90 | 1.10 | 1.31 | 2.80 | 1.37 | 0.670 |
| 80 | 1.03 | 1.27 | 2.55 | 1.30 | 0.640 |
| 70 | 0.984 | 1.21 | 2.42 | 1.23 | 0.600 |
| 60 | 0.958 | 1.15 | 2.32 | 1.17 | 0.560 |
| 50 | 0.926 | 1.04 | 2.28 | 1.10 | 0.500 |
| 40 | 0.915 | 0.984 | 2.23 | 1.03 | 0.470 |
| 30 | 0.897 | 0.941 | 2.12 | 0.949 | 0.440 |
| 25 | 0.875 | 0.915 | 2.12 | 0.918 | 0.440 |
| 20 | 0.866 | 0.886 | 1.97 | 0.861 | 0.410 |
| 15 | 0.853 | 0.863 | 1.92 | 0.807 | 0.380 |
| 10 | 0.841 | 0.841 | 1.87 | 0.742 | 0.380 |
| 9 | 0.836 | 0.836 | 1.87 | 0.721 | 0.350 |
| 8 | 0.834 | 0.834 | 1.87 | 0.712 | 0.350 |
| 7 | 0.832 | 0.832 | 1.87 | 0.685 | 0.350 |
| 6 | 0.827 | 0.827 | 1.87 | 0.651 | 0.350 |
| 5 | 0.818 | 0.818 | 1.87 | 0.630 | 0.350 |
| 4 | 0.804 | 0.804 | 1.84 | 0.579 | 0.350 |
| 3 | 0.803 | 0.803 | 1.84 | 0.550 | 0.320 |
| 2 | 0.802 | 0.802 | 1.84 | 0.512 | 0.320 |
| 1 | 0.796 | 0.796 | 1.78 | 0.460 | 0.320 |
| 0 | 0.759 | 0.759 | 1.72 | 0.300 | 0.300 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt
durch die Haunetalsperre beeinflusst

HLUG Wiesbaden

$A_{Eo}$ : 116 km²
PNP : NHN + 171.24 m
Lage: 1.0 km oberhalb der Mündung, links

Q
m³/s

Pegel : Adelshausen Nr. 42780500
Gewässer : Pfieffe
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.272 | 0.243 | 1.51 | R 1.16 | 0.952 | 0.532 | 0.489 | 0.655 | 0.577 | 0.663 | 0.359 | 0.300 | 0.340 | 0.405 |
| 2. | 0.272 | 0.275 | 2.03 | R 1.08 | 0.952 | 0.514 | 0.489 | 0.412 | 0.409 | 0.617 | 0.337 | 0.282 | 0.377 | 0.395 |
| 3. | 0.272 | 0.285 | 1.91 | R 1.02 | 0.952 | 0.489 | 0.489 | 0.444 | 0.389 | 0.605 | 0.331 | 0.272 | 0.697 | 0.409 |
| 4. | 0.272 | 0.308 | 1.74 | R 0.981 | 0.952 | 0.785 | 0.492 | 0.474 | 0.337 | 0.561 | 0.321 | 0.383 | 0.719 | 0.445 |
| 5. | 0.272 | 0.510 | 3.25 | D 0.949 | 0.952 | 0.590 | 0.655 | 0.620 | 0.804 | 0.555 | 0.324 | 0.380 | 0.543 | R 0.572 |
| 6. | 0.272 | 0.413 | 4.27 | D 0.918 | 0.952 | 0.532 | 0.713 | 0.478 | 0.547 | 0.845 | 0.327 | 0.412 | 0.469 | R 0.503 |
| 7. | 0.272 | 0.484 | 3.17 | D 0.896 | 0.905 | 0.532 | 0.580 | 0.445 | 0.425 | 0.595 | 0.303 | 0.364 | 0.486 | R 0.449 |
| 8. | 0.272 | 0.600 | 3.11 | D 0.880 | 1.33 | 0.523 | 0.535 | 0.394 | 0.465 | 0.535 | 0.303 | 0.307 | 0.493 | R 0.428 |
| 9. | 0.272 | 0.788 | 3.02 | D 0.865 | 1.18 | 0.517 | 0.498 | 0.361 | 0.496 | 0.531 | 0.303 | 0.303 | 0.446 | R 0.507 |
| 10. | 0.272 | 0.618 | 2.69 | D 0.849 | 1.04 | 0.674 | 0.538 | 0.337 | 0.516 | 0.489 | 0.299 | 0.303 | 0.568 | R 0.557 |
| 11. | 0.272 | 0.485 | 2.24 | D 0.834 | 1.00 | 0.630 | 0.510 | 0.362 | 0.421 | 0.481 | 0.378 | 0.284 | 0.740 | R 0.512 |
| 12. | 0.272 | 0.409 | 1.95 | D 0.819 | 0.951 | 0.660 | 0.530 | 0.420 | 0.551 | 0.438 | 0.398 | 0.298 | 0.558 | 0.476 |
| 13. | 0.272 | 0.409 | 1.97 | D 0.805 | 0.935 | 1.04 | 0.461 | 0.337 | 0.762 | 0.409 | 0.342 | 0.310 | 0.498 | 0.478 |
| 14. | 0.272 | 0.481 | 1.79 | D 0.790 | 0.872 | 0.812 | 0.414 | 0.345 | 6.64 | 0.401 | 0.307 | 0.308 | 0.469 | 0.474 |
| 15. | 0.272 | 0.692 | 1.58 | R 0.780 | 0.840 | 0.727 | 0.409 | 0.337 | 2.72 | 0.385 | 0.303 | 0.414 | 0.433 | 2.09 |
| 16. | 0.272 | 1.32 | 1.39 | R 0.800 | 0.777 | 0.675 | 0.461 | 0.364 | 1.88 | 0.472 | 0.303 | 0.348 | 0.409 | 2.89 |
| 17. | 0.272 | 1.66 | 1.23 | R 1.95 | 0.753 | 0.626 | 0.489 | 0.358 | 2.97 | 0.397 | 0.297 | 0.322 | 0.404 | 3.69 |
| 18. | 0.272 | 1.19 | 1.13 | R 1.52 | 0.698 | 0.625 | 0.474 | 0.303 | 2.57 | 0.365 | 0.303 | 0.303 | 0.375 | 3.19 |
| 19. | 0.272 | 0.897 | 3.11 | 1.68 | 0.682 | 0.625 | 0.448 | 0.323 | 2.02 | 0.354 | 0.303 | 0.303 | 0.373 | 2.28 |
| 20. | 0.269 | 0.767 | 3.80 | 1.07 | 0.626 | 0.625 | 0.529 | 1.16 | 1.93 | 0.344 | 0.303 | 0.303 | 0.372 | 1.79 |
| 21. | 0.243 | 1.37 | 3.84 | 0.934 | 0.625 | 0.632 | 0.453 | 0.683 | 2.79 | 0.337 | 0.303 | 0.303 | 0.406 | 1.53 |
| 22. | 0.244 | 1.74 | 5.69 | 0.858 | 0.625 | 0.742 | 0.412 | 0.524 | 1.88 | 0.333 | 0.303 | 0.303 | 0.412 | 1.51 |
| 23. | 0.272 | 1.84 | 4.55 | 0.834 | 0.625 | 0.625 | 0.422 | 0.423 | 1.55 | 0.326 | 0.279 | 0.298 | 0.409 | 5.43 |
| 24. | 0.247 | 1.74 | 4.01 | 0.851 | 0.585 | 0.625 | 0.392 | 0.387 | 1.28 | 0.459 | 0.295 | 0.303 | 0.438 | 5.41 |
| 25. | 0.267 | 1.57 | 3.18 | 1.10 | 0.578 | 0.615 | 0.363 | 0.438 | 1.12 | 0.964 | 0.303 | 0.303 | 0.419 | 3.70 |
| 26. | 0.272 | 1.25 | 2.72 | 1.03 | 0.576 | 0.578 | 0.337 | 0.388 | 1.02 | 0.543 | 0.303 | 0.303 | 0.413 | 3.10 |
| 27. | 0.272 | 1.10 | 2.38 | 0.961 | 0.532 | 0.533 | 0.337 | 0.372 | 0.938 | 0.569 | 0.328 | 0.314 | 0.472 | 2.76 |
| 28. | 0.272 | 0.992 | 2.06 | 0.952 | 0.532 | 0.523 | 0.337 | 0.358 | 1.13 | 0.455 | 0.303 | 0.307 | 0.448 | 2.61 |
| 29. | 0.272 | 0.885 | 1.78 | 0.952 | 0.532 | 0.489 | 0.331 | 0.337 | 1.12 | 0.396 | 0.303 | 0.303 | 0.451 | 2.14 |
| 30. | 0.263 | 1.69 | R 1.63 | | 0.532 | 0.489 | 0.317 | 0.329 | 0.871 | 0.372 | 0.303 | 0.430 | 0.466 | 1.91 |
| 31. | | 1.63 | R 1.35 | | 0.532 | | 0.405 | | 0.728 | 0.372 | | 0.388 | | 1.75 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 21. | 1. | 18. | 15. | 27.+ | 3.+ | 30. | 18. | 4. | 23. | 23. | 3. | 1. | 2. |
| NQ | 0.243 | 0.243 | 1.13 | 0.780 | 0.532 | 0.489 | 0.317 | 0.303 | 0.337 | 0.326 | 0.279 | 0.272 | 0.340 | 0.395 |
| MQ | 0.269 | 0.924 | 2.58 | 1.00 | 0.793 | 0.619 | 0.462 | 0.439 | 1.35 | 0.489 | 0.316 | 0.324 | 0.470 | 1.75 |
| HQ | 0.272 | 2.31 | 8.37 | 3.30 | 1.43 | 1.14 | 1.28 | 2.21 | 13.8 | 2.12 | 0.578 | 0.779 | 1.43 | 9.23 |
| Tag | 1.+ | 22. | 21. | 17. | 8. | 12.+ | 31. | 20. | 14. | 25. | 11. | 4. | 3. | 23. |
| $h_N$ mm | 1 | 116 | 116 | 21 | 18 | 46 | 78 | 85 | 137 | 53 | 26 | 51 | 46 | 114 |
| $h_A$ mm | 6 | 21 | 59 | 22 | 18 | 14 | 11 | 10 | 31 | 11 | 7 | 7 | 10 | 40 |
| | 1980/2011 | | 1981/2012 32 Jahre | | | | | | | | | | | |
| Jahr | 2003 | 2003 | 2004 | 1996 | 1996 | 1996 | 2011 | 2010 | 2010 | 1990 | 2008 | 1991 | 2003 | 2003 |
| NQ | 0.132 | 0.156 | 0.250 | 0.238 | 0.320 | 0.323 | 0.272 | 0.243 | 0.178 | 0.169 | 0.149 | 0.164 | 0.132 | 0.156 |
| MNQ | 0.404 | 0.510 | 0.685 | 0.763 | 0.822 | 0.755 | 0.535 | 0.444 | 0.323 | 0.293 | 0.282 | 0.352 | 0.404 | 0.503 |
| MQ | 0.869 | 1.25 | 1.59 | 1.49 | 1.71 | 1.23 | 0.929 | 0.818 | 0.528 | 0.453 | 0.491 | 0.584 | 0.861 | 1.26 |
| MHQ | 4.22 | 6.57 | 7.92 | 6.11 | 5.47 | 3.75 | 4.69 | 7.16 | 3.93 | 3.75 | 3.78 | 3.17 | 4.22 | 6.72 |
| HQ | 29.0 | 22.7 | 31.7 | 23.6 | 18.0 | 20.7 | 21.8 | 76.1 | 13.8 | 26.1 | 27.2 | 14.1 | 29.0 | 22.7 |
| Jahr | 1984 | 2002 | 1995 | 1984 | 1987 | 1994 | 1984 | 1981 | 2012 | 1987 | 2007 | 1998 | 1984 | 2002 |
| | 1980/2011 | | 1981/2012 32 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 69 | 72 | 64 | 49 | 60 | 50 | 75 | 80 | 79 | 69 | 72 | 59 | 68 | 74 |
| $Mh_A$ mm | 19 | 29 | 37 | 32 | 39 | 27 | 21 | 18 | 12 | 10 | 11 | 13 | 19 | 29 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.243 | am 21.11.2011 | 0.243 | 0.272 | 0.272 | am 03.10.2012 |
| MQ m³/s | 0.801 | | 1.04 | 0.565 | 0.888 | |
| HQ m³/s | 13.8 | am 14.07.2012 bei W= 228 cm | 8.37 | 13.8 | 13.8 | am 14.07.2012 bei W= 228 cm |
| Nq l/(s km²) | 2.09 | | 2.09 | 2.34 | 2.34 | |
| Mq l/(s km²) | 6.89 | | 8.94 | 4.86 | 7.64 | |
| Hq l/(s km²) | 119 | | 72.0 | 119 | 119 | |
| $h_N$ mm | 748 | | 318 | 430 | 791 | |
| $h_A$ mm | 217 | | 141 | 77 | 242 | |
| | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
| NQ m³/s | 0.132 | am 14.11.2003 | 0.132 | 0.149 | 0.132 | am 14.11.2003 |
| MNQ m³/s | 0.229 | | 0.350 | 0.256 | 0.255 | |
| MQ m³/s | 0.993 | | 1.36 | 0.634 | 0.992 | |
| MHQ m³/s | 17.7 | | 13.7 | 12.2 | 17.2 | |
| HQ m³/s | 76.1 | am 04.06.1981 | 31.7 | 76.1 | 76.1 | am 04.06.1981 |
| $HQ_1$ m³/s | 11.6 | | 8.76 | 6.11 | 11.6 | |
| $HQ_5$ m³/s | 18.9 | | 17.8 | 15.2 | 18.9 | |
| MNq l/(s km²) | 1.97 | | 3.01 | 2.20 | 2.19 | |
| Mq l/(s km²) | 8.54 | | 11.7 | 5.45 | 8.53 | |
| MHq l/(s km²) | 152 | | 118 | 105 | 148 | |
| | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
| $Mh_N$ mm | 796 | | 363 | 433 | 797 | |
| $Mh_A$ mm | 269 | | 184 | 87 | 270 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.132 | 1.14 | 14.11.2003 | 76.1 | 655 | 276 | 04.06.1981 |
| 2 | 0.149 | 1.28 | 12.09.2008 | 46.0 | 396 | | 05.06.1979 |
| 3 | 0.153 | 1.32 | 04.09.1991 | 31.7 | 273 | 254 | 23.01.1995 |
| 4 | 0.169 | 1.45 | 13.08.1990 | 29.0 | 249 | 234 | 23.11.1984 |
| 5 | 0.171 | 1.47 | 12.08.1998 | 27.2 | 234 | 264 | 29.09.2007 |
| 6 | 0.178 | 1.53 | 21.07.2010 | 26.1 | 225 | 247 | 18.08.1987 |
| 7 | 0.180 | 1.55 | 23.10.1983 | 25.4 | 218 | 229 | 31.01.1982 |
| 8 | 0.189 | 1.63 | 04.10.2011 | 23.6 | 203 | 226 | 07.02.1984 |
| 9 | 0.193 | 1.66 | 17.08.1994 | 23.0 | 198 | 242 | 02.01.1987 |
| 10 | 0.196 | 1.69 | 09.09.2009 | 22.7 | 195 | 243 | 31.12.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1981/2012 32 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 6.64 | 6.64 | | | |
| 364 | 5.69 | 5.69 | 23.6 | 8.98 | 2.68 |
| 363 | 4.55 | 5.43 | 23.6 | 6.92 | 2.58 |
| 362 | 4.27 | 5.41 | 23.6 | 5.90 | 2.57 |
| 361 | 4.01 | 4.55 | 10.3 | 5.31 | 2.56 |
| 360 | 3.84 | 4.27 | 9.90 | 4.87 | 2.29 |
| 359 | 3.80 | 4.01 | 9.50 | 4.56 | 2.26 |
| 358 | 3.25 | 3.84 | 8.76 | 4.20 | 2.22 |
| 357 | 3.18 | 3.80 | 8.50 | 3.97 | 2.19 |
| 356 | 3.17 | 3.70 | 8.12 | 3.78 | 2.04 |
| 350 | 2.79 | 3.17 | 6.64 | 3.05 | 1.78 |
| 340 | 1.97 | 2.69 | 4.98 | 2.48 | 1.56 |
| 330 | 1.78 | 2.02 | 4.05 | 2.05 | 1.34 |
| 320 | 1.52 | 1.79 | 3.55 | 1.79 | 1.18 |
| 300 | 1.08 | 1.16 | 2.74 | 1.47 | 0.977 |
| 270 | 0.880 | 0.905 | 2.17 | 1.15 | 0.644 |
| 240 | 0.683 | 0.698 | 1.74 | 0.930 | 0.495 |
| 210 | 0.580 | 0.580 | 1.50 | 0.777 | 0.415 |
| 183 | 0.523 | 0.531 | 1.35 | 0.652 | 0.361 |
| 150 | 0.444 | 0.474 | 1.18 | 0.526 | 0.304 |
| 130 | 0.405 | 0.444 | 1.12 | 0.466 | 0.275 |
| 120 | 0.387 | 0.420 | 1.09 | 0.439 | 0.252 |
| 110 | 0.364 | 0.412 | 1.06 | 0.414 | 0.239 |
| 100 | 0.344 | 0.398 | 1.03 | 0.390 | 0.226 |
| 90 | 0.342 | 0.385 | 0.980 | 0.372 | 0.212 |
| 80 | 0.323 | 0.372 | 0.980 | 0.350 | 0.212 |
| 70 | 0.307 | 0.354 | 0.920 | 0.329 | 0.202 |
| 60 | 0.307 | 0.340 | 0.920 | 0.311 | 0.192 |
| 50 | 0.307 | 0.328 | 0.900 | 0.298 | 0.188 |
| 40 | 0.299 | 0.308 | 0.860 | 0.282 | 0.188 |
| 30 | 0.275 | 0.307 | 0.800 | 0.266 | 0.179 |
| 25 | 0.275 | 0.307 | 0.780 | 0.256 | 0.172 |
| 20 | 0.275 | 0.307 | 0.780 | 0.246 | 0.169 |
| 15 | 0.275 | 0.307 | 0.720 | 0.234 | 0.166 |
| 10 | 0.275 | 0.303 | 0.701 | 0.221 | 0.156 |
| 9 | 0.275 | 0.300 | 0.697 | 0.216 | 0.146 |
| 8 | 0.275 | 0.299 | 0.696 | 0.212 | 0.145 |
| 7 | 0.272 | 0.299 | 0.691 | 0.208 | 0.145 |
| 6 | 0.269 | 0.298 | 0.684 | 0.201 | 0.145 |
| 5 | 0.267 | 0.297 | 0.682 | 0.201 | 0.145 |
| 4 | 0.263 | 0.295 | 0.675 | 0.193 | 0.145 |
| 3 | 0.247 | 0.284 | 0.674 | 0.188 | 0.145 |
| 2 | 0.244 | 0.282 | 0.673 | 0.179 | 0.142 |
| 1 | 0.244 | 0.279 | 0.665 | 0.169 | 0.133 |
| 0 | 0.243 | 0.272 | 0.641 | 0.132 | 0.132 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

Extremwerte vor dem 23.05.1981 wurden vom Pegel Mörshausen / Pfieffe übertragen

HLUG Wiesbaden

$A_{Eo}$ : 125.00 km²
PNP : NHN+ 430.45 m
Lage : 153.50 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Muesse Nr. 4281319000100
Gewässer: Eder, 428
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.813 | 0.501 | 16.4 | 2.27 | 3.61 | 0.791 | 1.23 | 1.22 | 4.28 | 1.22 | 0.560 | 0.535 | 1.17 | 1.93 |
| 2. | 0.808 | 0.979 | 31.9 | 1.88 | 3.62 | 0.733 | 1.20 | 0.921 | 3.29 | 1.15 | 0.489 | 0.496 | 1.58 | 1.94 |
| 3. | 0.767 | 1.60 | 21.9 | 1.96 | 3.49 | 0.707 | 1.14 | 0.920 | 2.68 | 1.09 | 0.458 | 0.573 | 3.20 | 1.86 |
| 4. | 0.736 | 2.60 | 15.9 | 1.83 | 3.26 | 0.871 | 1.06 | 1.03 | 2.12 | 0.998 | 0.420 | 5.36 | 3.13 | 2.06 |
| 5. | 0.707 | 3.60 | 30.7 | 1.67 | 3.13 | 1.05 | 1.22 | 1.43 | 1.79 | 0.946 | 0.385 | 4.71 | 3.28 | 2.05 |
| 6. | 0.677 | 3.29 | 30.5 | 1.63 | 2.76 | 0.800 | 1.17 | 1.09 | 1.58 | 1.43 | 0.381 | 8.05 | 3.18 | 1.84 |
| 7. | 0.643 | 5.10 | 19.0 | 1.69 | 2.52 | 0.754 | 1.11 | 1.13 | 1.38 | 1.04 | 0.377 | 6.39 | 3.68 | 1.67 |
| 8. | 0.603 | 6.32 | 17.6 | 1.46 | 2.72 | 0.727 | 0.975 | 0.979 | 1.40 | 0.893 | 0.352 | 4.89 | 3.33 | 1.52 |
| 9. | 0.592 | 16.7 | 16.0 | 1.35 | 2.44 | 0.774 | 1.11 | 0.927 | 1.34 | 0.820 | 0.335 | 3.77 | 3.31 | 1.60 |
| 10. | 0.554 | 15.1 | 13.1 | 1.27 | 2.19 | 1.27 | 1.74 | 0.819 | 1.10 | 0.766 | 0.327 | 2.94 | 3.47 | 1.56 |
| 11. | 0.551 | 9.80 | 10.4 | 1.20 | 2.10 | 1.26 | 1.18 | 0.848 | 1.17 | 0.724 | 0.623 | 2.41 | 3.54 | 1.46 |
| 12. | 0.532 | 8.97 | 8.69 | 1.40 | 1.96 | 1.06 | 1.17 | 1.03 | 1.45 | 0.659 | 0.632 | 2.22 | 2.89 | 1.39 |
| 13. | 0.518 | 9.96 | 7.36 | 1.11 | 1.88 | 1.13 | 1.09 | 1.01 | 2.04 | 0.639 | 0.503 | 1.93 | 2.64 | 1.48 |
| 14. | 0.482 | 13.4 | 6.07 | 1.11 | 1.80 | 1.06 | 1.06 | 0.886 | 4.58 | 0.600 | 0.453 | 2.03 | 2.49 | 1.51 |
| 15. | 0.474 | 12.5 | 5.29 | 1.24 | 1.69 | 1.01 | 1.13 | 0.838 | 5.39 | 0.562 | 0.481 | 2.79 | 2.34 | 8.87 |
| 16. | 0.470 | 15.0 | 4.47 | 1.06 | 1.61 | 0.990 | 1.35 | 1.51 | 5.65 | 1.70 | 0.425 | 2.15 | 2.16 | 15.2 |
| 17. | 0.458 | 16.6 | 3.78 | 1.18 | 1.54 | 0.919 | 1.12 | 1.42 | 10.8 | 0.873 | 0.371 | 2.14 | 1.99 | 18.7 |
| 18. | 0.439 | 12.2 | 3.22 | 1.78 | 1.66 | 0.946 | 0.996 | 1.05 | 12.5 | 0.724 | 0.356 | 2.04 | 1.89 | 19.2 |
| 19. | 0.439 | 8.43 | 7.00 | 3.59 | 1.50 | 0.943 | 1.04 | 1.01 | 9.57 | 0.634 | 0.374 | 1.93 | 1.73 | 14.8 |
| 20. | 0.439 | 6.44 | 8.76 | 2.15 | 1.31 | 0.904 | 0.973 | 1.65 | 7.78 | 0.600 | 0.435 | 1.79 | 1.55 | 10.6 |
| 21. | 0.438 | 6.01 | 10.9 | 1.62 | 1.24 | 0.921 | 0.921 | 1.41 | 5.78 | 0.579 | 0.370 | 1.73 | 1.44 | 7.94 |
| 22. | 0.410 | 6.58 | 15.2 | 1.53 | 1.14 | 0.953 | 0.920 | 1.93 | 4.50 | 0.530 | 0.359 | 1.56 | 1.34 | 7.14 |
| 23. | 0.410 | 12.7 | 16.2 | 1.83 | 1.06 | 0.918 | 2.12 | 1.39 | 3.66 | 0.487 | 0.331 | 1.46 | 1.30 | 23.2 |
| 24. | 0.395 | 20.7 | 13.2 | 2.82 | 1.02 | 0.875 | 1.88 | 1.54 | 3.01 | 0.486 | 0.371 | 1.35 | 1.63 | 41.1 |
| 25. | 0.390 | 17.8 | 9.66 | 3.32 | 0.940 | 1.14 | 1.51 | 2.13 | 2.54 | 0.611 | 0.494 | 1.27 | 1.35 | 21.9 |
| 26. | 0.379 | 14.0 | 7.19 | 3.50 | 0.869 | 1.92 | 1.30 | 1.72 | 2.16 | 0.860 | 0.696 | 1.19 | 1.71 | 16.2 |
| 27. | 0.397 | 11.8 | 5.59 | 3.42 | 0.826 | 1.45 | 1.15 | 1.53 | 2.27 | 1.06 | 0.955 | 1.21 | 2.24 | 17.8 |
| 28. | 0.444 | 9.61 | 4.42 | 3.46 | 0.779 | 1.39 | 1.06 | 1.66 | 2.40 | 0.686 | 1.08 | 1.09 | 1.82 | 15.4 |
| 29. | 0.416 | 8.02 | 3.61 | 3.67 | 0.741 | 1.35 | 1.02 | 4.89 | 1.87 | 0.598 | 0.706 | 1.02 | 1.89 | 11.7 |
| 30. | 0.413 | 8.69 | 3.02 | | 0.867 | 1.30 | 0.889 | 5.40 | 1.54 | 0.626 | 0.597 | 1.47 | 1.96 | 9.04 |
| 31. | | 7.52 | 2.58 | | 0.879 | | 0.891 | | 1.36 | 0.552 | | 1.39 | | 6.79 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 1. | 31. | 16. | 29. | 3. | 30. | 10. | 10. | 24. | 10. | 2. | 1. | 12. |
| NQ | 0.379 | 0.501 | 2.58 | 1.06 | 0.741 | 0.707 | 0.889 | 0.819 | 1.10 | 0.486 | 0.327 | 0.496 | 1.17 | 1.39 |
| MQ | 0.527 | 9.43 | 11.9 | 2.00 | 1.84 | 1.03 | 1.18 | 1.51 | 3.64 | 0.811 | 0.490 | 2.38 | 2.31 | 9.33 |
| HQ | 0.859 | 22.2 | 41.3 | 4.85 | 3.70 | 2.65 | 6.50 | 8.69 | 14.0 | 3.81 | 1.35 | 10.5 | 5.81 | 47.8 |
| Tag | 1. | 24. | 5. | 19. | 1.+ | 26. | 23. | 29. | 17. | 16. | 28. | 4. | 3. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 202 | 256 | 40 | 39 | 21 | 25 | 31 | 78 | 17 | 10 | 51 | 48 | 200 |

| | 1949/2011 | | 1950/2012 63 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1971 | 1959 | 1964 | 1996 | 1996 | 1974 | 2011 | 1976 | 1959 | 1976 | 1959 | 1959 | 1971 | 1959 |
| NQ | 0.176 | 0.200 | 0.315 | 0.188 | 0.383 | 0.346 | 0.190 | 0.169 | 0.086 | 0.059 | 0.112 | 0.112 | 0.176 | 0.200 |
| MNQ | 1.21 | 1.54 | 1.51 | 1.44 | 1.54 | 1.30 | 0.752 | 0.559 | 0.607 | 0.565 | 0.614 | 0.864 | 1.22 | 1.53 |
| MQ | 3.98 | 5.88 | 5.88 | 4.62 | 5.07 | 3.51 | 1.82 | 1.46 | 1.68 | 1.55 | 1.80 | 2.67 | 4.00 | 5.92 |
| MHQ | 14.7 | 23.0 | 25.3 | 17.6 | 19.0 | 10.2 | 5.79 | 6.00 | 6.96 | 7.45 | 7.34 | 10.0 | 14.8 | 23.4 |
| HQ | 50.7 | 64.3 | 63.2 | 59.7 | 56.2 | 45.9 | 31.4 | 48.0 | 31.6 | 49.7 | 47.1 | 64.9 | 50.7 | 64.3 |
| Jahr | 2010 | 1965 | 2002 | 2002 | 1999 | 2006 | 1984 | 1961 | 1954 | 2007 | 1957 | 1998 | 2010 | 1965 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 83 | 126 | 126 | 90 | 109 | 73 | 39 | 30 | 36 | 33 | 37 | 57 | 83 | 127 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.327 | am 10.09.2012 | 0.379 | 0.327 | 0.327 | am 10.09.2012 |
| MQ | m³/s | 3.09 | | 4.53 | 1.68 | 3.23 | |
| HQ | m³/s | 41.3 | am 05.01.2012 bei W = 165 cm | 41.3 | 14.0 | 47.8 | am 24.12.2012 bei W = 174 cm |
| Nq | l/(skm²) | 2.62 | | 3.04 | 2.62 | 2.62 | |
| Mq | l/(skm²) | 24.8 | | 36.2 | 13.4 | 25.9 | |
| Hq | l/(skm²) | 330 | | 330 | 112 | 382 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 783 | | 570 | 213 | 818 | |

| | | 1950/2012 (*) 63 Jahre | | | | 1950/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.059 | am 26.08.1976 | 0.176 | 0.059 | 0.059 | am 26.08.1976 |
| MNQ | m³/s | 0.302 | | 0.684 | 0.316 | 0.312 | |
| MQ | m³/s | 3.32 | | 4.84 | 1.83 | 3.33 | |
| MHQ | m³/s | 38.5 | | 37.1 | 17.5 | 38.6 | |
| HQ | m³/s | 64.9 | am 28.10.1998 bei W = 194 cm | 64.2 | 64.9 | 64.9 | am 28.10.1998 bei W = 194 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.42 | | 5.47 | 2.53 | 2.50 | |
| Mq | l/(skm²) | 26.6 | | 38.7 | 14.7 | 26.6 | |
| MHq | l/(skm²) | 308 | | 297 | 140 | 309 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 839 | | 606 | 233 | 840 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.059 | 0.472 | 26.08.1976 | 64.9 | 520 | 194 | 28.10.1998 |
| 2 | 0.086 | 0.687 | 30.07.1959 | 64.2 | 514 | 183 | 19.12.1965 |
| 3 | 0.124 | 0.988 | 16.08.1975 | 63.2 | 505 | 192 | 27.01.2002 |
| 4 | 0.150 | 1.20 | 13.10.1971 | 63.1 | 505 | 182 | 06.12.1965 |
| 5 | 0.165 | 1.32 | 25.08.1989 | 59.7 | 477 | 188 | 26.02.2002 |
| 6 | 0.165 | 1.32 | 03.09.1991 | 59.7 | 477 | 188 | 30.01.1995 |
| 7 | 0.165 | 1.32 | 26.07.2006 | 58.8 | 470 | 187 | 23.01.1995 |
| 8 | 0.169 | 1.35 | 12.09.1973 | 56.2 | 450 | 184 | 02.03.1999 |
| 9 | 0.173 | 1.38 | 27.07.1952 | 55.4 | 443 | 183 | 18.01.2007 |
| 10 | 0.173 | 1.39 | 15.08.1986 | 53.4 | 427 | 181 | 14.01.2011 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1950/2012 63 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 31.9 | 41.1 | 58.9 | 33.7 | 13.5 |
| 363 | 30.7 | 31.9 | 51.5 | 28.0 | 12.5 |
| 362 | 30.5 | 30.7 | 44.7 | 24.2 | 12.0 |
| 361 | 21.9 | 30.5 | 44.0 | 22.2 | 10.4 |
| 360 | 20.7 | 23.2 | 43.7 | 20.5 | 9.99 |
| 359 | 19.0 | 21.9 | 36.3 | 19.0 | 8.21 |
| 358 | 17.8 | 21.9 | 36.2 | 17.7 | 7.76 |
| 357 | 17.6 | 19.2 | 35.4 | 16.7 | 7.48 |
| 356 | 16.7 | 19.0 | 32.7 | 16.0 | 7.28 |
| 350 | 15.2 | 16.2 | 21.2 | 12.9 | 5.50 |
| 340 | 12.2 | 11.7 | 15.2 | 9.85 | 3.94 |
| 330 | 8.98 | 8.69 | 14.1 | 8.00 | 3.49 |
| 320 | 7.19 | 6.07 | 11.9 | 6.77 | 2.89 |
| 300 | 4.50 | 3.66 | 8.46 | 5.19 | 1.74 |
| 270 | 2.68 | 2.68 | 5.95 | 3.68 | 1.21 |
| 240 | 1.88 | 1.96 | 4.86 | 2.76 | 0.946 |
| 210 | 1.51 | 1.69 | 4.29 | 2.13 | 0.496 |
| 183 | 1.27 | 1.48 | 3.71 | 1.72 | 0.373 |
| 150 | 1.09 | 1.27 | 3.04 | 1.35 | 0.297 |
| 130 | 1.02 | 1.14 | 2.45 | 1.18 | 0.262 |
| 120 | 0.975 | 1.11 | 2.37 | 1.10 | 0.250 |
| 110 | 0.921 | 1.06 | 2.27 | 1.02 | 0.233 |
| 100 | 0.886 | 1.03 | 2.18 | 0.938 | 0.221 |
| 90 | 0.826 | 0.979 | 2.12 | 0.854 | 0.201 |
| 80 | 0.766 | 0.921 | 1.96 | 0.780 | 0.191 |
| 70 | 0.706 | 0.889 | 1.87 | 0.703 | 0.180 |
| 60 | 0.623 | 0.838 | 1.79 | 0.621 | 0.164 |
| 50 | 0.562 | 0.741 | 1.69 | 0.544 | 0.136 |
| 40 | 0.501 | 0.639 | 1.49 | 0.471 | 0.136 |
| 30 | 0.458 | 0.579 | 1.35 | 0.406 | 0.124 |
| 25 | 0.439 | 0.535 | 1.30 | 0.378 | 0.112 |
| 20 | 0.420 | 0.489 | 1.25 | 0.337 | 0.112 |
| 15 | 0.397 | 0.453 | 1.12 | 0.294 | 0.112 |
| 10 | 0.379 | 0.381 | 0.873 | 0.254 | 0.112 |
| 9 | 0.377 | 0.377 | 0.840 | 0.245 | 0.112 |
| 8 | 0.374 | 0.374 | 0.805 | 0.233 | 0.112 |
| 7 | 0.371 | 0.371 | 0.796 | 0.226 | 0.112 |
| 6 | 0.371 | 0.371 | 0.788 | 0.221 | 0.112 |
| 5 | 0.370 | 0.370 | 0.778 | 0.208 | 0.112 |
| 4 | 0.359 | 0.359 | 0.769 | 0.193 | 0.105 |
| 3 | 0.356 | 0.356 | 0.730 | 0.185 | 0.100 |
| 2 | 0.352 | 0.352 | 0.710 | 0.169 | 0.086 |
| 1 | 0.335 | 0.335 | 0.669 | 0.136 | 0.086 |
| 0 | 0.327 | 0.327 | 0.640 | 0.059 | 0.059 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 489 km²
PNP : NHN + 298.22 m
Lage: 110.0 km oberhalb der Mündung, links

Q
m³/s

Pegel : Auhammer Nr. 42810204
Gewässer : Eder
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.83 | 1.62 | 39.0 | G 9.69 | R 14.1 | 2.86 | 4.72 | 3.23 | 10.8 | 4.19 | K 1.50 | K 1.33 | K 2.96 | K 6.57 |
| 2. | 2.78 | 2.22 | 83.7 | G 9.00 | 14.3 | 2.61 | 4.54 | 2.94 | 9.23 | 3.79 | K 1.47 | K 1.15 | K 3.24 | K 6.38 |
| 3. | 2.80 | 2.85 | 79.6 | G 8.70 | 13.6 | 2.53 | 4.42 | 2.52 | 7.96 | 3.63 | K 1.30 | K 1.10 | K 5.72 | K 6.35 |
| 4. | 2.71 | 6.07 | 64.7 | D 8.52 | 12.4 | 2.74 | 4.02 | 2.77 | 6.58 | 3.31 | K 1.22 | K 5.55 | K 10.9 | K 6.57 |
| 5. | 2.65 | 9.28 | 86.3 | D 8.39 | 11.5 | 3.32 | 4.00 | 3.50 | 5.68 | 3.04 | K 1.17 | K 10.6 | K 9.99 | 8.09 |
| 6. | 2.52 | 11.2 | 112 | D 8.36 | 10.3 | 2.91 | 4.63 | 3.06 | 5.03 | 3.91 | K 1.10 | K 15.7 | K 9.67 | R 7.44 |
| 7. | 2.45 | 14.0 | 75.9 | D 8.35 | 9.03 | 2.61 | 4.15 | 3.29 | 4.49 | 3.60 | K 1.06 | K 15.1 | K 10.2 | R 6.73 |
| 8. | 2.35 | 21.4 | 72.6 | D 8.34 | 9.10 | 2.59 | 3.73 | 3.02 | 4.38 | 2.98 | K 0.988 | K 11.7 | K 11.0 | R 6.35 |
| 9. | 2.29 | 42.7 | 70.5 | D 8.33 | 8.60 | 2.46 | 3.49 | 2.73 | 4.78 | 2.68 | K 0.914 | K 9.32 | K 10.6 | R 7.84 |
| 10. | 2.24 | 51.7 | 56.0 | D 8.31 | 7.59 | 3.27 | 5.85 | 2.48 | 3.83 | 2.52 | K 0.880 | K 7.42 | K 10.3 | R 7.71 |
| 11. | 2.20 | 35.0 | 43.2 | D 8.27 | 7.22 | 3.69 | 4.65 | 2.39 | 3.64 | 2.37 | K 0.875 | K 6.11 | K 11.2 | 6.55 |
| 12. | 2.12 | 28.5 | 34.1 | D 8.26 | 6.89 | 3.51 | 4.29 | 3.09 | 4.07 | 2.21 | K 1.54 | K 5.31 | K 9.34 | 6.03 |
| 13. | 2.08 | 31.7 | 30.1 | D 8.26 | 6.63 | 3.85 | 4.02 | 2.79 | 4.98 | 2.08 | K 1.52 | K 4.98 | K 8.34 | 6.65 |
| 14. | 1.98 | 48.5 | 24.2 | D 8.23 | 6.31 | 3.75 | 3.93 | 2.58 | 11.3 | 1.99 | K 1.27 | K 4.69 | K 7.82 | 7.86 |
| 15. | 1.99 | 50.7 | 20.7 | D 8.18 | 6.07 | 3.67 | 3.89 | 2.42 | 16.7 | 1.88 | K 1.17 | K 7.33 | K 7.18 | 23.7 |
| 16. | 1.96 | 55.3 | 17.4 | D 8.16 | 5.87 | 3.50 | 4.52 | 2.89 | 19.3 | K 2.75 | K 1.13 | K 6.79 | K 6.71 | 52.8 |
| 17. | 1.80 | 73.6 | 14.9 | D 8.14 | 5.54 | 3.32 | 4.29 | 4.26 | 24.9 | K 2.87 | K 1.01 | K 6.29 | K 6.21 | 70.4 |
| 18. | 1.89 | 53.7 | 12.8 | D 8.11 | 5.33 | 3.31 | 3.74 | 3.10 | 35.3 | K 2.10 | K 0.938 | K 5.99 | K 5.84 | 72.8 |
| 19. | 1.85 | 36.9 | 17.1 | D 8.11 | 5.29 | 3.29 | 3.90 | 2.72 | 31.0 | K 1.88 | K 0.863 | K 5.48 | K 5.49 | 59.7 |
| 20. | 1.83 | 27.7 | 32.2 | D 8.10 | 4.57 | 3.22 | 3.96 | 4.38 | 24.0 | K 1.71 | K 0.943 | K 5.08 | K 4.88 | 42.9 |
| 21. | 1.73 | 25.4 | 34.4 | D 8.11 | 4.26 | 3.15 | 3.61 | 5.39 | 20.2 | K 1.68 | K 1.01 | K 4.78 | K 4.51 | 32.8 |
| 22. | 1.72 | 25.0 | 63.5 | D 8.23 | 3.95 | 3.31 | 3.52 | 5.78 | 15.1 | K 1.57 | K 0.891 | K 4.44 | K 4.26 | 26.8 |
| 23. | 1.73 | 41.2 | 75.9 | D 8.47 | 3.82 | 3.15 | 3.16 | 4.88 | 12.4 | K 1.43 | K 0.851 | K 4.03 | K 3.97 | 55.9 |
| 24. | 1.66 | 70.9 | 58.7 | D 8.87 | 3.62 | 3.23 | 4.97 | 4.44 | 10.2 | K 1.45 | K 0.828 | K 3.68 | K 4.45 | 133 |
| 25. | 1.62 | 68.5 | 41.1 | G 9.56 | 3.39 | 3.82 | 3.71 | 5.53 | 8.75 | K 1.61 | K 1.16 | K 3.43 | K 4.38 | 91.4 |
| 26. | 1.62 | 51.7 | 30.0 | G 10.4 | 3.16 | 5.49 | 3.33 | 5.28 | 7.50 | K 1.95 | K 1.33 | K 3.31 | K 4.07 | 64.0 |
| 27. | 1.62 | 43.4 | 23.3 | G 11.4 | 3.01 | 6.36 | 3.03 | 4.36 | 6.64 | K 2.38 | K 1.53 | K 3.26 | K 7.14 | 65.2 |
| 28. | 1.67 | 36.2 | R 18.5 | R 12.3 | 2.85 | 5.68 | 2.77 | 4.45 | 8.05 | K 2.10 | K 2.20 | K 2.93 | K 6.40 | 62.1 |
| 29. | 1.68 | 29.3 | R 15.3 | R 13.2 | 2.70 | 5.33 | 2.67 | 6.62 | 6.46 | K 1.71 | K 1.99 | K 2.72 | K 6.34 | 46.9 |
| 30. | 1.63 | 32.6 | R 12.8 | | 2.88 | 5.11 | 2.39 | 14.1 | 5.33 | K 1.58 | K 1.52 | K 2.69 | K 6.72 | 35.4 |
| 31. | | 29.6 | R 10.9 | | 3.11 | | 2.22 | | 4.67 | K 1.59 | | K 3.56 | | 27.9 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25.+ | 1. | 31. | 20. | 29. | 9. | 31. | 11. | 11. | 23. | 24. | 3. | 1. | 12. |
| NQ | 1.62 | 1.62 | 10.9 | 8.10 | 2.70 | 2.46 | 2.22 | 2.39 | 3.64 | 1.43 | 0.828 | 1.10 | 2.96 | 6.03 |
| MQ | 2.07 | 34.1 | 44.2 | 8.91 | 6.68 | 3.59 | 3.87 | 4.03 | 11.1 | 2.40 | 1.21 | 5.67 | 6.99 | 34.2 |
| HQ | 3.32 | 83.4 | 124 | 13.8 | 14.5 | 7.50 | 8.07 | 19.1 | 36.8 | 5.19 | 2.75 | 18.5 | 13.0 | 147 |
| Tag | 8. | 16. | 6. | 29. | 1.+ | 26.+ | 10. | 29. | 18. | 1. | 28. | 6. | 4. | 24. |
| $h_N$ mm | 4 | 241 | 184 | 27 | 16 | 70 | 64 | 126 | 124 | 51 | 42 | 103 | 65 | 180 |
| $h_A$ mm | 11 | 187 | 242 | 46 | 37 | 19 | 21 | 21 | 61 | 13 | 6 | 31 | 37 | 187 |
| | 1959/2011 | | 1960/2012 53 Jahre | | | | | | | | | | | |
| Jahr | 1959 | 1959 | 1972 | 1963 | 1963 | 1974 | 2011 | 2011 | 1976 | 1976 | 1976 | 1971 | 1983 | 1978 |
| NQ | 0.350 | 0.250 | 1.00 | 0.800 | 1.02 | 1.00 | 0.576 | 0.559 | 0.360 | 0.160 | 0.160 | 0.240 | 0.420 | 0.360 |
| MNQ | 3.62 | 5.16 | 5.23 | 5.38 | 5.19 | 4.62 | 2.49 | 1.91 | 1.81 | 1.58 | 1.54 | 2.24 | 3.67 | 5.27 |
| MQ | 12.6 | 19.6 | 20.0 | 15.3 | 17.2 | 11.8 | 5.99 | 4.41 | 4.61 | 4.08 | 4.23 | 7.25 | 12.7 | 20.1 |
| MHQ | 44.6 | 78.4 | 93.0 | 57.6 | 61.1 | 30.9 | 17.1 | 14.9 | 16.0 | 17.2 | 15.4 | 27.0 | 44.8 | 80.6 |
| HQ | 155 | 228 | 260 | 204 | 224 | 136 | 132 | 83.5 | 125 | 142 | 99.7 | 273 | 155 | 228 |
| Jahr | 2010 | 1965 | 1995 | 1980 | 1981 | 2006 | 1984 | 1984 | 1980 | 2007 | 1998 | 1998 | 2010 | 1965 |
| | 1959/2011 | | 1960/2012 53 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 111 | 135 | 127 | 90 | 94 | 73 | 78 | 87 | 94 | 89 | 84 | 93 | 111 | 136 |
| $Mh_A$ mm | 67 | 107 | 110 | 78 | 94 | 62 | 33 | 23 | 25 | 22 | 22 | 40 | 67 | 110 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.828 | am 24.09.2012 | 1.62 | 0.828 | 0.828 | am 24.09.2012 |
| MQ m³/s | 10.8 | | 16.8 | 4.73 | 11.2 | |
| HQ m³/s | 124 | am 06.01.2012 bei W= 246 cm | 124 | 36.8 | 147 | am 24.12.2012 bei W= 265 cm |
| Nq l/(s km²) | 1.69 | | 3.31 | 1.69 | 1.69 | |
| Mq l/(s km²) | 22.0 | | 34.4 | 9.67 | 22.8 | |
| Hq l/(s km²) | 253 | | 253 | 75.2 | 300 | |
| $h_N$ mm | 1052 | | 542 | 510 | 1052 | |
| $h_A$ mm | 693 | | 541 | 154 | 721 | |
| | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
| NQ m³/s | 0.160 | am 23.08.1976 | 0.250 | 0.160 | 0.160 | am 23.08.1976 |
| MNQ m³/s | 0.832 | | 2.23 | 0.907 | 0.879 | |
| MQ m³/s | 10.6 | | 16.1 | 5.11 | 10.6 | |
| MHQ m³/s | 137 | | 133 | 45.3 | 140 | |
| HQ m³/s | 273 | am 28.10.1998 bei W= 331 cm | 260 | 273 | 273 | am 28.10.1998 bei W= 331 cm |
| $HQ_1$ m³/s | 83.4 | | 75.5 | 17.1 | 83.5 | |
| $HQ_5$ m³/s | 186 | | 184 | 38.4 | 186 | |
| MNq l/(s km²) | 1.70 | | 4.56 | 1.85 | 1.80 | |
| Mq l/(s km²) | 21.7 | | 32.9 | 10.4 | 21.7 | |
| MHq l/(s km²) | 280 | | 272 | 92.6 | 286 | |
| | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
| $Mh_N$ mm | 1155 | | 630 | 525 | 1157 | |
| $Mh_A$ mm | 683 | | 517 | 166 | 685 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.160 | 0.327 | 23.08.1976 | 273 | 558 | 331 | 28.10.1998 |
| 2 | 0.180 | 0.368 | 10.08.1975 | 260 | 531 | 318 | 23.01.1995 |
| 3 | 0.180 | 0.368 | 09.09.1973 | 230 | 470 | 305 | 20.01.1986 |
| 4 | 0.240 | 0.490 | 08.10.1971 | 228 | 466 | 315 | 19.12.1965 |
| 5 | 0.250 | 0.511 | 11.12.1959 | 224 | 458 | 308 | 10.03.1981 |
| 6 | 0.352 | 0.719 | 05.09.1991 | 220 | 450 | 300 | 01.01.1987 |
| 7 | 0.358 | 0.732 | 24.08.1989 | 220 | 450 | 300 | 31.12.1986 |
| 8 | 0.360 R | 0.736 | 07.12.1978 | 218 | 446 | 299 | 27.01.2002 |
| 9 | 0.400 | 0.817 | 20.07.1964 | 214 | 437 | 299 | 30.01.1995 |
| 10 | 0.420 | 0.858 | 15.11.1983 | 204 | 417 | 300 | 06.02.1980 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1960/2012 53 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 112 | 133 | | | |
| 364 | 86.3 | 112 | 202 | 111 | 40.8 |
| 363 | 83.7 | 91.4 | 192 | 90.1 | 38.8 |
| 362 | 79.6 | 86.3 | 143 | 79.4 | 34.6 |
| 361 | 79.6 | 83.7 | 132 | 72.8 | 34.6 |
| 360 | 75.9 | 79.6 | 116 | 67.4 | 30.0 |
| 359 | 73.6 | 79.6 | 109 | 62.3 | 29.7 |
| 358 | 72.6 | 75.9 | 96.6 | 58.8 | 29.5 |
| 357 | 70.9 | 72.8 | 93.1 | 55.8 | 27.8 |
| 356 | 70.5 | 72.6 | 91.4 | 53.4 | 25.0 |
| 350 | 55.3 | 63.5 | 63.5 | 42.4 | 17.6 |
| 340 | 41.1 | 41.1 | 51.7 | 32.5 | 13.8 |
| 330 | 31.7 | 30.0 | 43.4 | 26.3 | 12.0 |
| 320 | 24.9 | 19.3 | 37.4 | 22.3 | 10.4 |
| 300 | 14.0 | 11.7 | 27.2 | 16.7 | 7.35 |
| 270 | 8.60 | 8.52 | 19.3 | 11.6 | 5.10 |
| 240 | 6.64 | 7.44 | 15.4 | 8.47 | 3.91 |
| 210 | 5.08 | 6.07 | 11.9 | 6.48 | 2.60 |
| 183 | 4.26 | 4.98 | 10.7 | 5.23 | 1.78 |
| 150 | 3.51 | 4.07 | 8.79 | 4.07 | 1.39 |
| 130 | 3.22 | 3.71 | 7.71 | 3.49 | 1.26 |
| 120 | 3.02 | 3.52 | 7.00 | 3.24 | 1.13 |
| 110 | 2.86 | 3.32 | 6.48 | 2.94 | 1.13 |
| 100 | 2.73 | 3.23 | 6.07 | 2.71 | 0.950 |
| 90 | 2.61 | 3.04 | 5.64 | 2.46 | 0.800 |
| 80 | 2.42 | 2.88 | 5.11 | 2.25 | 0.750 |
| 70 | 2.21 | 2.73 | 4.65 | 2.05 | 0.750 |
| 60 | 1.99 | 2.53 | 4.30 | 1.89 | 0.700 |
| 50 | 1.80 | 2.22 | 3.99 | 1.68 | 0.600 |
| 40 | 1.63 | 1.88 | 3.80 | 1.48 | 0.550 |
| 30 | 1.53 | 1.53 | 3.46 | 1.27 | 0.400 |
| 25 | 1.43 | 1.43 | 3.36 | 1.16 | 0.360 |
| 20 | 1.22 | 1.22 | 3.16 | 1.03 | 0.280 |
| 15 | 1.13 | 1.13 | 2.96 | 0.901 | 0.240 |
| 10 | 1.01 | 1.01 | 2.75 | 0.801 | 0.240 |
| 9 | 0.988 | 0.988 | 2.66 | 0.738 | 0.200 |
| 8 | 0.943 | 0.943 | 2.56 | 0.701 | 0.200 |
| 7 | 0.938 | 0.938 | 2.56 | 0.701 | 0.200 |
| 6 | 0.914 | 0.914 | 2.56 | 0.669 | 0.200 |
| 5 | 0.891 | 0.891 | 2.36 | 0.602 | 0.200 |
| 4 | 0.880 | 0.880 | 2.36 | 0.602 | 0.200 |
| 3 | 0.875 | 0.875 | 2.24 | 0.538 | 0.200 |
| 2 | 0.863 | 0.863 | 2.24 | 0.498 | 0.180 |
| 1 | 0.851 | 0.851 | 2.24 | 0.370 | 0.180 |
| 0 | 0.828 | 0.828 | 2.10 | 0.160 | 0.160 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 1202 km²
PNP : NN + 245.87 m
Lage: 74.5 km oberhalb der Mündung, links

# Q

m³/s

Pegel : Schmittlotheim Nr. 42800309
Gewässer : Eder
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.88 | 2.50 | 56.8 | R 18.6 | 24.7 | 6.35 | 9.10 | 5.68 | 16.1 | 6.95 | 3.07 | K 2.18 | 5.92 | 8.50 |
| 2. | 4.65 | 2.95 | 109 | R 14.8 | 25.3 | 6.20 | 8.74 | 5.63 | 14.3 | 6.28 | 2.80 | K 2.03 | 6.08 | 8.37 |
| 3. | 4.52 | 3.75 | 123 | R 12.2 | 23.9 | 6.10 | 9.44 | 5.08 | 12.5 | 5.73 | K 2.73 | K 1.92 | 8.81 | 8.44 |
| 4. | 4.37 | 6.15 | 106 | R 11.1 | 22.0 | 6.39 | 8.33 | 5.46 | 10.4 | 5.30 | K 2.72 | K 4.23 | 14.4 | 8.43 |
| 5. | 4.17 | 10.8 | 140 | R 9.90 | 20.6 | 6.51 | 8.67 | 5.85 | 8.42 | 5.11 | K 2.70 | K 13.8 | 13.6 | 9.63 |
| 6. | 4.00 | 16.0 | 204 | R 9.31 | 19.0 | 6.29 | 9.44 | 5.75 | K 7.42 | 5.85 | K 2.50 | K 15.6 | 13.0 | 9.12 |
| 7. | 3.83 | 18.4 | 147 | D 8.65 | 17.2 | 6.00 | 9.02 | 5.73 | K 6.93 | 6.39 | K 2.32 | K 16.4 | 13.0 | 8.35 |
| 8. | 3.69 | 27.7 | 130 | D 7.60 | 17.1 | 5.83 | 8.41 | 5.51 | K 6.86 | 4.80 | K 2.34 | K 13.7 | 14.4 | 7.81 |
| 9. | 3.59 | 49.8 | 126 | D 8.18 | 16.2 | 5.69 | 8.04 | 5.13 | K 7.02 | 4.40 | K 2.38 | K 11.6 | 14.2 | 8.07 |
| 10. | 3.54 | 69.4 | 101 | D 9.74 | 14.5 | 6.20 | 10.7 | 4.70 | K 6.59 | 4.23 | K 2.27 | K 9.90 | 13.7 | 11.1 |
| 11. | 3.40 | 49.3 | 77.3 | D 9.05 | 13.8 | 6.84 | 9.58 | 4.76 | K 6.55 | 4.06 | K 2.16 | K 8.68 | 14.3 | 9.83 |
| 12. | 3.28 | 38.9 | 61.4 | D 8.20 | 13.2 | 6.77 | 8.67 | 5.50 | K 6.68 | 3.88 | K 2.24 | K 7.93 | 12.9 | 10.8 |
| 13. | 3.26 | 44.4 | 55.0 | D 9.06 | 12.8 | 8.08 | 8.24 | 5.19 | K 7.53 | 3.61 | K 2.29 | K 7.63 | 11.6 | 13.9 |
| 14. | 3.12 | 69.8 | 45.3 | D 9.84 | 12.4 | 7.42 | 7.81 | 4.64 | 18.3 | 3.31 | K 2.05 | K 7.27 | 10.9 | 15.7 |
| 15. | 3.16 | 76.4 | 38.5 | D 10.0 | 12.0 | 7.24 | 7.50 | 4.51 | 25.2 | 3.04 | K 1.90 | K 10.4 | 10.4 | 31.6 |
| 16. | 3.12 | 85.9 | 32.1 | D 9.74 | 11.4 | 7.09 | 7.88 | 4.92 | 26.9 | 3.73 | K 1.81 | K 11.0 | 9.76 | 72.3 |
| 17. | 3.04 | 124 | 26.8 | D 12.2 | 11.0 | 6.85 | 7.96 | 6.25 | 30.7 | 4.72 | K 1.71 | K 9.26 | 9.18 | 99.8 |
| 18. | 3.00 | 91.1 | 22.7 | D 14.9 | 10.7 | 6.65 | 7.36 | 5.38 | 42.3 | 3.39 | K 1.60 | K 8.74 | 8.78 | 104 |
| 19. | 2.98 | 62.0 | 27.1 | D 22.8 | 10.5 | 6.57 | 7.59 | 4.55 | 40.3 | 2.94 | K 1.52 | K 8.31 | 8.31 | 88.6 |
| 20. | 2.96 | 46.3 | 54.6 | R 19.8 | 9.54 | 6.55 | 7.97 | 7.73 | 32.6 | 2.76 | K 1.54 | K 7.85 | 7.76 | 67.3 |
| 21. | 2.92 | 44.7 | 58.8 | R 14.1 | 8.79 | 6.57 | 7.17 | 9.49 | 28.1 | 2.64 | K 1.56 | K 7.48 | 7.15 | 53.3 |
| 22. | 2.83 | 45.7 | 106 | R 12.6 | 8.44 | 6.63 | 6.55 | 9.13 | 22.0 | 2.58 | K 1.56 | K 7.14 | 6.64 | 44.4 |
| 23. | 2.78 | 63.5 | 135 | R 12.5 | 8.24 | 6.49 | 6.60 | 8.70 | 18.1 | 2.52 | K 1.54 | K 6.73 | 6.26 | 80.9 |
| 24. | 2.75 | 102 | 110 | R 16.3 | 7.95 | 6.89 | 7.96 | 7.82 | 15.4 | 2.52 | K 1.57 | K 6.60 | 6.54 | 196 |
| 25. | 2.68 | 109 | 78.8 | 23.4 | 7.51 | 7.32 | 6.70 | 8.44 | 13.5 | 3.03 | K 2.05 | K 6.41 | 6.74 | 162 |
| 26. | 2.62 | 82.6 | 58.4 | 24.8 | 7.14 | 9.07 | 5.89 | 8.29 | 12.1 | 3.27 | K 2.21 | K 6.20 | 6.34 | 110 |
| 27. | 2.60 | 67.4 | 46.4 | 24.1 | 6.80 | 11.0 | 5.47 | 7.44 | 11.1 | 3.28 | K 2.14 | K 6.18 | 8.65 | 108 |
| 28. | 2.57 | 57.2 | 37.6 | 22.6 | 6.57 | 10.0 | 5.16 | 7.16 | 12.4 | 3.58 | K 2.83 | K 5.99 | 8.68 | 108 |
| 29. | 2.54 | 47.0 | 31.5 | 22.9 | 6.38 | 9.41 | 4.92 | 9.04 | 10.7 | 3.10 | K 2.95 | K 5.68 | 8.46 | 84.2 |
| 30. | 2.52 | 56.2 | 27.0 | | 6.30 | 9.01 | 4.67 | 19.3 | 9.27 | 2.88 | K 2.42 | K 5.65 | 8.57 | 64.8 |
| 31. | | 53.3 | 22.1 | | 6.74 | | 4.46 | | 8.05 | 2.79 | | K 6.05 | | 53.4 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 8. | 30. | 9. | 31. | 15. | 11. | 23.+ | 19. | 3. | 1. | 8. |
| NQ | 2.52 | 2.50 | 22.1 | 7.60 | 6.30 | 5.69 | 4.46 | 4.51 | 6.55 | 2.52 | 1.52 | 1.92 | 5.92 | 7.81 |
| MQ | 3.31 | 52.4 | 77.3 | 14.1 | 12.9 | 7.13 | 7.61 | 6.76 | 15.9 | 3.96 | 2.18 | 8.02 | 9.83 | 53.8 |
| HQ | 4.94 | 136 | 214 | 32.9 | 25.4 | 159 | 11.2 | 22.2 | 43.2 | 7.34 | 3.08 | 18.2 | 15.6 | 223 |
| Tag | 1. | 17. | 6. | 19. | 2. | 17. | 10. | 30. | 18.+ | 1. | 28.+ | 6. | 4. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 117 | 172 | 29 | 29 | 15 | 17 | 15 | 35 | 9 | 5 | 18 | 21 | 120 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1959 | 1947 | 1947 | 1942 | 2011 | 2011 | 1964 | 1964 + | 1973 | 1947 | 1959 | 1983 | 1959 |
| NQ | 0.600 | 1.52 | 0.500 | 1.00 | 1.70 | 2.81 | 1.49 | 0.300 | 0.500 | 0.160 | 0.140 | 0.510 | 0.600 | 1.52 |
| MNQ | 6.46 | 9.01 | 9.60 | 10.1 | 10.3 | 8.55 | 4.95 | 3.76 | 3.29 | 3.02 | 3.14 | 4.14 | 6.49 | 9.10 |
| MQ | 21.7 | 33.3 | 35.5 | 32.2 | 32.1 | 21.7 | 10.6 | 8.21 | 8.17 | 6.97 | 7.51 | 11.6 | 20.9 | 33.9 |
| MHQ | 73.6 | 126 | 152 | 121 | 112 | 57.2 | 28.2 | 24.4 | 25.7 | 23.0 | 24.3 | 36.9 | 67.5 | 126 |
| HQ | 450 | 487 | 518 | 750 | 450 | 200 | 255 | 178 | 170 | 192 | 190 | 429 | 258 | 487 |
| Jahr | 1940 | 1947 | 1948 | 1946 | 1947 | 2006 | 1984 | 1984 | 1980 | 2007 | 1957 | 1998 | 1984 | 1947 |

72 Jahre

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 47 | 74 | 79 | 67 | 72 | 47 | 24 | 18 | 18 | 16 | 16 | 26 | 45 | 76 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 1.52 | am 19.09.2012 | 2.50 | 1.52 | 1.52 | am 19.09.2012 |
| MQ m³/s | 17.8 | | 28.2 | 7.44 | 18.4 | |
| HQ m³/s | 214 | am 06.01.2012 bei W = 276 cm | 214 | 43.2 | 223 | am 24.12.2012 bei W = 276 cm |
| Nq l/(s km²) | 1.26 | | 2.08 | 1.26 | 1.26 | |
| Mq l/(s km²) | 14.8 | | 23.5 | 6.19 | 15.3 | |
| Hq l/(s km²) | 178 | | 178 | 35.9 | 186 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 467 | | 369 | 98 | 485 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 0.140 | am 13.09.1947 | 0.500 | 0.140 | 0.140 | am 13.09.1947 |
| MNQ m³/s | 1.76 | | 3.93 | 1.89 | 1.80 | |
| MQ m³/s | 19.1 | | 29.5 | 8.85 | 19.1 | |
| MHQ m³/s | 240 | | 235 | 65.8 | 240 | |
| HQ m³/s | 750 | am 09.02.1946 bei W = 411 cm | 750 | 429 | 750 | am 09.02.1946 bei W = 411 cm |
| $HQ_1$ m³/s | 173 | | 170 | 35.0 | 173 | |
| $HQ_5$ m³/s | 332 | | 326 | 100 | 332 | |
| MNq l/(s km²) | 1.46 | | 3.27 | 1.57 | 1.50 | |
| Mq l/(s km²) | 15.9 | | 24.5 | 7.36 | 15.9 | |
| MHq l/(s km²) | 200 | | 196 | 54.7 | 200 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 501 | | 386 | 117 | 502 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.140 | 0.116 | 13.09.1947 | 750 | 624 | 411 | 09.02.1946 |
| 2 | 0.160 | 0.133 | 27.08.1973 | 507 | 422 | 375 | 14.01.1948 |
| 3 | 0.300 | 0.250 | 28.06.1964 | 475 | 395 | 369 | 28.12.1947 |
| 4 | 0.308 | 0.256 | 27.08.2003 | 474 | 394 | 364 | 23.01.1995 |
| 5 | 0.400 | 0.333 | 23.08.1976 | 450 | 374 | 378 | 05.11.1940 |
| 6 | 0.400 | 0.333 | 31.08.1964 | 429 | 357 | 355 | 29.10.1998 |
| 7 | 0.490 | 0.408 | 04.09.1959 | 400 | 333 | 344 | 19.12.1965 |
| 8 | 0.500 | 0.416 | 20.07.1964 | 385 | 320 | 348 | 28.11.1939 |
| 9 | 0.500 | 0.416 | 14.09.1949 | 375 | 312 | 346 | 20.01.1986 |
| 10 | 0.500 | 0.416 | 09.01.1947 | 365 | 304 | 338 | 15.01.1968 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 72 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 204 | 204 | | | |
| 364 | 147 | 196 | 610 | 195 | 67.0 |
| 363 | 140 | 162 | 362 | 160 | 60.5 |
| 362 | 135 | 147 | 312 | 143 | 58.5 |
| 361 | 130 | 140 | 300 | 130 | 52.5 |
| 360 | 126 | 135 | 229 | 121 | 49.7 |
| 359 | 124 | 130 | 215 | 111 | 48.3 |
| 358 | 123 | 126 | 176 | 105 | 45.6 |
| 357 | 110 | 123 | 174 | 98.4 | 44.2 |
| 356 | 110 | 123 | 151 | 94.0 | 41.5 |
| 350 | 91.1 | 106 | 117 | 75.1 | 32.8 |
| 340 | 62.0 | 67.3 | 91.1 | 57.4 | 24.2 |
| 330 | 49.8 | 46.4 | 81.2 | 47.3 | 20.4 |
| 320 | 40.3 | 31.5 | 67.6 | 40.4 | 17.1 |
| 300 | 23.4 | 22.0 | 54.1 | 30.1 | 12.2 |
| 270 | 14.1 | 13.7 | 38.5 | 20.8 | 8.80 |
| 240 | 10.0 | 10.7 | 31.5 | 15.3 | 6.24 |
| 210 | 8.65 | 9.05 | 21.8 | 11.8 | 4.12 |
| 183 | 7.59 | 8.33 | 17.3 | 9.56 | 2.39 |
| 150 | 6.60 | 7.42 | 13.6 | 7.41 | 1.78 |
| 130 | 6.25 | 6.77 | 12.3 | 6.31 | 1.52 |
| 120 | 5.85 | 6.59 | 11.4 | 5.85 | 1.51 |
| 110 | 5.51 | 6.41 | 11.1 | 5.41 | 1.29 |
| 100 | 5.08 | 6.25 | 10.6 | 5.01 | 1.09 |
| 90 | 4.64 | 5.92 | 10.1 | 4.55 | 1.00 |
| 80 | 4.06 | 5.68 | 9.60 | 4.20 | 0.820 |
| 70 | 3.54 | 5.16 | 8.90 | 3.81 | 0.820 |
| 60 | 3.12 | 4.67 | 8.40 | 3.44 | 0.780 |
| 50 | 2.95 | 3.73 | 8.30 | 3.01 | 0.710 |
| 40 | 2.75 | 3.03 | 7.90 | 2.68 | 0.710 |
| 30 | 2.54 | 2.70 | 7.50 | 2.29 | 0.630 |
| 25 | 2.50 | 2.50 | 7.10 | 2.09 | 0.630 |
| 20 | 2.29 | 2.29 | 6.80 | 1.88 | 0.440 |
| 15 | 2.16 | 2.16 | 6.20 | 1.66 | 0.400 |
| 10 | 1.92 | 1.92 | 6.20 | 1.41 | 0.260 |
| 9 | 1.90 | 1.90 | 6.20 | 1.31 | 0.260 |
| 8 | 1.81 | 1.81 | 6.00 | 1.27 | 0.240 |
| 7 | 1.71 | 1.71 | 6.00 | 1.11 | 0.240 |
| 6 | 1.60 | 1.60 | 6.00 | 1.01 | 0.240 |
| 5 | 1.57 | 1.57 | 6.00 | 0.910 | 0.240 |
| 4 | 1.57 | 1.57 | 6.00 | 0.814 | 0.200 |
| 3 | 1.56 | 1.56 | 5.80 | 0.720 | 0.200 |
| 2 | 1.56 | 1.56 | 5.80 | 0.690 | 0.200 |
| 1 | 1.54 | 1.54 | 5.80 | 0.590 | 0.180 |
| 0 | 1.52 | 1.52 | 5.60 | 0.140 | 0.140 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1941/2012
Extremwerte ab 1931
Verkrautung vom 6.7. - 13.7. und 3.9. - 31.10
11 Tage Randeis, 13 Tage Eisdecke

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 1452 km²
PNP : NN + 193.19 m
Lage: 44.0 km oberhalb der Mündung, rechts

# Q
m³/s

Pegel : Affoldern* Nr. 42800502
Gewässer : Eder
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.91 | 6.75 | 83.9 | R 18.4 | 6.77 | 6.97 | 12.9 | 21.3 | K 12.0 | 7.13 | 21.6 | 27.1 | 13.9 | 6.85 |
| 2. | 8.60 | 6.90 | 85.2 | R 16.8 | 6.84 | 6.90 | 14.1 | 10.7 | K 6.86 | 13.9 | 22.5 | 30.0 | 13.1 | 6.82 |
| 3. | 20.9 | 6.93 | 88.5 | R 14.9 | 9.10 | 6.93 | 13.5 | 17.6 | 8.89 | 14.8 | 24.1 | 28.3 | 10.0 | 8.08 |
| 4. | 19.3 | 6.84 | 95.0 | R 14.9 | 10.8 | 6.93 | 13.1 | 16.7 | 12.1 | 11.0 | 29.0 | 28.2 | 6.85 | 8.38 |
| 5. | 6.76 | 6.84 | 94.7 | R 14.9 | 10.8 | 6.92 | 13.1 | K 11.7 | 12.5 | 18.1 | 33.6 | 24.0 | 6.75 | 7.38 |
| 6. | 6.82 | 6.89 | 94.1 | R 14.9 | 10.8 | 6.92 | 12.7 | K 8.16 | 8.11 | 31.7 | 33.9 | 20.8 | 6.77 | 6.78 |
| 7. | 6.80 | 6.85 | 93.6 | R 14.9 | 9.92 | 6.94 | 8.45 | K 9.05 | 6.89 | 20.3 | 34.6 | 18.0 | 6.84 | 6.77 |
| 8. | 6.83 | 6.84 | 93.7 | R 14.9 | 7.68 | 6.94 | 6.85 | K 6.84 | 7.55 | 12.8 | 38.8 | 11.5 | 6.80 | 9.02 |
| 9. | 6.87 | 6.94 | 96.3 | R 15.0 | 6.78 | 9.18 | 6.85 | K 11.2 | 9.92 | 14.4 | 46.9 | 15.3 | 6.79 | 16.8 |
| 10. | 6.89 | 6.90 | 101 | R 14.9 | 6.84 | 8.29 | 6.89 | K 16.8 | 12.9 | 15.3 | 47.6 | 22.1 | 6.78 | 22.7 |
| 11. | 6.89 | 6.87 | 106 | R 14.9 | 6.80 | 6.89 | K 7.63 | K 19.5 | 12.6 | 15.9 | 36.8 | 22.9 | 6.77 | 23.8 |
| 12. | 6.82 | 6.83 | 105 | R 14.9 | 6.82 | 6.88 | K 8.02 | K 19.9 | 9.93 | 17.6 | 28.0 | 23.7 | 6.75 | 23.7 |
| 13. | 6.79 | 6.95 | 101 | R 13.7 | 6.82 | 6.89 | K 7.99 | K 18.8 | 7.54 | 19.0 | 17.6 | 23.4 | 6.78 | 25.3 |
| 14. | 6.81 | 6.88 | 78.7 | R 15.9 | 6.85 | 6.96 | K 9.30 | K 14.7 | 6.90 | 20.1 | 16.3 | 20.9 | 6.90 | 32.9 |
| 15. | 6.84 | 6.83 | 59.2 | 18.0 | 6.85 | 6.92 | K 10.4 | K 11.3 | 6.88 | 21.2 | 22.8 | 18.5 | 10.0 | 37.0 |
| 16. | 6.84 | 6.88 | 53.3 | 18.0 | 6.79 | 6.89 | K 10.9 | K 14.2 | 6.87 | 22.2 | 25.5 | 14.2 | 11.6 | 11.5 |
| 17. | 6.80 | 6.73 | 28.7 | 20.5 | 6.77 | 6.90 | K 11.0 | K 14.8 | 6.85 | 20.1 | 25.6 | 16.1 | 12.0 | 8.73 |
| 18. | 6.80 | 6.76 | 30.6 | 28.7 | 6.81 | 7.48 | K 12.0 | K 14.8 | 6.86 | 18.7 | 25.6 | 20.9 | 13.7 | 8.91 |
| 19. | 6.79 | 7.59 | 54.7 | 29.1 | 6.76 | 7.39 | K 12.9 | K 17.2 | 6.90 | 22.7 | 25.6 | 22.3 | 13.2 | 10.9 |
| 20. | 6.86 | 10.8 | 53.7 | 37.3 | 6.82 | 7.02 | K 12.9 | K 12.3 | 6.87 | 24.5 | 26.3 | 23.5 | 12.1 | 10.8 |
| 21. | 6.86 | 10.8 | 51.1 | 24.0 | 6.86 | 8.37 | K 13.0 | K 6.90 | 6.83 | 24.7 | 27.2 | 24.6 | 13.2 | 10.8 |
| 22. | 6.83 | 10.7 | 54.2 | 15.7 | 6.90 | 9.08 | K 13.1 | K 6.87 | 6.87 | 25.0 | 27.7 | 25.2 | 13.9 | 14.5 |
| 23. | 6.85 | 10.8 | 54.7 | 11.0 | 6.91 | 7.62 | K 15.8 | K 6.93 | 6.89 | 25.1 | 27.8 | 26.6 | 14.1 | 18.0 |
| 24. | 6.86 | 10.8 | 54.6 | 8.95 | 6.87 | 6.89 | K 20.0 | K 6.96 | 7.27 | 25.3 | 27.2 | 27.5 | 14.6 | 18.0 |
| 25. | 6.75 | 10.9 | 53.5 | 6.85 | 6.85 | 6.89 | K 22.5 | K 6.94 | 9.71 | 16.4 | 26.1 | 28.0 | 15.1 | 18.0 |
| 26. | 6.55 | 10.7 | 51.8 | 6.88 | 6.86 | 6.90 | K 23.8 | K 6.99 | 14.2 | 14.4 | 26.5 | 28.1 | 15.1 | 21.7 |
| 27. | 6.52 | 12.8 | 23.0 | 6.86 | 6.85 | 7.47 | K 25.7 | K 8.40 | 17.3 | 19.1 | 24.1 | 27.6 | 15.1 | 26.8 |
| 28. | 6.20 | 30.3 | 18.5 | 6.80 | 6.88 | 7.96 | K 26.1 | K 11.8 | 18.3 | 20.7 | 20.3 | 21.8 | 13.9 | 26.7 |
| 29. | 6.58 | 39.6 | 18.5 | 6.78 | 6.89 | 8.52 | K 25.8 | K 13.2 | 16.5 | 21.0 | 20.7 | 19.2 | 11.9 | 26.7 |
| 30. | 6.36 | 61.3 | 18.5 | | 6.92 | 10.1 | K 25.8 | K 14.6 | 13.6 | 21.9 | 24.4 | 19.2 | 8.68 | 26.9 |
| 31. | | 85.2 | 18.5 | | 6.91 | | K 24.9 | | 9.03 | 21.8 | | 18.2 | | 26.8 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 28. | 17. | 28.+ | 29. | 19. | 12. | 8.+ | 8. | 21. | 1. | 14. | 8. | 5.+ | 7. |
| NQ | 6.20 | 6.73 | 18.5 | 6.78 | 6.76 | 6.88 | 6.85 | 6.84 | 6.83 | 7.13 | 16.3 | 11.5 | 6.75 | 6.77 |
| MQ | 7.71 | 14.1 | 65.0 | 15.8 | 7.42 | 7.43 | 14.5 | 12.6 | 9.76 | 19.3 | 27.8 | 22.5 | 10.7 | 17.0 |
| HQ | 22.3 | 109 | 113 | 38.6 | 11.2 | 11.1 | 27.2 | 24.7 | 18.5 | 38.2 | 49.9 | 30.7 | 15.7 | 39.3 |
| Tag | 3. | 30. | 12.+ | 20. | 6. | 9.+ | 27. | 1. | 27. | 5.+ | 9. | 2. | 18. | 15. |
| $h_N$ mm / $h_A$ mm | 14 | 26 | 120 | 27 | 14 | 13 | 27 | 22 | 18 | 36 | 50 | 42 | 19 | 31 |

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1959 | 1954 | 1944 | 1944 | 1964 | 1964 | 1944 | 1944 + | 1964 | 1959 | 1949 | 1949 | 1959 |
| NQ | 1.20 | 1.39 | 2.70 | 1.30 | 1.00 | 3.10 | 3.00 | 3.70 | 4.00 | 3.30 | 1.12 | 0.700 | 1.20 | 1.39 |
| MNQ | 7.97 | 9.83 | 10.3 | 11.3 | 9.87 | 8.54 | 6.78 | 7.24 | 9.09 | 10.4 | 11.0 | 8.06 | 7.95 | 9.82 |
| MQ | 19.2 | 23.8 | 29.0 | 28.9 | 24.7 | 20.4 | 14.5 | 14.6 | 17.3 | 19.1 | 20.3 | 17.7 | 18.7 | 23.8 |
| MHQ | 48.6 | 57.6 | 70.2 | 77.3 | 68.3 | 51.7 | 88.7 | 38.3 | 39.9 | 39.3 | 42.8 | 46.5 | 46.7 | 57.8 |
| HQ | 152 | 327 | 360 | 770 | 339 | 127 | 3600 | 208 | 205 | 102 | 90.2 | 481 | 131 | 327 |
| Jahr | 1940 | 1965 | 1948 | 1946 | 1981 | 1956 + | 1943 | 1984 | 1956 | 2007 | 1992 | 1960 | 1998 | 1965 |

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm / $Mh_A$ mm | 34 | 44 | 54 | 50 | 46 | 36 | 27 | 26 | 32 | 35 | 36 | 33 | 33 | 44 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 6.20 | am 28.11.2011 | 6.20 | 6.83 | 6.75 | am 05.11.2012 |
| MQ m³/s | 18.7 | | 19.7 | 17.7 | 19.2 | |
| HQ m³/s | 113 | am 13.01.2012 bei W = 243 cm | 113 | 49.9 | 113 | am 13.01.2012 bei W = 243 cm |
| Nq l/(s km²) | 4.27 | | 4.27 | 4.70 | 4.65 | |
| Mq l/(s km²) | 12.9 | | 13.6 | 12.2 | 13.2 | |
| Hq l/(s km²) | 77.8 | | 77.8 | 34.4 | 77.8 | |
| $h_N$ mm / $h_A$ mm | 406 | | 214 | 194 | 418 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 0.700 | am 14.10.1949 | 1.00 | 0.700 | 0.700 | am 14.10.1949 |
| MNQ m³/s | 4.24 | | 5.29 | 5.02 | 4.49 | |
| MQ m³/s | 20.8 | | 24.3 | 17.3 | 20.7 | |
| MHQ m³/s | 190 | | 128 | 125 | 191 | |
| HQ m³/s | 3600 | am 17.05.1943 | 770 | 3600 | 3600 | am 17.05.1943 |
| $HQ_1$ m³/s | 102 | | 94.0 | 53.2 | 102 | |
| $HQ_5$ m³/s | 172 | | 162 | 90.0 | 172 | |
| MNq l/(s km²) | 2.92 | | 3.64 | 3.46 | 3.09 | |
| Mq l/(s km²) | 14.3 | | 16.7 | 11.9 | 14.3 | |
| MHq l/(s km²) | 131 | | 88.2 | 86.1 | 132 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 452 | | 263 | 189 | 451 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.700 | 0.482 | 14.10.1949 | 3600*) | 2480 | | 17.05.1943 |
| 2 | 0.880 | 0.606 | 19.10.1959 | 770 | 530 | 454 | 09.02.1946 |
| 3 | 1.00 | 0.689 | 07.03.1944 | 360 | 248 | 287 | 15.01.1948 |
| 4 | 1.40 | 0.964 | 15.03.1950 | 339 | 233 | 396 | 11.03.1981 |
| 5 | 2.09 | 1.44 | 23.09.2003 | 327 | 225 | 393 | 20.12.1965 |
| 6 | 2.10 | 1.45 | 13.11.1983 | 299 | 206 | 362 | 31.05.1984 |
| 7 | 2.20 | 1.52 | 15.11.1976 | 295 | 203 | 363 | 30.01.1995 |
| 8 | 2.28 | 1.57 | 15.09.1991 | 218 | 150 | 318 | 07.02.1980 |
| 9 | 2.50 | 1.72 | 14.02.1947 | 205 | 141 | 302 | 07.01.1994 |
| 10 | 2.50 | 1.72 | 21.10.1943 | 205 | 141 | 338 | 20.07.1956 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 106 | 106 | | | |
| 364 | 105 | 105 | 1140 | 126 | 44.3 |
| 363 | 105 | 105 | 575 | 111 | 44.3 |
| 362 | 101 | 101 | 208 | 107 | 40.1 |
| 361 | 96.3 | 96.3 | 200 | 99.3 | 37.8 |
| 360 | 95.0 | 95.0 | 180 | 93.6 | 36.0 |
| 359 | 94.7 | 94.7 | 167 | 88.9 | 35.1 |
| 358 | 94.1 | 94.1 | 147 | 85.1 | 33.0 |
| 357 | 93.7 | 93.7 | 146 | 81.8 | 31.7 |
| 356 | 93.6 | 93.6 | 146 | 79.1 | 31.7 |
| 350 | 61.3 | 59.2 | 111 | 65.7 | 25.9 |
| 340 | 51.1 | 46.9 | 85.0 | 49.5 | 18.7 |
| 330 | 31.7 | 30.6 | 79.3 | 41.8 | 18.1 |
| 320 | 28.1 | 28.0 | 70.0 | 37.9 | 17.2 |
| 300 | 25.6 | 25.7 | 52.9 | 31.1 | 14.1 |
| 270 | 21.8 | 22.7 | 42.9 | 25.0 | 6.90 |
| 240 | 18.5 | 18.8 | 36.4 | 20.4 | 5.40 |
| 210 | 15.0 | 16.1 | 30.4 | 17.4 | 4.70 |
| 183 | 13.0 | 14.4 | 27.2 | 14.4 | 4.50 |
| 150 | 10.1 | 12.1 | 21.0 | 11.9 | 4.20 |
| 130 | 8.11 | 10.8 | 19.8 | 10.8 | 4.10 |
| 120 | 7.48 | 9.30 | 18.6 | 10.1 | 4.00 |
| 110 | 6.95 | 8.73 | 18.0 | 9.31 | 2.72 |
| 100 | 6.93 | 8.08 | 16.0 | 8.42 | 2.39 |
| 90 | 6.91 | 7.47 | 14.5 | 7.93 | 1.74 |
| 80 | 6.90 | 6.96 | 14.1 | 7.41 | 1.61 |
| 70 | 6.89 | 6.92 | 13.8 | 7.01 | 1.51 |
| 60 | 6.87 | 6.90 | 13.0 | 6.80 | 1.41 |
| 50 | 6.86 | 6.89 | 12.8 | 6.51 | 1.41 |
| 40 | 6.85 | 6.87 | 12.5 | 6.21 | 1.41 |
| 30 | 6.83 | 6.86 | 12.1 | 5.81 | 1.38 |
| 25 | 6.82 | 6.85 | 11.6 | 5.51 | 1.38 |
| 20 | 6.81 | 6.83 | 11.3 | 5.01 | 1.38 |
| 15 | 6.79 | 6.80 | 11.3 | 4.31 | 1.29 |
| 10 | 6.77 | 6.79 | 11.1 | 3.98 | 1.29 |
| 9 | 6.77 | 6.79 | 11.1 | 3.94 | 1.29 |
| 8 | 6.76 | 6.78 | 11.0 | 3.71 | 1.29 |
| 7 | 6.76 | 6.78 | 10.9 | 3.54 | 1.21 |
| 6 | 6.75 | 6.78 | 10.8 | 3.36 | 1.12 |
| 5 | 6.73 | 6.78 | 9.70 | 3.18 | 1.09 |
| 4 | 6.58 | 6.78 | 9.70 | 2.98 | 1.09 |
| 3 | 6.55 | 6.77 | 9.00 | 2.44 | 1.08 |
| 2 | 6.52 | 6.76 | 8.00 | 2.13 | 1.07 |
| 1 | 6.36 | 6.76 | 8.00 | 1.49 | 0.800 |
| 0 | 6.20 | 6.75 | 6.80 | 0.700 | 0.700 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1941/2012 Extremwerte ab 1941
* Abfluss aus der Edertalsperre
*) durch Bruch der Edertalsperre (W=1991 cm)
Verkrautung vom 11.05. - 31.05. und 5.06. - 2.07.2012
an 14 Tagen Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 1806 km²
PNP : NHN + 164.64 m
Lage: 25.5 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Fritzlar Nr. 42870057
Gewässer : Eder
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K 7.84 | K 9.51 | K 90.6 | 19.2 | 7.73 | K 6.87 | K 12.7 | K 24.9 | K 14.7 | K 6.48 | K 23.1 | K 25.2 | K 13.8 | K 6.89 |
| 2. | K 8.10 | K 9.55 | K 93.6 | 18.0 | 7.72 | K 6.83 | K 14.6 | K 13.0 | K 7.80 | K 13.0 | K 23.6 | K 29.2 | K 13.0 | K 7.01 |
| 3. | K 22.8 | K 9.61 | K 96.5 | 15.8 | 9.53 | K 6.80 | K 14.2 | K 16.9 | K 8.75 | K 16.9 | K 25.4 | K 28.5 | K 11.9 | K 7.70 |
| 4. | K 24.6 | K 9.59 | K 105 | 16.0 | 11.8 | K 6.90 | K 13.6 | K 18.3 | K 12.4 | K 13.0 | K 29.5 | K 29.3 | K 6.96 | K 9.12 |
| 5. | K 9.54 | K 10.7 | K 112 | 16.0 | 11.9 | K 6.81 | K 14.0 | K 13.2 | K 14.7 | K 14.1 | K 36.2 | K 25.7 | K 6.71 | K 8.11 |
| 6. | K 8.38 | K 10.5 | K 113 | 16.6 | 11.6 | K 6.82 | K 13.9 | K 9.31 | K 9.37 | K 38.0 | K 35.9 | K 21.3 | K 6.50 | K 6.90 |
| 7. | K 8.34 | K 10.2 | K 109 | 16.6 | 11.2 | K 6.70 | K 10.1 | K 8.94 | K 7.00 | K 24.8 | K 36.2 | K 17.4 | K 6.25 | K 6.94 |
| 8. | K 8.36 | K 9.77 | K 107 | 15.5 | 9.24 | K 6.67 | K 7.49 | K 7.02 | K 7.66 | K 13.4 | K 39.4 | K 12.9 | K 6.24 | K 8.22 |
| 9. | K 8.35 | K 10.8 | K 108 | 15.6 | 7.80 | K 8.26 | K 7.39 | K 9.59 | K 9.92 | K 14.6 | K 51.7 | K 10.8 | K 6.19 | K 15.9 |
| 10. | K 8.34 | K 10.4 | K 113 | 16.0 | 7.57 | K 9.12 | K 7.69 | K 16.1 | K 14.0 | K 15.9 | K 52.3 | K 21.0 | K 6.20 | K 25.5 |
| 11. | K 8.32 | K 9.91 | K 119 | 16.2 | 7.35 | K 6.90 | K 8.13 | K 19.3 | K 15.0 | K 16.3 | K 42.8 | K 22.7 | K 6.39 | K 25.9 |
| 12. | K 8.31 | K 9.55 | K 118 | 15.5 | 7.26 | K 6.77 | K 8.64 | K 20.2 | K 12.3 | K 18.1 | K 29.5 | K 23.5 | K 6.29 | K 25.7 |
| 13. | K 8.37 | K 10.1 | 115 | 14.7 | 7.39 | K 6.90 | K 8.54 | K 19.2 | K 9.77 | K 19.8 | K 19.5 | K 23.6 | K 6.08 | K 26.5 |
| 14. | K 8.30 | K 11.4 | 92.2 | 15.8 | 7.36 | K 6.88 | K 9.45 | K 16.5 | K 11.8 | K 21.2 | K 13.8 | K 22.0 | K 6.19 | K 33.3 |
| 15. | K 8.28 | K 11.3 | 67.8 | 18.8 | K 7.34 | K 6.86 | K 11.0 | K 11.2 | K 9.85 | K 22.2 | K 20.3 | K 19.7 | K 8.62 | K 43.4 |
| 16. | K 8.58 | K 14.6 | 62.2 | 18.7 | K 7.23 | K 6.68 | K 11.7 | K 14.4 | K 8.82 | K 24.3 | K 25.1 | K 15.4 | K 11.3 | K 20.6 |
| 17. | K 8.96 | K 15.3 | 33.6 | 20.4 | K 7.27 | K 6.64 | K 11.6 | K 15.3 | K 9.20 | K 21.9 | K 24.9 | K 13.0 | K 12.0 | K 14.2 |
| 18. | K 8.77 | K 13.1 | 32.2 | 29.4 | K 7.39 | K 7.03 | K 12.2 | K 14.9 | K 8.92 | K 19.2 | K 24.7 | K 19.8 | K 13.0 | K 11.9 |
| 19. | K 8.95 | K 11.7 | 60.5 | 30.8 | K 7.48 | K 7.37 | K 13.5 | K 17.0 | K 8.53 | K 22.9 | K 24.7 | K 21.5 | K 14.0 | K 13.8 |
| 20. | K 9.20 | K 16.1 | 62.6 | 38.8 | K 7.29 | K 6.68 | K 13.9 | K 16.3 | K 8.99 | K 27.0 | K 25.3 | K 22.9 | K 12.1 | K 13.2 |
| 21. | K 9.57 | K 16.2 | 59.8 | 27.3 | K 7.15 | K 7.72 | K 13.7 | K 7.82 | K 8.97 | K 26.9 | K 26.3 | K 24.1 | K 12.9 | K 13.1 |
| 22. | K 9.19 | K 16.6 | 64.9 | 17.3 | K 7.09 | K 9.25 | K 13.5 | K 7.15 | K 8.25 | K 27.4 | K 26.7 | K 25.2 | K 14.2 | K 15.3 |
| 23. | K 8.91 | K 16.8 | 66.4 | 11.8 | K 7.11 | K 8.20 | K 15.5 | K 6.84 | K 7.89 | K 27.4 | K 26.7 | K 26.4 | K 14.6 | K 22.2 |
| 24. | K 8.98 | K 17.5 | 65.7 | 10.4 | K 7.08 | K 6.90 | K 19.9 | K 6.84 | K 7.53 | K 28.0 | K 26.7 | K 27.4 | K 15.0 | K 23.6 |
| 25. | K 9.20 | K 17.4 | 63.5 | 7.49 | K 7.08 | K 6.88 | K 23.2 | K 6.73 | K 10.3 | K 20.9 | K 25.3 | K 27.8 | K 15.8 | K 23.0 |
| 26. | K 9.38 | K 16.8 | 61.8 | 7.33 | K 7.03 | K 6.95 | K 24.8 | K 6.68 | K 15.8 | K 13.7 | K 25.2 | K 28.5 | K 16.0 | K 24.9 |
| 27. | K 9.43 | K 16.4 | 30.2 | 7.46 | K 7.02 | K 7.35 | K 26.9 | K 7.72 | K 19.5 | K 19.3 | K 24.0 | K 28.7 | K 16.1 | K 33.1 |
| 28. | K 8.83 | K 34.1 | 21.1 | 7.44 | K 6.99 | K 8.29 | K 27.8 | K 11.3 | K 22.8 | K 22.3 | K 19.6 | K 23.0 | K 15.4 | K 33.2 |
| 29. | K 9.39 | K 43.4 | 20.4 | 7.71 | K 6.94 | K 8.76 | K 27.2 | K 14.8 | K 20.3 | K 22.2 | K 17.8 | K 18.7 | K 13.1 | K 32.5 |
| 30. | K 8.67 | K 64.7 | 20.3 | | K 6.93 | K 10.0 | K 27.2 | K 16.1 | K 16.8 | K 23.4 | K 23.1 | K 18.7 | K 10.1 | K 32.0 |
| 31. | | K 89.7 | 19.6 | | K 6.90 | | K 27.2 | | K 11.1 | K 23.4 | | K 18.7 | | K 31.6 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 1. | 1. | 31. | 26. | 31. | 17. | 9. | 26. | 7. | 1. | 14. | 9. | 13. | 1. |
| NQ | 7.84 | 9.51 | 19.6 | 7.33 | 6.90 | 6.64 | 7.39 | 6.68 | 7.00 | 6.48 | 13.8 | 10.8 | 6.08 | 6.89 |
| MQ | 9.74 | 18.5 | 74.3 | 16.8 | 7.96 | 7.36 | 15.2 | 13.1 | 11.6 | 20.6 | 28.2 | 22.3 | 10.8 | 19.8 |
| HQ | 25.3 | 95.6 | 123 | 39.9 | 14.1 | 11.4 | 28.4 | 27.5 | 25.7 | 43.3 | 53.7 | 33.5 | 16.5 | 44.6 |
| Tag | 3. | 31. | 12. | 20. | 3. | 30. | 27. | 1. | 27. | 6. | 9. | 4. | 28. | 15. |
| $h_N$ mm | 3 | 172 | 135 | 21 | 12 | 52 | 62 | 96 | 102 | 44 | 32 | 71 | 49 | 132 |
| $h_A$ mm | 14 | 27 | 110 | 23 | 12 | 11 | 23 | 19 | 17 | 31 | 40 | 33 | 15 | 29 |

| | 1965/2011 | | 1966/2012 47 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1978 | 1972 | 1996 | 1972 | 1996 | 1988 | 1978 | 1996 | 2011 | 1991 | 1976 | 1976 | 1978 |
| NQ | 2.80 | 4.70 | 5.35 | 4.94 | 6.40 | 6.47 | 6.08 | 6.00 | 5.94 | 6.36 | 3.01 | 3.40 | 2.80 | 4.70 |
| MNQ | 9.78 | 12.5 | 13.6 | 15.5 | 14.1 | 11.6 | 9.21 | 9.53 | 10.8 | 12.9 | 12.7 | 9.71 | 9.75 | 12.3 |
| MQ | 20.5 | 27.7 | 35.0 | 31.5 | 31.7 | 23.7 | 16.0 | 16.3 | 18.7 | 21.7 | 21.7 | 19.3 | 20.6 | 26.2 |
| MHQ | 50.1 | 62.6 | 80.6 | 70.9 | 79.8 | 53.7 | 42.2 | 42.1 | 41.4 | 44.1 | 48.4 | 44.1 | 50.0 | 56.9 |
| HQ | 139 | 311 | 308 | 247 | 313 | 132 | 274 | 238 | 156 | 105 | 83.2 | 134 | 139 | 163 |
| Jahr | 1998 | 1965 | 1995 | 1995 | 1981 | 2006 | 1984 | 1984 | 1980 | 2007 | 1992 | 1998 | 1998 | 1993 |

| | 1965/2011 | | 1966/2012 47 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 84 | 96 | 88 | 65 | 71 | 56 | 70 | 77 | 75 | 72 | 69 | 68 | 82 | 94 |
| $Mh_A$ mm | 29 | 41 | 52 | 44 | 47 | 34 | 24 | 23 | 28 | 32 | 31 | 29 | 30 | 39 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 6.48 | am 01.08.2012 | 6.64 | 6.48 | 6.08 | am 13.11.2012 |
| MQ m³/s | 20.6 | | 22.7 | 18.5 | 20.8 | |
| HQ m³/s | 123 | am 12.01.2012 | 123 | 53.7 | 123 | am 12.01.2012 |
| Nq l/(s km²) | 3.59 | | 3.68 | 3.59 | 3.37 | |
| Mq l/(s km²) | 11.4 | | 12.6 | 10.2 | 11.5 | |
| Hq l/(s km²) | 68.1 | | 68.1 | 29.7 | 68.1 | |
| $h_N$ mm | 802 | | 395 | 407 | 808 | |
| $h_A$ mm | 359 | | 197 | 163 | 363 | |
| | 1966/2012 (*) 47 Jahre | | | | 1966/2012 | |
| NQ m³/s | 2.80 | am 19.11.1976 | 2.80 | 3.01 | 2.80 | am 19.11.1976 |
| MNQ m³/s | 6.07 | | 7.60 | 6.89 | 6.46 | |
| MQ m³/s | 23.6 | | 28.4 | 18.9 | 23.5 | |
| MHQ m³/s | 134 | | 130 | 73.9 | 132 | |
| HQ m³/s | 313 | am 11.03.1981 | 313 | 274 | 313 | am 11.03.1981 |
| $HQ_1$ m³/s | 89.5 | | 85.6 | 48.8 | 89.5 | |
| $HQ_5$ m³/s | 134 | | 134 | 80.5 | 134 | |
| MNq l/(s km²) | 3.36 | | 4.21 | 3.81 | 3.58 | |
| Mq l/(s km²) | 13.1 | | 15.7 | 10.5 | 13.0 | |
| MHq l/(s km²) | 74.2 | | 72.0 | 40.9 | 73.1 | |
| | 1966/2012 (*) 47 Jahre | | | | 1966/2012 | |
| $Mh_N$ mm | 891 | | 460 | 432 | 888 | |
| $Mh_A$ mm | 412 | | 247 | 166 | 411 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.80 | 1.55 | 19.11.1976 | 313 | 173 | 438 | 11.03.1981 |
| 2 | 2.98 | 1.65 | 20.11.2003 | 311 | 172 | 476 | 20.12.1965 |
| 3 | 3.01 | 1.67 | 15.09.1991 | 308 | 171 | 435 | 31.01.1995 |
| 4 | 3.40 | 1.88 | 16.11.1971 | 274 | 152 | 422 | 31.05.1984 |
| 5 | 4.25 R | 2.35 | 14.11.1983 | 220 | 122 | 385 | 07.02.1980 |
| 6 | 4.46 | 2.47 | 26.10.1990 | 217 | 120 | 366 | 06.01.1994 |
| 7 | 4.65 | 2.57 | 24.10.1994 | 198 | 110 | 342 | 01.03.1990 |
| 8 | 4.70 | 2.60 | 12.12.1978 | 198 | 110 | 360 | 04.01.1966 |
| 9 | 4.70 | 2.60 | 23.10.1973 | 164 | 90.8 | 324 | 26.03.1970 |
| 10 | 4.94 | 2.73 | 15.02.1996 | 163 | 90.2 | 318 | 31.12.1993 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1966/2012 47 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 119 | 119 | | | |
| 364 | 118 | 118 | 272 | 132 | 48.6 |
| 363 | 115 | 115 | 255 | 119 | 48.2 |
| 362 | 115 | 115 | 208 | 113 | 45.9 |
| 361 | 113 | 113 | 197 | 108 | 43.4 |
| 360 | 112 | 112 | 195 | 101 | 42.6 |
| 359 | 109 | 109 | 178 | 95.8 | 40.4 |
| 358 | 108 | 108 | 158 | 92.4 | 39.2 |
| 357 | 107 | 107 | 149 | 88.9 | 39.2 |
| 356 | 105 | 105 | 144 | 86.3 | 38.0 |
| 350 | 67.8 | 66.4 | 116 | 72.2 | 32.9 |
| 340 | 59.8 | 51.7 | 93.1 | 54.6 | 28.9 |
| 330 | 35.9 | 33.3 | 79.0 | 46.7 | 25.1 |
| 320 | 29.2 | 29.5 | 72.8 | 41.7 | 23.0 |
| 300 | 26.4 | 26.9 | 53.4 | 33.6 | 17.8 |
| 270 | 22.9 | 23.5 | 45.6 | 26.4 | 15.6 |
| 240 | 19.3 | 20.2 | 40.2 | 22.5 | 13.5 |
| 210 | 16.3 | 16.6 | 35.4 | 19.6 | 11.1 |
| 183 | 14.6 | 15.0 | 28.5 | 17.1 | 8.55 |
| 150 | 11.6 | 13.1 | 26.2 | 14.8 | 7.53 |
| 130 | 9.91 | 11.7 | 21.6 | 13.7 | 7.28 |
| 120 | 9.54 | 10.3 | 21.2 | 13.2 | 7.17 |
| 110 | 9.24 | 9.37 | 20.7 | 12.6 | 7.08 |
| 100 | 8.95 | 8.92 | 17.7 | 11.9 | 7.00 |
| 90 | 8.64 | 8.25 | 17.0 | 11.0 | 6.91 |
| 80 | 8.32 | 7.73 | 16.5 | 10.3 | 6.88 |
| 70 | 7.89 | 7.49 | 16.5 | 9.61 | 6.82 |
| 60 | 7.69 | 7.35 | 16.0 | 9.19 | 4.48 |
| 50 | 7.44 | 7.09 | 15.3 | 8.77 | 4.22 |
| 40 | 7.26 | 6.96 | 14.5 | 8.38 | 3.91 |
| 30 | 7.03 | 6.90 | 14.1 | 7.95 | 3.60 |
| 25 | 6.94 | 6.86 | 13.8 | 7.71 | 3.40 |
| 20 | 6.93 | 6.81 | 13.7 | 7.42 | 3.20 |
| 15 | 6.86 | 6.70 | 13.4 | 7.11 | 3.20 |
| 10 | 6.81 | 6.64 | 13.1 | 6.75 | 3.20 |
| 9 | 6.80 | 6.50 | 13.0 | 6.70 | 3.20 |
| 8 | 6.77 | 6.48 | 12.8 | 6.57 | 3.20 |
| 7 | 6.73 | 6.39 | 12.4 | 6.41 | 3.20 |
| 6 | 6.70 | 6.29 | 12.2 | 6.03 | 3.20 |
| 5 | 6.70 | 6.25 | 11.2 | 5.48 | 3.20 |
| 4 | 6.70 | 6.24 | 10.6 | 5.28 | 3.20 |
| 3 | 6.68 | 6.20 | 10.5 | 4.85 | 3.00 |
| 2 | 6.67 | 6.20 | 10.5 | 4.22 | 3.00 |
| 1 | 6.64 | 6.19 | 10.5 | 3.61 | 3.00 |
| 0 | 6.48 | 6.08 | 10.1 | 2.80 | 2.80 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt durch die Edertalsperre beeinflusst

HLUG Wiesbaden

$A_{Eo}$ : 8.47 km²
PNP : NHN+ 427.74 m
Lage : 0.50 km oberhalb der Mündung rechts

Q
m³/s

Pegel : Aue Nr. 4281334000100
Gewässer : Preisdorf
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.036 | 0.017 | 0.552 | 0.136 | 0.197 | 0.038 | 0.049 | 0.031 | 0.076 | 0.061 | 0.017 | 0.013 | 0.030 | 0.090 |
| 2. | 0.029 | 0.021 | 1.30 | 0.119 | 0.198 | 0.038 | 0.050 | 0.026 | 0.076 | 0.061 | 0.017 | 0.013 | 0.039 | 0.090 |
| 3. | 0.029 | 0.025 | 1.23 | 0.113 | 0.183 | 0.035 | 0.049 | 0.029 | 0.068 | 0.056 | 0.017 | 0.016 | 0.068 | 0.089 |
| 4. | 0.029 | 0.030 | 0.995 | 0.097 | 0.179 | 0.039 | 0.049 | 0.032 | 0.061 | 0.049 | 0.017 | 0.080 | 0.076 | 0.091 |
| 5. | 0.029 | 0.060 | 1.37 | 0.087 | 0.162 | 0.034 | 0.052 | 0.032 | 0.057 | 0.049 | 0.017 | 0.062 | 0.083 | 0.089 |
| 6. | 0.029 | 0.061 | 1.56 | 0.076 | 0.146 | 0.030 | 0.049 | 0.032 | 0.051 | 0.058 | 0.017 | 0.094 | 0.090 | 0.076 |
| 7. | 0.029 | 0.098 | 1.17 | 0.075 | 0.140 | 0.030 | 0.043 | 0.030 | 0.049 | 0.044 | 0.017 | 0.078 | 0.120 | 0.076 |
| 8. | 0.029 | 0.146 | 1.36 | 0.061 | 0.137 | 0.030 | 0.038 | 0.028 | 0.051 | 0.038 | 0.016 | 0.076 | 0.128 | 0.066 |
| 9. | 0.024 | 0.562 | 1.32 | 0.056 | 0.118 | 0.033 | 0.051 | 0.026 | 0.039 | 0.038 | 0.016 | 0.063 | 0.141 | 0.068 |
| 10. | 0.021 | 0.658 | 0.988 | 0.049 | 0.107 | 0.038 | 0.056 | 0.025 | 0.038 | 0.035 | 0.014 | 0.056 | 0.147 | 0.073 |
| 11. | 0.021 | 0.484 | 0.778 | 0.046 | 0.107 | 0.038 | 0.049 | 0.025 | 0.038 | 0.032 | 0.017 | 0.049 | 0.133 | 0.061 |
| 12. | 0.021 | 0.417 | 0.601 | 0.042 | 0.107 | 0.035 | 0.049 | 0.028 | 0.043 | 0.030 | 0.017 | 0.049 | 0.121 | 0.061 |
| 13. | 0.021 | 0.462 | 0.469 | 0.038 | 0.096 | 0.038 | 0.049 | 0.023 | 0.050 | 0.030 | 0.017 | 0.039 | 0.108 | 0.060 |
| 14. | 0.021 | 0.721 | 0.363 | 0.038 | 0.090 | 0.038 | 0.049 | 0.021 | 0.090 | 0.030 | 0.017 | 0.042 | 0.107 | 0.079 |
| 15. | 0.021 | 0.715 | 0.299 | 0.038 | 0.090 | 0.037 | 0.056 | 0.023 | 0.108 | 0.027 | 0.017 | 0.060 | 0.101 | 0.281 |
| 16. | 0.021 | 0.819 | 0.250 | 0.038 | 0.089 | 0.038 | 0.054 | 0.033 | 0.131 | 0.033 | 0.016 | 0.049 | 0.090 | 0.660 |
| 17. | 0.021 | 1.01 | 0.211 | 0.040 | 0.081 | 0.038 | 0.049 | 0.029 | 0.273 | 0.026 | 0.015 | 0.049 | 0.082 | 1.04 |
| 18. | 0.021 | 0.796 | 0.183 | 0.080 | 0.078 | 0.038 | 0.049 | 0.025 | 0.422 | 0.021 | 0.014 | 0.049 | 0.076 | 1.12 |
| 19. | 0.019 | 0.561 | 0.289 | 0.130 | 0.069 | 0.038 | 0.044 | 0.022 | 0.376 | 0.021 | 0.014 | 0.049 | 0.069 | 0.945 |
| 20. | 0.017 | 0.429 | 0.440 | 0.065 | 0.061 | 0.038 | 0.038 | 0.033 | 0.295 | 0.021 | 0.016 | 0.049 | 0.061 | 0.730 |
| 21. | 0.017 | 0.350 | 0.597 | 0.053 | 0.058 | 0.038 | 0.038 | 0.030 | 0.230 | 0.021 | 0.013 | 0.049 | 0.061 | 0.574 |
| 22. | 0.017 | 0.340 | 1.06 | 0.060 | 0.055 | 0.038 | 0.038 | 0.030 | 0.179 | 0.021 | 0.013 | 0.047 | 0.052 | 0.476 |
| 23. | 0.017 | 0.605 | 1.28 | 0.078 | 0.051 | 0.038 | 0.038 | 0.028 | 0.150 | 0.020 | 0.013 | 0.039 | 0.051 | 1.47 |
| 24. | 0.017 | 1.10 | 1.04 | 0.121 | 0.049 | 0.038 | 0.033 | 0.033 | 0.132 | 0.021 | 0.014 | 0.038 | 0.054 | 2.46 |
| 25. | 0.017 | 1.06 | 0.762 | 0.171 | 0.049 | 0.038 | 0.030 | 0.033 | 0.114 | 0.022 | 0.017 | 0.038 | 0.049 | 1.52 |
| 26. | 0.017 | 0.804 | 0.554 | 0.187 | 0.044 | 0.051 | 0.030 | 0.030 | 0.096 | 0.023 | 0.017 | 0.038 | 0.065 | 1.10 |
| 27. | 0.017 | 0.658 | 0.405 | 0.179 | 0.040 | 0.040 | 0.030 | 0.030 | 0.114 | 0.023 | 0.018 | 0.038 | 0.076 | 1.13 |
| 28. | 0.017 | 0.534 | 0.296 | 0.179 | 0.038 | 0.038 | 0.030 | 0.030 | 0.098 | 0.020 | 0.017 | 0.031 | 0.076 | 1.02 |
| 29. | 0.017 | 0.436 | 0.236 | 0.182 | 0.038 | 0.049 | 0.028 | 0.072 | 0.083 | 0.018 | 0.017 | 0.030 | 0.084 | 0.820 |
| 30. | 0.017 | 0.405 | 0.196 | | 0.043 | 0.049 | 0.026 | 0.072 | 0.076 | 0.020 | 0.014 | 0.036 | 0.090 | 0.637 |
| 31. | | 0.358 | 0.165 | | 0.038 | | 0.030 | | 0.066 | 0.017 | | 0.030 | | 0.487 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 20.+ | 1. | 31. | 13.+ | 29.+ | 6.+ | 30. | 14. | 10.+ | 31. | 22.+ | 1.+ | 1. | 13. |
| NQ | 0.017 | 0.017 | 0.165 | 0.038 | 0.038 | 0.030 | 0.026 | 0.021 | 0.038 | 0.017 | 0.013 | 0.013 | 0.030 | 0.060 |
| MQ | 0.022 | 0.475 | 0.720 | 0.091 | 0.095 | 0.038 | 0.043 | 0.031 | 0.120 | 0.032 | 0.016 | 0.047 | 0.084 | 0.565 |
| HQ | 0.038 | 1.19 | 1.72 | 0.241 | 0.198 | 0.061 | 0.090 | 0.318 | 0.449 | 0.107 | 0.021 | 0.160 | 0.179 | 2.90 |
| Tag | 1.+ | 24.+ | 5.+ | 19. | 1.+ | 26. | 9. | 29. | 18. | 6. | 11.+ | 4. | 10. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 150 | 228 | 27 | 30 | 12 | 14 | 10 | 38 | 10 | 5 | 15 | 26 | 179 |

| | 1975/2011 | | 1976/2012 37 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 2011 | 1996 | 1996 | 1986 | 2011 | 2011 | 2011 | 1989 | 2003 | 1989+ | 1977 | 1983 | 2011 |
| NQ | 0.012 | 0.017 | 0.030 | 0.013 | 0.021 | 0.021 | 0.013 | 0.013 | 0.013 | 0.009 | 0.009 | 0.010 | 0.012 | 0.017 |
| MNQ | 0.062 | 0.087 | 0.100 | 0.093 | 0.098 | 0.082 | 0.049 | 0.035 | 0.029 | 0.027 | 0.028 | 0.040 | 0.061 | 0.087 |
| MQ | 0.220 | 0.346 | 0.406 | 0.283 | 0.355 | 0.198 | 0.101 | 0.076 | 0.067 | 0.061 | 0.073 | 0.110 | 0.220 | 0.357 |
| MHQ | 0.798 | 1.47 | 1.90 | 1.17 | 1.36 | 0.570 | 0.323 | 0.351 | 0.388 | 0.339 | 0.311 | 0.431 | 0.788 | 1.54 |
| HQ | 2.98 | 4.52 | 4.82 | 4.03 | 4.44 | 2.82 | 2.52 | 2.12 | 2.82 | 2.52 | 2.74 | 4.93 | 2.98 | 4.52 |
| Jahr | 2010 | 1986 | 1995 | 1980 | 1981 | 2006 | 1984 | 1979 | 2005 | 2007 | 1998 | 1998 | 2010 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 67 | 109 | 129 | 82 | 112 | 61 | 32 | 23 | 21 | 19 | 22 | 35 | 67 | 113 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.013 | am 22.09.2012 | 0.017 | 0.013 | 0.013 | am 22.09.2012 |
| MQ m³/s | 0.146 | | 0.244 | 0.048 | 0.158 | |
| HQ m³/s | 1.72 | am 05.01.2012 bei W = 61.0 cm | 1.72 | 0.449 | 2.90 | am 24.12.2012 bei W = 79.0 cm |
| Nq l/(skm²) | 1.53 | | 2.01 | 1.53 | 1.53 | |
| Mq l/(skm²) | 17.2 | | 28.8 | 5.72 | 18.7 | |
| Hq l/(skm²) | 203 | | 203 | 53.0 | 342 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 544 | | 453 | 91 | 591 | |

| | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.009 | am 06.09.1989 | 0.012 | 0.009 | 0.009 | am 06.09.1989 |
| MNQ m³/s | 0.018 | | 0.041 | 0.019 | 0.019 | |
| MQ m³/s | 0.191 | | 0.303 | 0.081 | 0.192 | |
| MHQ m³/s | 2.95 | | 2.88 | 0.993 | 2.93 | |
| HQ m³/s | 4.93 | am 28.10.1998 bei W = 101 cm | 4.82 | 4.93 | 4.93 | am 28.10.1998 bei W = 101 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(skm²) | 2.11 | | 4.82 | 2.25 | 2.21 | |
| Mq l/(skm²) | 22.6 | | 35.7 | 9.62 | 22.7 | |
| MHq l/(skm²) | 348 | | 340 | 117 | 346 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 713 | | 560 | 153 | 716 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.009 | 1.06 | 07.08.2003 | 4.93 | 581 | 101 | 28.10.1998 |
| 2 | 0.009 | 1.06 | 06.09.1989 | 4.82 | 569 | 100 | 23.01.1995 |
| 3 | 0.010 | 1.18 | 24.10.1977 | 4.62 | 545 | 98.0 | 20.01.1986 |
| 4 | 0.010 | 1.18 | 05.09.1991 | 4.52 | 534 | 97.0 | 31.12.1986 |
| 5 | 0.012 | 1.41 | 14.11.1983 | 4.44 | 524 | 94.0 | 10.03.1981 |
| 6 | 0.013 | 1.53 | 22.09.2012 | 4.43 | 523 | 96.0 | 30.01.1995 |
| 7 | 0.013 | 1.53 | 28.05.2011 | 4.23 | 499 | 94.0 | 27.01.2002 |
| 8 | 0.013 | 1.53 | 19.07.2010 | 4.23 | 499 | 94.0 | 31.12.1993 |
| 9 | 0.013 | 1.53 | 03.08.1999 | 4.03 | 476 | 92.0 | 14.01.2011 |
| 10 | 0.013 | 1.53 | 11.08.1995 | 4.03 | 476 | 92.0 | 21.01.2005 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1976/2012 37 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 1.56 | 2.46 | 4.02 | 2.26 | 0.875 |
| 363 | 1.37 | 1.56 | 3.98 | 1.81 | 0.863 |
| 362 | 1.36 | 1.52 | 3.31 | 1.64 | 0.790 |
| 361 | 1.32 | 1.47 | 2.49 | 1.47 | 0.745 |
| 360 | 1.30 | 1.37 | 2.41 | 1.29 | 0.574 |
| 359 | 1.28 | 1.36 | 2.18 | 1.19 | 0.511 |
| 358 | 1.23 | 1.32 | 2.02 | 1.11 | 0.510 |
| 357 | 1.17 | 1.30 | 2.00 | 1.06 | 0.507 |
| 356 | 1.10 | 1.28 | 1.92 | 1.01 | 0.495 |
| 350 | 0.988 | 1.06 | 1.27 | 0.809 | 0.391 |
| 340 | 0.605 | 0.730 | 0.969 | 0.600 | 0.307 |
| 330 | 0.462 | 0.469 | 0.799 | 0.482 | 0.249 |
| 320 | 0.358 | 0.281 | 0.682 | 0.394 | 0.232 |
| 300 | 0.179 | 0.150 | 0.501 | 0.282 | 0.139 |
| 270 | 0.094 | 0.096 | 0.334 | 0.194 | 0.096 |
| 240 | 0.061 | 0.076 | 0.239 | 0.144 | 0.061 |
| 210 | 0.049 | 0.061 | 0.198 | 0.111 | 0.042 |
| 183 | 0.043 | 0.049 | 0.166 | 0.090 | 0.035 |
| 150 | 0.038 | 0.043 | 0.141 | 0.069 | 0.030 |
| 130 | 0.035 | 0.038 | 0.125 | 0.060 | 0.029 |
| 120 | 0.032 | 0.038 | 0.112 | 0.053 | 0.029 |
| 110 | 0.030 | 0.038 | 0.107 | 0.049 | 0.025 |
| 100 | 0.030 | 0.035 | 0.107 | 0.046 | 0.021 |
| 90 | 0.029 | 0.033 | 0.098 | 0.039 | 0.021 |
| 80 | 0.026 | 0.030 | 0.090 | 0.038 | 0.019 |
| 70 | 0.023 | 0.030 | 0.090 | 0.034 | 0.017 |
| 60 | 0.021 | 0.028 | 0.083 | 0.030 | 0.016 |
| 50 | 0.021 | 0.025 | 0.076 | 0.030 | 0.013 |
| 40 | 0.017 | 0.021 | 0.076 | 0.025 | 0.013 |
| 30 | 0.017 | 0.017 | 0.068 | 0.021 | 0.013 |
| 25 | 0.017 | 0.017 | 0.064 | 0.021 | 0.013 |
| 20 | 0.017 | 0.017 | 0.064 | 0.019 | 0.010 |
| 15 | 0.017 | 0.017 | 0.064 | 0.017 | 0.009 |
| 10 | 0.016 | 0.016 | 0.063 | 0.017 | 0.009 |
| 9 | 0.015 | 0.015 | 0.061 | 0.017 | 0.009 |
| 8 | 0.014 | 0.014 | 0.059 | 0.017 | 0.009 |
| 7 | 0.014 | 0.014 | 0.058 | 0.017 | 0.009 |
| 6 | 0.014 | 0.014 | 0.056 | 0.016 | 0.009 |
| 5 | 0.014 | 0.014 | 0.055 | 0.015 | 0.009 |
| 4 | 0.014 | 0.014 | 0.053 | 0.013 | 0.009 |
| 3 | 0.013 | 0.013 | 0.053 | 0.013 | 0.009 |
| 2 | 0.013 | 0.013 | 0.053 | 0.013 | 0.009 |
| 1 | 0.013 | 0.013 | 0.053 | 0.011 | 0.009 |
| 0 | 0.013 | 0.013 | 0.050 | 0.009 | 0.009 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 84.70 km²
PNP : NHN+ 400.27 m
Lage : 0.18 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Raumland Nr. 4281490000100
Gewässer : Odeborn
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.494 | 0.244 | 6.18 | 1.36 | 4.39 | 0.580 | 0.758 | 0.775 | 1.14 | 0.685 | 0.247 | 0.205 | 0.479 | 1.00 |
| 2. | 0.492 | 0.372 | 15.9 | 1.11 | 4.23 | 0.546 | 0.769 | 0.579 | 1.16 | 0.668 | 0.209 | 0.196 | 0.676 | 1.03 |
| 3. | 0.491 | 0.414 | 13.8 | 1.16 | 3.74 | 0.534 | 0.764 | 0.624 | 1.08 | 0.596 | 0.210 | 0.240 | 1.12 | 1.00 |
| 4. | 0.465 | 0.580 | 9.89 | 1.06 | 3.20 | 0.709 | 0.727 | 0.663 | 0.971 | 0.535 | 0.208 | 1.20 | 1.31 | 1.08 |
| 5. | 0.436 | 1.04 | 13.4 | 0.983 | 2.77 | 0.616 | 0.876 | 0.733 | 0.897 | 0.500 | 0.194 | 1.09 | 1.36 | 1.03 |
| 6. | 0.397 | 0.984 | 15.3 | 0.964 | 2.36 | 0.540 | 0.800 | 0.686 | 0.824 | 0.658 | 0.184 | 1.57 | 1.41 | 0.924 |
| 7. | 0.397 | 1.27 | 11.4 | 0.995 | 2.07 | 0.567 | 0.746 | 0.653 | 0.801 | 0.483 | 0.176 | 1.33 | 1.76 | 0.833 |
| 8. | 0.378 | 1.72 | 13.3 | 0.884 | 2.07 | 0.539 | 0.678 | 0.615 | 0.873 | 0.438 | 0.176 | 1.12 | 2.03 | 0.768 |
| 9. | 0.356 | 5.89 | 13.8 | 0.814 | 1.71 | 0.611 | 0.974 | 0.588 | 0.788 | 0.407 | 0.176 | 0.950 | 2.02 | 0.778 |
| 10. | 0.354 | 6.43 | 11.0 | 0.772 | 1.55 | 0.719 | 1.20 | 0.549 | 0.674 | 0.382 | 0.176 | 0.806 | 1.97 | 0.866 |
| 11. | 0.354 | 4.72 | 8.72 | 0.718 | 1.51 | 0.750 | 1.05 | 0.621 | 0.693 | 0.358 | 0.274 | 0.735 | 1.83 | 0.763 |
| 12. | 0.354 | 4.10 | 7.19 | 0.842 | 1.47 | 0.730 | 1.02 | 0.618 | 0.822 | 0.333 | 0.285 | 0.702 | 1.55 | 0.746 |
| 13. | 0.331 | 4.55 | 6.38 | 0.685 | 1.45 | 0.766 | 0.997 | 0.555 | 1.06 | 0.324 | 0.217 | 0.642 | 1.45 | 0.710 |
| 14. | 0.322 | 6.73 | 5.11 | 0.679 | 1.40 | 0.757 | 0.975 | 0.504 | 1.98 | 0.309 | 0.214 | 0.665 | 1.35 | 0.822 |
| 15. | 0.311 | 7.37 | 4.02 | 0.742 | 1.33 | 0.753 | 1.07 | 0.502 | 2.41 | 0.277 | 0.207 | 1.11 | 1.26 | 3.55 |
| 16. | 0.296 | 7.95 | 3.21 | 0.611 | 1.28 | 0.711 | 1.14 | 0.694 | 2.46 | 0.471 | 0.176 | 0.886 | 1.17 | 6.66 |
| 17. | 0.252 | 8.69 | 2.64 | 0.711 | 1.21 | 0.696 | 1.02 | 0.582 | 3.78 | 0.302 | 0.183 | 0.833 | 1.08 | 9.47 |
| 18. | 0.263 | 6.87 | 2.28 | 1.12 | 1.16 | 0.696 | 1.00 | 0.494 | 4.88 | 0.271 | 0.176 | 0.818 | 0.998 | 10.1 |
| 19. | 0.242 | 5.02 | 3.83 | 2.02 | 1.03 | 0.684 | 0.988 | 0.490 | 4.50 | 0.266 | 0.200 | 0.805 | 0.899 | 8.56 |
| 20. | 0.234 | 4.04 | 6.03 | 1.18 | 0.969 | 0.640 | 0.995 | 0.775 | 3.71 | 0.248 | 0.198 | 0.749 | 0.828 | 6.52 |
| 21. | 0.236 | 3.75 | 7.05 | 0.925 | 0.908 | 0.634 | 0.938 | 0.683 | 3.06 | 0.241 | 0.176 | 0.700 | 0.799 | 5.14 |
| 22. | 0.236 | 3.93 | 11.3 | 0.884 | 0.849 | 0.596 | 0.867 | 0.686 | 2.48 | 0.235 | 0.176 | 0.650 | 0.748 | 4.30 |
| 23. | 0.238 | 7.28 | 12.1 | 1.16 | 0.799 | 0.594 | 0.851 | 0.593 | 2.16 | 0.223 | 0.176 | 0.611 | 0.737 | 12.2 |
| 24. | 0.234 | 13.0 | 8.87 | 2.42 | 0.757 | 0.620 | 0.800 | 0.647 | 1.88 | 0.236 | 0.218 | 0.594 | 0.800 | 19.5 |
| 25. | 0.230 | 11.6 | 6.34 | 4.18 | 0.695 | 0.688 | 0.716 | 0.737 | 1.59 | 0.315 | 0.228 | 0.549 | 0.719 | 12.8 |
| 26. | 0.226 | 8.99 | 4.71 | 4.01 | 0.647 | 0.916 | 0.655 | 0.636 | 1.35 | 0.329 | 0.240 | 0.539 | 0.876 | 11.3 |
| 27. | 0.219 | 9.01 | 3.68 | 3.46 | 0.613 | 0.765 | 0.621 | 0.612 | 1.25 | 0.276 | 0.249 | 0.534 | 1.04 | 11.9 |
| 28. | 0.234 | 7.62 | 2.94 | 3.23 | 0.592 | 0.756 | 0.599 | 0.625 | 1.16 | 0.243 | 0.335 | 0.485 | 0.942 | 10.3 |
| 29. | 0.205 | 5.90 | 2.44 | 3.76 | 0.573 | 0.748 | 0.567 | 1.29 | 0.966 | 0.231 | 0.239 | 0.450 | 1.03 | 7.83 |
| 30. | 0.217 | 5.30 | 2.06 | | 0.739 | 0.757 | 0.539 | 1.24 | 0.855 | 0.284 | 0.209 | 0.570 | 1.05 | 5.93 |
| 31. | | 4.44 | 1.73 | | 0.628 | | 0.593 | | 0.758 | 0.219 | | 0.535 | | 4.62 |
| Tag | 29. | 1. | 31. | 16. | 29. | 3. | 30. | 19. | 10. | 31. | 7.+ | 2. | 1. | 13. |
| NQ | 0.205 | 0.244 | 1.73 | 0.611 | 0.573 | 0.534 | 0.539 | 0.490 | 0.674 | 0.219 | 0.176 | 0.196 | 0.479 | 0.710 |
| MQ | 0.316 | 5.16 | 7.63 | 1.50 | 1.57 | 0.674 | 0.848 | 0.668 | 1.71 | 0.366 | 0.211 | 0.738 | 1.18 | 5.26 |
| HQ | 0.539 | 14.3 | 17.7 | 4.27 | 4.52 | 1.13 | 3.14 | 5.60 | 5.07 | 1.49 | 0.450 | 2.46 | 2.27 | 22.1 |
| Tag | 1. | 24. | 2. | 25.+ | 1. | 26. | 9. | 29. | 18. | 16. | 11.+ | 4. | 10. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 163 | 241 | 44 | 50 | 21 | 27 | 20 | 54 | 12 | 6 | 23 | 36 | 166 |

## Hauptwerte

| | 1950/2011 | | 1951/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 62 Kalenderjahre | | | | | | | | | | | |
| Jahr | 1971 | 1978 | 1964 | 1996 | 1963 | 2011 | 2011 | 2011 | 2010 | 1995 | 1976 | 1983 | 1971 | 1978 |
| NQ | 0.125 | 0.185 | 0.231 | 0.148 | 0.175 | 0.196 | 0.110 | 0.114 | 0.084 | 0.079 | 0.082 | 0.122 | 0.125 | 0.185 |
| MNQ | 0.780 | 0.987 | 0.995 | 1.04 | 1.14 | 1.06 | 0.581 | 0.419 | 0.389 | 0.382 | 0.372 | 0.509 | 0.765 | 0.971 |
| MQ | 2.40 | 3.53 | 3.60 | 2.89 | 3.44 | 2.57 | 1.24 | 0.890 | 0.959 | 0.874 | 0.949 | 1.45 | 2.34 | 3.56 |
| MHQ | 8.18 | 14.1 | 15.2 | 10.7 | 12.0 | 6.86 | 3.52 | 3.49 | 4.36 | 4.26 | 3.54 | 4.84 | 8.07 | 14.3 |
| HQ | 26.9 | 45.1 | 44.4 | 37.9 | 50.8 | 30.4 | 25.9 | 18.0 | 34.2 | 32.3 | 27.4 | 38.0 | 26.9 | 45.1 |
| Jahr | 2010 | 1965+ | 2011 | 1980 | 1981 | 2006 | 1984 | 1966 | 1980 | 2007 | 1957 | 1998 | 2010 | 1965+ |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 73 | 112 | 114 | 83 | 109 | 79 | 39 | 27 | 30 | 28 | 29 | 46 | 72 | 113 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.176 | am 07.09.2012 | 0.205 | 0.176 | 0.176 | am 07.09.2012 |
| MQ | m³/s | 1.80 | | 2.85 | 0.760 | 1.88 | |
| HQ | m³/s | 17.7 | am 02.01.2012 bei W = 127 cm | 17.7 | 5.60 | 22.1 | am 24.12.2012 bei W = 142 cm |
| Nq | l/(skm²) | 2.08 | | 2.42 | 2.08 | 2.08 | |
| Mq | l/(skm²) | 21.2 | | 33.6 | 8.98 | 22.2 | |
| Hq | l/(skm²) | 209 | | 209 | 66.2 | 261 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 671 | | 529 | 143 | 701 | |
| | | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
| NQ | m³/s | 0.079 | am 19.08.1995 | 0.125 | 0.079 | 0.079 | am 19.08.1995 |
| MNQ | m³/s | 0.220 | | 0.483 | 0.232 | 0.227 | |
| MQ | m³/s | 2.06 | | 3.08 | 1.06 | 2.06 | |
| MHQ | m³/s | 25.0 | | 24.1 | 9.42 | 25.2 | |
| HQ | m³/s | 50.8 | am 10.03.1981 bei W = 208 cm | 50.8 | 38.0 | 50.8 | am 10.03.1981 bei W = 208 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.60 | | 5.71 | 2.74 | 2.68 | |
| Mq | l/(skm²) | 24.4 | | 36.4 | 12.5 | 24.3 | |
| MHq | l/(skm²) | 296 | | 284 | 111 | 298 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 769 | | 570 | 199 | 768 | |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1951/2012 62 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 15.9 | 19.5 | 43.7 | 19.2 | 9.54 |
| 363 | 15.3 | 15.9 | 31.5 | 16.4 | 8.93 |
| 362 | 13.8 | 15.3 | 26.5 | 14.8 | 7.04 |
| 361 | 13.8 | 13.8 | 23.6 | 13.3 | 5.57 |
| 360 | 13.4 | 13.8 | 21.3 | 12.4 | 5.52 |
| 359 | 13.3 | 13.4 | 18.4 | 11.6 | 5.14 |
| 358 | 13.0 | 13.3 | 18.1 | 11.0 | 4.81 |
| 357 | 12.1 | 12.8 | 17.8 | 10.5 | 4.63 |
| 356 | 11.6 | 12.2 | 17.7 | 10.1 | 4.52 |
| 350 | 8.99 | 11.0 | 14.0 | 8.01 | 4.07 |
| 340 | 6.87 | 7.05 | 10.1 | 6.05 | 2.73 |
| 330 | 5.11 | 4.88 | 8.76 | 5.01 | 2.52 |
| 320 | 4.18 | 3.83 | 7.58 | 4.22 | 2.11 |
| 300 | 2.64 | 2.36 | 5.71 | 3.21 | 1.57 |
| 270 | 1.28 | 1.33 | 3.75 | 2.30 | 1.15 |
| 240 | 0.997 | 1.06 | 3.14 | 1.72 | 0.808 |
| 210 | 0.822 | 0.924 | 2.56 | 1.35 | 0.484 |
| 183 | 0.746 | 0.801 | 2.16 | 1.08 | 0.351 |
| 150 | 0.663 | 0.737 | 1.90 | 0.824 | 0.268 |
| 130 | 0.613 | 0.688 | 1.83 | 0.713 | 0.241 |
| 120 | 0.593 | 0.674 | 1.77 | 0.663 | 0.241 |
| 110 | 0.567 | 0.642 | 1.73 | 0.615 | 0.241 |
| 100 | 0.535 | 0.618 | 1.70 | 0.568 | 0.241 |
| 90 | 0.491 | 0.596 | 1.65 | 0.518 | 0.220 |
| 80 | 0.407 | 0.573 | 1.65 | 0.469 | 0.209 |
| 70 | 0.354 | 0.539 | 1.60 | 0.423 | 0.196 |
| 60 | 0.302 | 0.490 | 1.57 | 0.384 | 0.180 |
| 50 | 0.252 | 0.335 | 1.55 | 0.343 | 0.173 |
| 40 | 0.239 | 0.276 | 1.55 | 0.297 | 0.148 |
| 30 | 0.230 | 0.240 | 1.55 | 0.255 | 0.122 |
| 25 | 0.219 | 0.228 | 1.51 | 0.234 | 0.098 |
| 20 | 0.210 | 0.214 | 1.50 | 0.216 | 0.095 |
| 15 | 0.205 | 0.207 | 1.48 | 0.197 | 0.095 |
| 10 | 0.194 | 0.194 | 1.46 | 0.176 | 0.095 |
| 9 | 0.184 | 0.184 | 1.46 | 0.173 | 0.095 |
| 8 | 0.183 | 0.183 | 1.46 | 0.166 | 0.095 |
| 7 | 0.176 | 0.176 | 1.46 | 0.159 | 0.095 |
| 6 | 0.176 | 0.176 | 1.46 | 0.151 | 0.093 |
| 5 | 0.176 | 0.176 | 1.45 | 0.146 | 0.093 |
| 4 | 0.176 | 0.176 | 1.44 | 0.138 | 0.092 |
| 3 | 0.176 | 0.176 | 1.41 | 0.125 | 0.089 |
| 2 | 0.176 | 0.176 | 1.41 | 0.120 | 0.085 |
| 1 | 0.176 | 0.176 | 1.41 | 0.104 | 0.082 |
| 0 | 0.176 | 0.176 | 1.36 | 0.079 | 0.079 |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.079 | 0.934 | 19.08.1995 | 50.8 | 600 | 208 | 10.03.1981 |
| 2 | 0.081 | 0.962 | 24.09.1976 | 45.1 | 533 | 198 | 19.12.1965 |
| 3 | 0.084 | 0.991 | 15.09.1991 | 45.1 | 532 | 198 | 31.12.1986 |
| 4 | 0.084 | 0.996 | 05.09.2003 | 44.4 | 524 | 197 | 14.01.2011 |
| 5 | 0.084 | 0.997 | 20.07.2010 | 43.0 | 508 | 194 | 23.01.1995 |
| 6 | 0.095 | 1.12 | 31.07.2001 | 40.9 | 483 | 190 | 21.01.2005 |
| 7 | 0.104 | 1.23 | 09.09.1973 | 40.5 | 478 | 189 | 03.03.1999 |
| 8 | 0.109 | 1.28 | 10.09.1999 | 40.0 | 472 | 188 | 24.12.1967 |
| 9 | 0.110 | 1.30 | 30.05.2011 | 39.0 | 460 | 186 | 30.01.1995 |
| 10 | 0.120 | 1.42 | 24.07.1959 | 38.1 | 450 | 184 | 27.01.2002 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 131 km²
PNP : NHN + 237.68 m
Lage: 74.2 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Alsfeld Nr. 42880458
Gewässer : Schwalm
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.336 | 0.344 | 1.98 | R0.762 | 0.687 | 0.403 | 0.381 | 0.585 | 3.03 | 0.528 | 0.325 | 0.311 | 0.595 | 0.437 |
| 2. | 0.344 | 0.355 | 3.45 | R0.794 | 0.681 | 0.399 | 0.383 | 0.401 | 1.04 | 0.482 | 0.300 | 0.308 | 0.633 | 0.454 |
| 3. | 0.343 | 0.363 | 3.24 | R0.864 | 0.687 | 0.404 | 0.469 | 0.494 | 0.729 | 0.457 | 0.300 | 0.318 | 1.16 | 0.455 |
| 4. | 0.339 | 0.583 | 4.36 | R0.883 | 0.678 | 0.812 | 0.430 | 0.617 | 0.562 | 0.436 | 0.300 | 0.670 | 1.35 | 0.468 |
| 5. | 0.346 | 1.54 | 10.6 | R1.05 | 0.662 | 0.584 | 0.617 | 0.828 | 1.31 | 0.427 | 0.295 | 0.501 | 1.04 | 0.518 |
| 6. | 0.340 | 1.03 | 9.23 | R1.06 | 0.617 | 0.491 | 0.792 | 0.539 | 0.884 | 0.779 | 0.302 | 0.477 | 0.832 | 0.515 |
| 7. | 0.342 | 0.994 | 5.65 | R0.983 | 0.583 | 0.514 | 0.788 | 0.499 | 0.602 | 0.459 | 0.295 | 0.565 | 0.725 | 0.486 |
| 8. | 0.344 | 1.29 | 5.00 | R1.03 | 0.702 | 0.483 | 0.628 | 0.439 | 0.514 | 0.390 | 0.291 | 0.462 | 0.643 | 0.461 |
| 9. | 0.341 | 1.68 | 3.74 | G1.05 | 0.658 | 0.417 | 0.519 | 0.407 | 0.471 | 0.375 | 0.286 | 0.419 | 0.610 | 0.443 |
| 10. | 0.348 | 1.53 | 3.02 | G0.965 | 0.616 | 0.492 | 0.485 | 0.398 | 0.443 | 0.376 | 0.286 | 0.385 | 0.884 | 0.525 |
| 11. | 0.354 | 1.03 | 2.33 | G0.906 | 0.608 | 0.581 | 0.886 | 0.476 | 0.496 | 0.336 | 0.500 | 0.370 | 1.08 | 0.477 |
| 12. | 0.347 | 0.903 | 2.02 | D0.984 | 0.592 | 0.592 | 1.07 | 0.501 | 0.541 | 0.345 | 0.704 | 0.429 | 0.803 | 0.446 |
| 13. | 0.350 | 1.09 | 2.36 | D1.14 | 0.570 | 0.553 | 0.645 | 0.716 | 0.715 | 0.337 | 0.521 | 0.427 | 0.650 | 0.434 |
| 14. | 0.354 | 1.90 | 1.93 | G0.909 | 0.551 | 0.497 | 0.536 | 0.777 | 7.85 | 0.334 | 0.362 | 0.494 | 0.585 | 0.524 |
| 15. | 0.359 | 1.95 | 1.59 | G0.562 | 0.533 | 0.472 | 0.689 | 0.557 | 3.37 | 0.335 | 0.342 | 0.631 | 0.558 | 4.17 |
| 16. | 0.362 | 4.28 | 1.30 | R0.443 | 0.508 | 0.446 | 0.688 | 0.690 | 2.35 | 0.623 | 0.334 | 0.563 | 0.537 | 3.99 |
| 17. | 0.354 | 3.95 | 1.07 | R0.712 | 0.499 | 0.427 | 0.566 | 0.655 | 2.16 | 0.397 | 0.322 | 0.485 | 0.513 | 2.50 |
| 18. | 0.333 | 2.09 | 0.907 | R0.894 | 0.507 | 0.428 | 0.501 | 0.515 | 2.10 | 0.338 | 0.315 | 0.440 | 0.502 | 2.37 |
| 19. | 0.336 | 1.52 | 2.33 | R1.29 | 0.590 | 0.438 | 0.473 | 0.631 | 1.30 | 0.329 | 0.301 | 0.401 | 0.492 | 1.70 |
| 20. | 0.330 | 1.26 | 5.01 | 0.776 | 0.525 | 0.467 | 0.820 | 2.51 | 0.981 | 0.321 | 0.300 | 0.411 | 0.474 | 1.31 |
| 21. | 0.333 | 1.16 | 5.36 | 0.574 | 0.487 | 0.449 | 0.554 | 1.89 | 1.09 | 0.312 | 0.302 | 0.398 | 0.465 | 1.22 |
| 22. | 0.333 | 1.48 | 11.1 | 0.534 | 0.471 | 0.508 | 0.475 | 1.29 | 0.842 | 0.303 | 0.318 | 0.394 | 0.460 | 1.28 |
| 23. | 0.333 | 1.80 | 5.48 | 0.544 | 0.458 | 0.650 | 0.413 | 0.822 | 0.643 | 0.300 | 0.316 | 0.383 | 0.455 | 4.60 |
| 24. | 0.331 | 1.69 | 3.97 | 0.590 | 0.453 | 0.608 | 0.390 | 0.670 | 0.539 | 0.479 | 0.357 | 0.403 | 0.460 | 6.40 |
| 25. | 0.336 | 1.43 | 2.85 | 0.644 | 0.438 | 0.566 | 0.370 | 0.878 | 0.493 | 0.410 | 0.370 | 0.398 | 0.437 | 3.27 |
| 26. | 0.333 | 1.18 | 2.18 | 0.620 | 0.415 | 0.555 | 0.364 | 0.716 | 0.446 | 0.386 | 0.374 | 0.409 | 0.446 | 3.44 |
| 27. | 0.333 | 1.04 | 1.80 | 0.601 | 0.408 | 0.500 | 0.365 | 0.587 | 0.418 | 0.360 | 0.362 | 0.528 | 0.466 | 5.20 |
| 28. | 0.336 | 0.945 | R1.60 | 0.592 | 0.407 | 0.470 | 0.366 | 0.536 | 1.34 | 0.326 | 0.342 | 0.468 | 0.461 | 6.57 |
| 29. | 0.339 | 0.869 | R1.41 | 0.652 | 0.404 | 0.423 | 0.361 | 0.541 | 1.43 | 0.305 | 0.330 | 0.438 | 0.460 | 3.09 |
| 30. | 0.341 | 1.67 | R1.18 | | 0.402 | 0.401 | 0.376 | 0.503 | 0.915 | 0.321 | 0.317 | 0.517 | 0.460 | 2.28 |
| 31. | | 1.79 | R0.954 | | 0.403 | | 0.534 | | 0.621 | 0.403 | | 0.629 | | 1.94 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 20. | 1. | 18. | 16. | 30. | 2. | 29. | 10. | 27. | 23. | 9.+ | 2. | 25. | 13. |
| NQ | 0.330 | 0.344 | 0.907 | 0.443 | 0.402 | 0.399 | 0.361 | 0.398 | 0.418 | 0.300 | 0.286 | 0.308 | 0.437 | 0.434 |
| MQ | 0.342 | 1.44 | 3.52 | 0.807 | 0.542 | 0.501 | 0.546 | 0.722 | 1.30 | 0.397 | 0.346 | 0.453 | 0.641 | 2.00 |
| HQ | 0.380 | 7.61 | 20.3 | 1.62 | 0.787 | 1.30 | 2.61 | 3.62 | 13.7 | 3.18 | 1.90 | 1.75 | 1.85 | 9.60 |
| Tag | 5.+ | 16. | 22. | 19. | 8. | 4. | 11. | 20. | 14. | 6. | 12. | 4. | 3. | 28. |
| $h_N$ mm | 1 | 100 | 106 | 17 | 9 | 45 | 100 | 126 | 118 | 48 | 41 | 62 | 40 | 86 |
| $h_A$ mm | 7 | 29 | 72 | 15 | 11 | 10 | 11 | 14 | 26 | 8 | 7 | 9 | 13 | 41 |
| | 1967/2011 | | 1968/2012 45 Jahre | | | | | | | | | | | |
| Jahr | 2011 | 2011 | 1972 | 1972 | 1972 | 2011 | 2011 | 2011 | 2011 | 1973 + | 1974 | 2011 | 2011 | 2011 |
| NQ | 0.330 | 0.344 | 0.320 | 0.320 | 0.380 | 0.336 | 0.282 | 0.257 | 0.269 | 0.270 | 0.250 | 0.292 | 0.330 | 0.344 |
| MNQ | 0.481 | 0.551 | 0.600 | 0.659 | 0.675 | 0.596 | 0.458 | 0.411 | 0.388 | 0.368 | 0.374 | 0.408 | 0.477 | 0.542 |
| MQ | 1.03 | 1.58 | 1.90 | 1.75 | 1.75 | 1.16 | 0.930 | 0.697 | 0.590 | 0.560 | 0.533 | 0.724 | 1.02 | 1.56 |
| MHQ | 5.96 | 10.7 | 13.4 | 10.7 | 9.47 | 6.03 | 6.37 | 5.15 | 5.51 | 5.68 | 3.79 | 3.93 | 5.86 | 10.2 |
| HQ | 44.4 | 36.1 | 50.3 | 42.6 | 36.8 | 41.5 | 24.0 | 49.7 | 23.8 | 52.1 | 20.2 | 17.8 | 44.4 | 36.1 |
| Jahr | 1984 | 2002 | 2011 | 1970 | 1988 | 1983 | 2002 | 1981 | 1989 | 1981 | 2007 | 1998 | 1984 | 2002 |
| | 1967/2011 | | 1968/2012 45 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 65 | 67 | 61 | 50 | 56 | 52 | 75 | 79 | 75 | 68 | 60 | 61 | 64 | 67 |
| $Mh_A$ mm | 20 | 32 | 39 | 33 | 36 | 23 | 19 | 14 | 12 | 11 | 10 | 15 | 20 | 32 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.286 | am 09.09.2012 | 0.330 | 0.286 | 0.286 | am 09.09.2012 |
| MQ m³/s | 0.915 | | 1.20 | 0.628 | 0.986 | |
| HQ m³/s | 20.3 | am 22.01.2012 | 20.3 | 13.7 | 20.3 | am 22.01.2012 |
| Nq l/(s km²) | 2.18 | | 2.51 | 2.18 | 2.18 | |
| Mq l/(s km²) | 6.96 | | 9.17 | 4.78 | 7.50 | |
| Hq l/(s km²) | 154 | | 154 | 104 | 154 | |
| $h_N$ mm | 773 | | 278 | 495 | 798 | |
| $h_A$ mm | 220 | | 144 | 76 | 237 | |
| | 1968/2012 (*) 45 Jahre | | | | 1968/2012 | |
| NQ m³/s | 0.250 | am 16.09.1974 | 0.320 | 0.250 | 0.250 | am 16.09.1974 |
| MNQ m³/s | 0.343 | | 0.427 | 0.349 | 0.347 | |
| MQ m³/s | 1.10 | | 1.53 | 0.673 | 1.10 | |
| MHQ m³/s | 26.8 | | 24.5 | 12.5 | 24.1 | |
| HQ m³/s | 52.1 | am 11.08.1981 | 50.3 | 52.1 | 52.1 | am 11.08.1981 |
| $HQ_1$ m³/s | 15.9 | | 13.5 | 5.96 | 15.9 | |
| $HQ_5$ m³/s | 28.4 | | 28.4 | 16.8 | 28.4 | |
| MNq l/(s km²) | 2.61 | | 3.25 | 2.66 | 2.64 | |
| Mq l/(s km²) | 8.37 | | 11.6 | 5.12 | 8.37 | |
| MHq l/(s km²) | 204 | | 186 | 95.1 | 183 | |
| | 1968/2012 (*) 45 Jahre | | | | 1968/2012 | |
| $Mh_N$ mm | 769 | | 351 | 418 | 769 | |
| $Mh_A$ mm | 264 | | 183 | 81 | 265 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.250 | 1.90 | 16.09.1974 | 52.1 | 396 | 269 | 11.08.1981 |
| 2 | 0.257 | 1.96 | 29.06.2011 | 50.3 | 383 | | 07.01.2011 |
| 3 | 0.270 | 2.05 | 30.09.1977 | 49.7 | 378 | 264 | 02.06.1981 |
| 4 | 0.270 | 2.05 | 27.06.1976 | 44.4 | 338 | 258 | 23.11.1984 |
| 5 | 0.270 | 2.05 | 26.08.1973 | 44.3 | 337 | 252 | 03.11.1977 |
| 6 | 0.276 | 2.10 | 04.09.1991 | 44.2 | 336 | 292 | 12.01.1993 |
| 7 | 0.283 | 2.15 | 20.08.2009 | 42.6 | 324 | 244 | 23.02.1970 |
| 8 | 0.286 | 2.18 | 09.09.2012 | 41.8 | 318 | 249 | 07.02.1984 |
| 9 | 0.288 | 2.19 | 13.07.2010 | 41.5 | 316 | 248 | 08.04.1983 |
| 10 | 0.299 | 2.28 | 07.08.1990 | 40.0 | 304 | 263 | 18.01.2007 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1968/2012 45 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 11.1 | 11.1 | | | |
| 364 | 10.6 | 10.6 | 35.3 | 12.3 | 4.46 |
| 363 | 9.23 | 9.23 | 29.6 | 10.2 | 4.20 |
| 362 | 7.85 | 7.85 | 18.1 | 9.06 | 3.44 |
| 361 | 5.65 | 6.57 | 15.2 | 7.94 | 3.12 |
| 360 | 5.48 | 6.40 | 13.2 | 7.12 | 3.04 |
| 359 | 5.36 | 5.65 | 12.1 | 6.40 | 2.58 |
| 358 | 5.01 | 5.48 | 12.0 | 5.82 | 2.51 |
| 357 | 5.00 | 5.36 | 12.0 | 5.51 | 2.37 |
| 356 | 4.36 | 5.20 | 11.2 | 5.23 | 2.30 |
| 350 | 3.37 | 3.99 | 8.55 | 3.77 | 1.88 |
| 340 | 2.18 | 3.02 | 6.03 | 2.75 | 1.55 |
| 330 | 1.89 | 2.18 | 4.66 | 2.17 | 1.12 |
| 320 | 1.52 | 1.60 | 3.67 | 1.82 | 0.960 |
| 300 | 1.07 | 1.07 | 2.52 | 1.37 | 0.760 |
| 270 | 0.822 | 0.794 | 1.78 | 1.04 | 0.585 |
| 240 | 0.650 | 0.645 | 1.25 | 0.829 | 0.470 |
| 210 | 0.574 | 0.584 | 1.08 | 0.681 | 0.421 |
| 183 | 0.519 | 0.533 | 1.00 | 0.601 | 0.395 |
| 150 | 0.472 | 0.492 | 0.840 | 0.531 | 0.359 |
| 130 | 0.439 | 0.469 | 0.800 | 0.501 | 0.348 |
| 120 | 0.419 | 0.461 | 0.760 | 0.486 | 0.344 |
| 110 | 0.407 | 0.449 | 0.720 | 0.471 | 0.341 |
| 100 | 0.401 | 0.439 | 0.700 | 0.459 | 0.338 |
| 90 | 0.385 | 0.428 | 0.680 | 0.441 | 0.334 |
| 80 | 0.370 | 0.409 | 0.650 | 0.435 | 0.320 |
| 70 | 0.359 | 0.402 | 0.640 | 0.418 | 0.320 |
| 60 | 0.345 | 0.394 | 0.600 | 0.411 | 0.320 |
| 50 | 0.340 | 0.374 | 0.600 | 0.396 | 0.314 |
| 40 | 0.335 | 0.360 | 0.600 | 0.381 | 0.310 |
| 30 | 0.331 | 0.334 | 0.560 | 0.371 | 0.300 |
| 25 | 0.322 | 0.322 | 0.560 | 0.357 | 0.300 |
| 20 | 0.317 | 0.317 | 0.560 | 0.351 | 0.298 |
| 15 | 0.308 | 0.308 | 0.560 | 0.339 | 0.296 |
| 10 | 0.301 | 0.301 | 0.530 | 0.321 | 0.290 |
| 9 | 0.301 | 0.301 | 0.530 | 0.321 | 0.290 |
| 8 | 0.301 | 0.301 | 0.530 | 0.321 | 0.287 |
| 7 | 0.301 | 0.301 | 0.530 | 0.314 | 0.283 |
| 6 | 0.301 | 0.301 | 0.530 | 0.306 | 0.283 |
| 5 | 0.300 | 0.300 | 0.530 | 0.301 | 0.282 |
| 4 | 0.300 | 0.300 | 0.530 | 0.301 | 0.282 |
| 3 | 0.295 | 0.295 | 0.530 | 0.301 | 0.281 |
| 2 | 0.291 | 0.291 | 0.530 | 0.293 | 0.271 |
| 1 | 0.291 | 0.291 | 0.530 | 0.271 | 0.269 |
| 0 | 0.286 | 0.286 | 0.500 | 0.250 | 0.250 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 986 km²
PNP : NHN + 164.41 m
Lage: 9.4 km oberhalb der Mündung, links

Q
m³/s

Pegel : Uttershausen Nr. 42882806
Gewässer : Schwalm
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.24 | 2.18 | 10.5 | R5.37 | 5.01 | 2.99 | 2.92 | 3.76 | 2.77 | 3.34 | 2.03 | 2.00 | 2.88 | 2.67 |
| 2. | 2.29 | 2.25 | 12.7 | R4.74 | 5.10 | 2.94 | 2.72 | 3.02 | 4.95 | 2.91 | 1.99 | 2.01 | 3.19 | 2.73 |
| 3. | 2.25 | 2.38 | 18.2 | R4.95 | 4.84 | 2.97 | 2.73 | 2.47 | 3.26 | 2.61 | 1.91 | 2.01 | 4.84 | 2.87 |
| 4. | 2.21 | 2.65 | 18.0 | R4.67 | 4.77 | 4.49 | 2.86 | 3.18 | 2.72 | 2.34 | 1.90 | 2.87 | 7.70 | 2.86 |
| 5. | 2.20 | 3.89 | 28.5 | R4.11 | 4.74 | 4.90 | 3.06 | 3.80 | 2.59 | 2.34 | 1.88 | 4.13 | 6.10 | 3.24 |
| 6. | 2.18 | 5.10 | 35.7 | R3.89 | 4.72 | 3.60 | 4.71 | 3.51 | 3.59 | 2.96 | 1.88 | 3.13 | 5.00 | 3.21 |
| 7. | 2.13 | 4.80 | 30.9 | R3.73 | 4.31 | 3.33 | 4.26 | 3.32 | 2.73 | 3.39 | 1.96 | 3.30 | 4.30 | 3.08 |
| 8. | 2.16 | 5.09 | 28.5 | R3.87 | 5.14 | 3.39 | 3.70 | 2.77 | 2.51 | 2.51 | 1.90 | 2.92 | 3.80 | 2.81 |
| 9. | 2.10 | 5.74 | 26.4 | R3.96 | 5.08 | 3.12 | 3.26 | 2.44 | 2.60 | 2.36 | 1.86 | 2.55 | 3.50 | 2.69 |
| 10. | 2.10 | 6.45 | 24.7 | R3.98 | 4.56 | 3.38 | 3.49 | 2.20 | 2.28 | 2.31 | 1.84 | 2.40 | 3.35 | 3.56 |
| 11. | 2.14 | 5.08 | 20.9 | R3.81 | 4.44 | 3.60 | 3.14 | 2.28 | 2.31 | 2.27 | 2.02 | 2.39 | 4.95 | 3.90 |
| 12. | 2.15 | 4.36 | 15.5 | R3.68 | 4.31 | 3.69 | 4.63 | 3.46 | 2.53 | 2.22 | 2.74 | 2.36 | 4.59 | 3.16 |
| 13. | 2.06 | 4.70 | 12.9 | R3.85 | 4.18 | 3.68 | 3.72 | 3.06 | 3.01 | 2.12 | 3.64 | 2.67 | 3.89 | 2.98 |
| 14. | 2.03 | 6.72 | 11.8 | R3.91 | 4.10 | 3.41 | 3.02 | 2.91 | 16.5 | 2.01 | 2.66 | 2.67 | 3.67 | 3.11 |
| 15. | 2.06 | 11.0 | 10.2 | R4.26 | 3.92 | 3.19 | 3.03 | 2.76 | 21.8 | 2.00 | 2.28 | 4.13 | 3.25 | 12.3 |
| 16. | 2.18 | 16.2 | 8.79 | R4.31 | 3.83 | 3.24 | 3.51 | 2.55 | 15.4 | 2.83 | 2.24 | 3.61 | 3.16 | 22.0 |
| 17. | 2.14 | 24.3 | 7.26 | R4.14 | 3.73 | 2.92 | 3.40 | 3.19 | 11.5 | 3.30 | 2.16 | 2.85 | 3.04 | 19.3 |
| 18. | 2.19 | 15.6 | 6.24 | R5.10 | 3.83 | 2.93 | 2.95 | 2.72 | 12.5 | 2.24 | 2.12 | 2.74 | 2.91 | 15.6 |
| 19. | 2.11 | 10.2 | 7.88 | R5.77 | 4.21 | 2.94 | 2.95 | 2.36 | 8.65 | 2.03 | 2.07 | 2.46 | 2.89 | 12.3 |
| 20. | 2.11 | 8.15 | 20.9 | R5.68 | 3.73 | 3.03 | 3.79 | 5.60 | 6.62 | 1.95 | 2.01 | 2.43 | 2.82 | 10.3 |
| 21. | 2.10 | 7.56 | 21.9 | 4.40 | 3.55 | 3.27 | 3.67 | 9.96 | 7.08 | 1.99 | 2.06 | 2.41 | 2.68 | 8.71 |
| 22. | 2.13 | 7.94 | 28.7 | 4.02 | 3.53 | 3.93 | 2.86 | 5.57 | 6.73 | 1.97 | 2.05 | 2.36 | 2.58 | 9.47 |
| 23. | 2.20 | 10.7 | 29.3 | 3.98 | 3.37 | 3.67 | 2.67 | 4.39 | 4.92 | 1.91 | 2.16 | 2.36 | 2.67 | 14.9 |
| 24. | 2.08 | 10.4 | 26.9 | 4.14 | 3.34 | 3.66 | 2.45 | 3.49 | 4.08 | 2.19 | 2.34 | 2.37 | 2.67 | 24.9 |
| 25. | 2.07 | 9.30 | 25.1 | 4.56 | 3.24 | 3.57 | 2.26 | 3.27 | 3.55 | 3.62 | 2.61 | 2.33 | 2.68 | 22.5 |
| 26. | 2.09 | 7.87 | 20.9 | 4.57 | 3.13 | 3.43 | 2.24 | 3.43 | 3.19 | 2.71 | 2.39 | 2.31 | 2.61 | 17.2 |
| 27. | 2.11 | 6.95 | R13.5 | 4.53 | 3.07 | 3.32 | 2.16 | 2.94 | 2.84 | 2.40 | 2.36 | 2.66 | 3.21 | 20.5 |
| 28. | 2.15 | 6.29 | R11.5 | 4.43 | 3.01 | 3.09 | 2.17 | 2.73 | 3.38 | 2.16 | 2.34 | 2.93 | 3.00 | 23.9 |
| 29. | 2.15 | 5.76 | R10.2 | 4.65 | 2.96 | 2.89 | 2.12 | 2.64 | 5.50 | 2.07 | 2.15 | 2.60 | 2.80 | 20.8 |
| 30. | 2.13 | 10.2 | R8.74 | | 2.95 | 2.86 | 2.10 | 2.82 | 5.72 | 2.01 | 2.03 | 2.58 | 2.78 | 15.1 |
| 31. | | 11.0 | R7.33 | | 3.01 | | 2.28 | | 4.19 | 2.02 | | 3.06 | | 12.9 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 14. | 1. | 18. | 12. | 30. | 30. | 30. | 10. | 10. | 23. | 10. | 1. | 22. | 1. |
| NQ | 2.03 | 2.18 | 6.24 | 3.68 | 2.95 | 2.86 | 2.10 | 2.20 | 2.28 | 1.91 | 1.84 | 2.00 | 2.58 | 2.67 |
| MQ | 2.14 | 7.77 | 18.1 | 4.38 | 3.99 | 3.38 | 3.06 | 3.42 | 5.87 | 2.42 | 2.19 | 2.70 | 3.58 | 10.5 |
| HQ | 2.86 | 30.1 | 40.5 | 6.71 | 5.68 | 6.10 | 5.56 | 13.0 | 24.5 | 4.50 | 4.11 | 4.68 | 8.38 | 26.2 |
| Tag | 5. | 16. | 5. | 2. | 8. | 4. | 6. | 21. | 15. | 7. | 13. | 15. | 4. | 24. |
| $h_N$ mm | 1 | 102 | 90 | 15 | 12 | 41 | 67 | 93 | 121 | 41 | 31 | 53 | 40 | 87 |
| $h_A$ mm | 6 | 21 | 49 | 11 | 11 | 9 | 8 | 9 | 16 | 7 | 6 | 7 | 9 | 29 |
| | 1957/2011 | | 1958/2012 | | | | | | 55 Jahre | | | | | |
| Jahr | 1964 | 1963 | 1964 | 1972 | 1972 | 1976 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1963 |
| NQ | 1.50 | 1.40 | 1.40 | 1.84 | 2.08 | 2.09 | 1.40 | 1.00 | 0.740 | 0.870 | 0.800 | 1.00 | 1.50 | 1.40 |
| MNQ | 3.10 | 3.91 | 4.41 | 4.89 | 4.84 | 4.28 | 3.18 | 2.73 | 2.42 | 2.22 | 2.25 | 2.51 | 3.08 | 3.90 |
| MQ | 5.93 | 9.41 | 11.3 | 10.5 | 10.2 | 7.43 | 5.80 | 4.94 | 4.07 | 3.66 | 3.30 | 4.16 | 5.91 | 9.49 |
| MHQ | 16.1 | 29.3 | 33.8 | 28.7 | 26.0 | 17.8 | 18.6 | 16.0 | 12.7 | 10.5 | 9.28 | 10.9 | 16.1 | 29.5 |
| HQ | 66.3 | 160 | 97.9 | 76.0 | 81.0 | 52.0 | 75.1 | 88.4 | 51.0 | 47.5 | 33.6 | 41.4 | 66.3 | 160 |
| Jahr | 1984 | 1960 | 1995 | 1961 | 1963 | 1962 | 1984 | 2002 | 1966 | 1981 | 2007 | 1966 | 1984 | 1960 |
| | 1957/2011 | | 1958/2012 | | | | | | 55 Jahre | | | | | |
| $Mh_N$ mm | 59 | 63 | 56 | 44 | 49 | 49 | 67 | 70 | 71 | 68 | 54 | 54 | 59 | 64 |
| $Mh_A$ mm | 16 | 26 | 31 | 27 | 28 | 20 | 16 | 13 | 11 | 10 | 9 | 11 | 16 | 26 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 1.84 | am 10.09.2012 | 2.03 | 1.84 | 1.84 | am 10.09.2012 |
| MQ m³/s | 4.98 | | 6.69 | 3.28 | 5.33 | |
| HQ m³/s | 40.5 | am 05.01.2012 | 40.5 | 24.5 | 40.5 | am 05.01.2012 |
| Nq l/(s km²) | 1.87 | | 2.06 | 1.87 | 1.87 | |
| Mq l/(s km²) | 5.05 | | 6.79 | 3.33 | 5.40 | |
| Hq l/(s km²) | 41.1 | | 41.1 | 24.9 | 41.1 | |
| $h_N$ mm | 667 | | 261 | 406 | 691 | |
| $h_A$ mm | 159 | | 107 | 53 | 171 | |
| | 1958/2012 (*) 55 Jahre | | | | 1958/2012 | |
| NQ m³/s | 0.740 | am 19.07.1964 | 1.40 | 0.740 | 0.740 | am 19.07.1964 |
| MNQ m³/s | 1.94 | | 2.77 | 2.00 | 1.94 | |
| MQ m³/s | 6.72 | | 9.15 | 4.32 | 6.72 | |
| MHQ m³/s | 51.5 | | 48.3 | 27.1 | 51.4 | |
| HQ m³/s | 160 | am 06.12.1960 | 160 | 88.4 | 160 | am 06.12.1960 |
| $HQ_1$ m³/s | 33.6 | | 31.3 | 11.2 | 33.6 | |
| $HQ_5$ m³/s | 52.9 | | 51.7 | 32.2 | 52.9 | |
| MNq l/(s km²) | 1.97 | | 2.81 | 2.03 | 1.97 | |
| Mq l/(s km²) | 6.82 | | 9.28 | 4.38 | 6.82 | |
| MHq l/(s km²) | 52.2 | | 49.0 | 27.5 | 52.1 | |
| | 1958/2012 (*) 55 Jahre | | | | 1958/2012 | |
| $Mh_N$ mm | 703 | | 319 | 384 | 704 | |
| $Mh_A$ mm | 215 | | 146 | 70 | 216 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.740 | 0.751 | 19.07.1964 | 160 | 162 | | 06.12.1960 |
| 2 | 0.800 | 0.812 | 03.07.1976 | 97.9 | 99.3 | 357 | 23.01.1995 |
| 3 | 1.28 | 1.30 | 09.09.1973 | 88.4 | 89.7 | 348 | 07.06.2002 |
| 4 | 1.32 | 1.34 | 30.07.1963 | 84.6 | 85.8 | | 13.12.1966 |
| 5 | 1.42 | 1.44 | 07.08.1977 | 81.0 | 82.2 | | 11.03.1963 |
| 6 | 1.42 | 1.44 | 22.09.1974 | 77.4 | 78.5 | | 31.01.1961 |
| 7 | 1.45 | 1.47 | 11.09.1959 | 76.2 | 77.3 | 329 | 04.06.1981 |
| 8 | 1.46 | 1.48 | 06.09.1991 | 75.1 | 76.2 | 338 | 31.05.1984 |
| 9 | 1.50 | 1.52 | 19.07.1960 | 71.0 | 72.0 | 331 | 12.01.1993 |
| 10 | 1.51 | 1.53 | 21.08.1998 | 70.6 | 71.6 | 332 | 07.02.1984 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1958/2012 55 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 35.7 | 35.7 | | | |
| 364 | 30.9 | 30.9 | 83.5 | 47.1 | 16.4 |
| 363 | 29.3 | 29.3 | 74.1 | 42.0 | 15.2 |
| 362 | 28.7 | 28.7 | 68.8 | 37.9 | 14.0 |
| 361 | 28.7 | 28.7 | 61.6 | 35.6 | 13.5 |
| 360 | 28.5 | 28.5 | 60.2 | 33.7 | 11.0 |
| 359 | 26.9 | 26.9 | 58.8 | 32.4 | 10.6 |
| 358 | 26.4 | 26.4 | 55.6 | 31.1 | 10.4 |
| 357 | 25.1 | 25.1 | 53.8 | 29.9 | 10.4 |
| 356 | 24.7 | 24.9 | 53.4 | 28.9 | 9.04 |
| 350 | 20.9 | 21.8 | 44.9 | 24.0 | 7.50 |
| 340 | 12.7 | 16.5 | 36.5 | 17.9 | 6.38 |
| 330 | 10.4 | 12.5 | 31.4 | 14.4 | 5.68 |
| 320 | 7.94 | 9.96 | 25.3 | 12.3 | 5.12 |
| 300 | 5.57 | 5.50 | 19.9 | 9.37 | 4.28 |
| 270 | 4.49 | 4.43 | 13.5 | 7.01 | 3.64 |
| 240 | 3.87 | 3.85 | 10.9 | 5.67 | 2.80 |
| 210 | 3.51 | 3.53 | 9.04 | 4.80 | 2.68 |
| 183 | 3.24 | 3.26 | 7.64 | 4.17 | 2.32 |
| 150 | 2.92 | 3.00 | 6.52 | 3.65 | 2.08 |
| 130 | 2.73 | 2.91 | 6.05 | 3.33 | 1.96 |
| 120 | 2.64 | 2.84 | 5.76 | 3.21 | 1.84 |
| 110 | 2.53 | 2.76 | 5.62 | 3.09 | 1.72 |
| 100 | 2.40 | 2.69 | 5.34 | 2.99 | 1.60 |
| 90 | 2.36 | 2.66 | 5.06 | 2.88 | 1.60 |
| 80 | 2.29 | 2.58 | 4.93 | 2.77 | 1.50 |
| 70 | 2.24 | 2.41 | 4.80 | 2.67 | 1.40 |
| 60 | 2.18 | 2.37 | 4.66 | 2.55 | 1.32 |
| 50 | 2.15 | 2.31 | 4.53 | 2.43 | 1.24 |
| 40 | 2.12 | 2.20 | 4.40 | 2.32 | 1.24 |
| 30 | 2.07 | 2.12 | 4.16 | 2.19 | 1.16 |
| 25 | 2.05 | 2.05 | 4.04 | 2.12 | 1.16 |
| 20 | 2.02 | 2.02 | 3.80 | 2.03 | 1.08 |
| 15 | 2.01 | 2.01 | 3.80 | 1.96 | 1.08 |
| 10 | 1.97 | 1.97 | 3.56 | 1.85 | 1.00 |
| 9 | 1.96 | 1.96 | 3.56 | 1.83 | 1.00 |
| 8 | 1.95 | 1.95 | 3.56 | 1.80 | 1.00 |
| 7 | 1.95 | 1.95 | 3.56 | 1.76 | 1.00 |
| 6 | 1.91 | 1.91 | 3.56 | 1.73 | 1.00 |
| 5 | 1.91 | 1.91 | 3.56 | 1.69 | 1.00 |
| 4 | 1.90 | 1.90 | 3.56 | 1.62 | 0.930 |
| 3 | 1.90 | 1.90 | 3.44 | 1.51 | 0.870 |
| 2 | 1.88 | 1.88 | 3.44 | 1.42 | 0.870 |
| 1 | 1.86 | 1.86 | 3.40 | 1.18 | 0.800 |
| 0 | 1.84 | 1.84 | 3.30 | 0.740 | 0.740 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

Hochwasserabflüsse ab 1968 durch Rückhaltungen beeinflusst

HLUG Wiesbaden

$A_{Eo}$ : 220 km²
PNP : NHN + 165.71 m
Lage: 1.3 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Hebel Nr. 42883558
Gewässer : Efze
Gebiet : Fulda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.518 | 0.449 | 2.74 | R 1.45 | 1.16 | 0.581 | 0.559 | 0.659 | 0.469 | 1.03 | 0.507 | 0.586 | 0.729 | 0.788 |
| 2. | 0.475 | 0.521 | 4.58 | R 1.35 | 1.14 | 0.577 | 0.539 | 0.412 | 0.484 | 0.897 | 0.527 | 0.586 | 0.981 | 0.781 |
| 3. | 0.471 | 0.494 | 4.05 | R 1.27 | 1.08 | 0.570 | 0.682 | 0.512 | 0.429 | 0.836 | 0.527 | 0.573 | 2.05 | 0.846 |
| 4. | 0.436 | 0.697 | 3.62 | R 1.20 | 1.02 | 1.23 | 0.560 | 0.605 | 0.459 | 0.788 | 0.493 | 0.981 | 2.24 | 0.823 |
| 5. | 0.424 | 1.09 | 11.0 | R 1.14 | 1.03 | 0.853 | 0.747 | 0.931 | 0.774 | 0.784 | 0.500 | 0.869 | 1.54 | 0.932 |
| 6. | 0.418 | 0.977 | 9.24 | R 1.09 | 0.983 | 0.726 | 1.11 | 0.601 | 0.792 | 1.22 | 0.520 | 0.863 | 1.19 | 0.924 |
| 7. | 0.463 | 1.09 | 5.79 | R 1.04 | 0.946 | 0.757 | 0.825 | 0.555 | 0.614 | 0.892 | 0.502 | 1.01 | 0.995 | 0.814 |
| 8. | 0.481 | 1.28 | 5.51 | D 1.00 | 1.45 | 0.732 | 0.732 | 0.465 | 0.651 | 0.761 | 0.471 | 0.664 | 0.893 | 0.777 |
| 9. | 0.471 | 1.66 | 4.80 | D 0.968 | 1.34 | 0.700 | 0.653 | 0.405 | 0.725 | 0.751 | 0.459 | 0.613 | 0.852 | 0.777 |
| 10. | 0.459 | 1.37 | 4.15 | D 0.932 | 1.12 | 0.834 | 0.696 | 0.373 | 0.807 | 0.717 | 0.471 | 0.552 | 0.989 | 1.14 |
| 11. | 0.454 | 1.04 | 3.20 | D 0.896 | 1.03 | 0.881 | 1.04 | 0.515 | 0.616 | 0.711 | 0.624 | 0.530 | 1.51 | R 0.990 |
| 12. | 0.455 | 0.878 | 2.87 | D 0.861 | 1.00 | 0.818 | 1.05 | 0.962 | 0.932 | 0.698 | 0.913 | 0.599 | 1.10 | R 0.878 |
| 13. | 0.454 | 1.07 | 3.11 | D 0.827 | 0.935 | 0.798 | 0.649 | 0.546 | 1.11 | 0.653 | 0.914 | 0.606 | 0.943 | R 0.907 |
| 14. | 0.440 | 1.41 | 2.56 | D 0.793 | 0.892 | 0.716 | 0.586 | 0.489 | 9.75 | 0.647 | 0.590 | 0.637 | 0.852 | R 0.924 |
| 15. | 0.471 | 2.75 | 2.23 | R 0.759 | 0.863 | 0.666 | 0.622 | 0.488 | 5.59 | 0.623 | 0.546 | 1.13 | 0.857 | R 7.25 |
| 16. | 0.448 | 6.94 | 1.90 | R 0.727 | 0.846 | 0.657 | 0.661 | 0.516 | 3.50 | 0.908 | 0.540 | 0.793 | 0.835 | 6.08 |
| 17. | 0.452 | 4.47 | 1.63 | R 0.747 | 0.797 | 0.627 | 0.553 | 0.606 | 5.09 | 0.713 | 0.533 | 0.606 | 0.793 | 5.34 |
| 18. | 0.471 | 2.49 | 1.48 | R 1.14 | 0.850 | 0.624 | 0.532 | 0.433 | 4.99 | 0.598 | 0.538 | 0.571 | 0.784 | 4.04 |
| 19. | 0.527 | 1.75 | 3.15 | R 1.72 | 0.856 | 0.611 | 0.583 | 0.417 | 2.79 | 0.586 | 0.534 | 0.546 | 0.799 | 3.24 |
| 20. | 0.495 | 1.49 | 4.93 | R 1.22 | 0.761 | 0.642 | 0.676 | 2.07 | 2.49 | 0.549 | 0.586 | 0.521 | 0.756 | 2.76 |
| 21. | 0.471 | 1.54 | 4.07 | 0.931 | 0.714 | 0.659 | 0.546 | 1.40 | 4.39 | 0.541 | 0.586 | 0.527 | 0.711 | 2.55 |
| 22. | 0.471 | 2.42 | 7.13 | 0.894 | 0.711 | 0.906 | 0.496 | 0.889 | 2.79 | 0.527 | 0.589 | 0.534 | 0.699 | 2.93 |
| 23. | 0.473 | 3.70 | 5.03 | 0.871 | 0.700 | 0.754 | 0.431 | 0.577 | 1.93 | 0.516 | 0.579 | 0.546 | 0.711 | 5.68 |
| 24. | 0.471 | 2.86 | 3.96 | 0.877 | 0.668 | 0.729 | 0.415 | 0.483 | 1.56 | 0.903 | 0.662 | 0.544 | 0.711 | 7.19 |
| 25. | 0.471 | 2.23 | 3.26 | 1.01 | 0.634 | 0.730 | 0.367 | 0.504 | 1.36 | 1.18 | 0.707 | 0.557 | 0.735 | 4.67 |
| 26. | 0.497 | 1.88 | 2.73 | 0.984 | 0.627 | 0.671 | 0.367 | 0.437 | 1.18 | 0.700 | 0.696 | 0.549 | 0.736 | 4.52 |
| 27. | 0.436 | 1.67 | 2.34 | 1.06 | 0.594 | 0.621 | 0.367 | 0.418 | 1.12 | 0.688 | 0.663 | 0.774 | 0.859 | 5.72 |
| 28. | 0.421 | 1.50 | R 2.08 | 0.986 | 0.586 | 0.586 | 0.367 | 0.435 | 1.49 | 0.566 | 0.647 | 0.698 | 0.778 | 7.13 |
| 29. | 0.454 | 1.46 | R 1.89 | 1.12 | 0.581 | 0.579 | 0.360 | 0.423 | 2.13 | 0.543 | 0.643 | 0.651 | 0.777 | 4.56 |
| 30. | 0.429 | 3.07 | R 1.67 | | 0.599 | 0.536 | 0.338 | 0.393 | 1.54 | 0.534 | 0.593 | 0.750 | 0.786 | 3.76 |
| 31. | | 2.63 | R 1.55 | | 0.600 | | 0.366 | | 1.20 | 0.533 | | 0.808 | | 3.46 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 6. | 1. | 18. | 16. | 29. | 30. | 30. | 10. | 3. | 23. | 9. | 20. | 22. | 8.+ |
| NQ | 0.418 | 0.449 | 1.48 | 0.727 | 0.581 | 0.536 | 0.338 | 0.373 | 0.429 | 0.516 | 0.459 | 0.521 | 0.699 | 0.777 |
| MQ | 0.463 | 1.90 | 3.81 | 1.03 | 0.875 | 0.712 | 0.596 | 0.617 | 2.06 | 0.729 | 0.589 | 0.670 | 0.973 | 3.01 |
| HQ | 0.647 | 13.5 | 18.4 | 1.94 | 1.65 | 1.84 | 2.90 | 4.01 | 14.5 | 2.04 | 1.39 | 1.94 | 4.14 | 9.75 |
| Tag | 10. | 16. | 5. | 19. | 8.+ | 4. | 11. | 20. | 14. | 25. | 12. | 4. | 3. | 28. |
| $h_N$ mm | 1 | 97 | 84 | 17 | 13 | 40 | 58 | 92 | 135 | 45 | 29 | 48 | 43 | 91 |
| $h_A$ mm | 5 | 23 | 46 | 12 | 11 | 8 | 7 | 7 | 25 | 9 | 7 | 8 | 11 | 37 |

| | 1962/2011 | | 1963/2012 50 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1964 | 1983 | 1964 + | 1963 | 1963 | 2011 | 2011 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1983 |
| NQ | 0.300 | 0.300 | 0.420 | 0.380 | 0.420 | 0.434 | 0.296 | 0.100 | 0.040 | 0.100 | 0.120 | 0.180 | 0.300 | 0.300 |
| MNQ | 0.676 | 0.915 | 0.966 | 1.06 | 1.11 | 1.03 | 0.714 | 0.598 | 0.469 | 0.404 | 0.428 | 0.494 | 0.678 | 0.917 |
| MQ | 1.30 | 1.89 | 2.22 | 2.08 | 2.31 | 1.74 | 1.32 | 1.09 | 0.914 | 0.704 | 0.704 | 0.897 | 1.30 | 1.93 |
| MHQ | 5.50 | 8.61 | 11.1 | 9.02 | 8.35 | 5.71 | 6.93 | 6.99 | 5.63 | 5.27 | 4.07 | 4.07 | 5.55 | 8.72 |
| HQ | 32.2 | 36.3 | 37.8 | 36.8 | 30.5 | 28.2 | 37.6 | 40.0 | 26.0 | 41.2 | 38.5 | 20.2 | 32.2 | 36.3 |
| Jahr | 1984 | 2002 | 1995 + | 1997 | 1990 | 1994 | 2004 | 1981 | 1966 | 2007 | 2007 | 1998 | 1984 | 2002 |

| | 1962/2011 | | 1963/2012 50 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 61 | 61 | 54 | 43 | 51 | 51 | 66 | 74 | 76 | 67 | 58 | 55 | 61 | 61 |
| $Mh_A$ mm | 15 | 23 | 27 | 24 | 28 | 21 | 16 | 13 | 11 | 9 | 8 | 11 | 15 | 24 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.338 | am 30.05.2012 | 0.418 | 0.338 | 0.338 | am 30.05.2012 |
| MQ m³/s | 1.18 | | 1.48 | 0.879 | 1.31 | |
| HQ m³/s | 18.4 | am 05.01.2012 bei W= 165 cm | 18.4 | 14.5 | 18.4 | am 05.01.2012 bei W= 165 cm |
| Nq l/(s km²) | 1.54 | | 1.90 | 1.54 | 1.54 | |
| Mq l/(s km²) | 5.36 | | 6.73 | 4.00 | 5.98 | |
| Hq l/(s km²) | 83.7 | | 83.7 | 66.0 | 83.7 | |
| $h_N$ mm | 659 | | 252 | 407 | 695 | |
| $h_A$ mm | 169 | | 106 | 64 | 189 | |
| | 1963/2012 (*) 50 Jahre | | | | 1963/2012 | |
| NQ m³/s | 0.040 | am 19.07.1964 | 0.300 | 0.040 | 0.040 | am 19.07.1964 |
| MNQ m³/s | 0.351 | | 0.597 | 0.360 | 0.360 | |
| MQ m³/s | 1.43 | | 1.93 | 0.938 | 1.43 | |
| MHQ m³/s | 22.1 | | 18.9 | 13.7 | 20.5 | |
| HQ m³/s | 41.2 | am 10.08.2007 bei W= 234 cm | 37.8 | 41.2 | 41.2 | am 10.08.2007 bei W= 234 cm |
| $HQ_1$ m³/s | 13.5 | | 10.6 | 5.40 | 13.5 | |
| $HQ_5$ m³/s | 30.5 | | 26.5 | 18.2 | 30.5 | |
| MNq l/(s km²) | 1.60 | | 2.72 | 1.64 | 1.64 | |
| Mq l/(s km²) | 6.50 | | 8.78 | 4.27 | 6.50 | |
| MHq l/(s km²) | 101 | | 86.0 | 62.3 | 93.2 | |
| | 1963/2012 (*) 50 Jahre | | | | 1963/2012 | |
| $Mh_N$ mm | 718 | | 321 | 397 | 718 | |
| $Mh_A$ mm | 205 | | 138 | 68 | 206 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.040 | 0.182 | 19.07.1964 | 41.2 | 187 | 234 | 10.08.2007 |
| 2 | 0.160 | 0.728 | 03.08.1990 | 40.0 | 182 | 266 | 04.06.1981 |
| 3 | 0.160 | 0.728 | 14.08.1976 | 38.6 | 176 | 251 | 29.09.2007 |
| 4 | 0.204 | 0.928 | 02.09.1991 | 37.8 | 172 | 230 | 07.01.2011 |
| 5 | 0.216 | 0.982 | 20.08.1993 | 37.8 | 172 | 252 | 23.01.1995 |
| 6 | 0.220 | 1.00 | 22.08.1989 | 37.6 | 171 | 249 | 08.05.2004 |
| 7 | 0.220 | 1.00 | 31.08.1963 | 36.8 | 167 | 246 | 25.02.1997 |
| 8 | 0.222 | 1.01 | 13.08.1997 | 36.3 | 165 | 244 | 31.12.2002 |
| 9 | 0.224 | 1.02 | 22.09.2003 | 35.4 | 161 | 240 | 07.06.2002 |
| 10 | 0.260 | 1.18 | 11.10.2004 | 34.7 | 158 | 239 | 12.01.1993 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1963/2012 50 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 11.0 | 11.0 | | | |
| 364 | 9.75 | 9.75 | 29.4 | 12.3 | 2.93 |
| 363 | 9.24 | 9.24 | 28.2 | 9.77 | 2.73 |
| 362 | 7.13 | 7.25 | 20.3 | 8.63 | 2.34 |
| 361 | 6.94 | 7.19 | 17.5 | 7.89 | 2.26 |
| 360 | 5.79 | 7.19 | 14.6 | 7.25 | 1.94 |
| 359 | 5.59 | 7.13 | 13.1 | 6.72 | 1.94 |
| 358 | 5.51 | 6.08 | 11.3 | 6.27 | 1.86 |
| 357 | 5.09 | 5.79 | 11.0 | 5.94 | 1.78 |
| 356 | 5.03 | 5.72 | 11.0 | 5.63 | 1.64 |
| 350 | 4.39 | 5.03 | 8.99 | 4.50 | 1.40 |
| 340 | 3.15 | 4.07 | 6.66 | 3.46 | 1.20 |
| 330 | 2.63 | 3.20 | 5.68 | 2.91 | 1.10 |
| 320 | 2.07 | 2.56 | 4.93 | 2.51 | 1.05 |
| 300 | 1.46 | 1.51 | 4.03 | 2.02 | 0.900 |
| 270 | 1.08 | 1.09 | 2.88 | 1.56 | 0.800 |
| 240 | 0.908 | 0.932 | 2.46 | 1.31 | 0.650 |
| 210 | 0.797 | 0.852 | 2.05 | 1.10 | 0.600 |
| 183 | 0.713 | 0.778 | 1.80 | 0.951 | 0.550 |
| 150 | 0.637 | 0.713 | 1.50 | 0.801 | 0.480 |
| 130 | 0.599 | 0.661 | 1.38 | 0.731 | 0.460 |
| 120 | 0.589 | 0.647 | 1.30 | 0.701 | 0.420 |
| 110 | 0.577 | 0.622 | 1.18 | 0.661 | 0.380 |
| 100 | 0.552 | 0.601 | 1.15 | 0.622 | 0.340 |
| 90 | 0.541 | 0.589 | 1.08 | 0.601 | 0.300 |
| 80 | 0.532 | 0.581 | 1.08 | 0.559 | 0.260 |
| 70 | 0.518 | 0.557 | 1.05 | 0.528 | 0.260 |
| 60 | 0.496 | 0.546 | 1.05 | 0.493 | 0.220 |
| 50 | 0.473 | 0.534 | 0.950 | 0.469 | 0.220 |
| 40 | 0.471 | 0.520 | 0.880 | 0.433 | 0.220 |
| 30 | 0.454 | 0.493 | 0.830 | 0.406 | 0.180 |
| 25 | 0.437 | 0.483 | 0.830 | 0.391 | 0.180 |
| 20 | 0.431 | 0.459 | 0.830 | 0.366 | 0.180 |
| 15 | 0.421 | 0.429 | 0.800 | 0.349 | 0.140 |
| 10 | 0.412 | 0.412 | 0.750 | 0.313 | 0.140 |
| 9 | 0.405 | 0.405 | 0.750 | 0.311 | 0.140 |
| 8 | 0.393 | 0.393 | 0.740 | 0.302 | 0.140 |
| 7 | 0.373 | 0.373 | 0.740 | 0.299 | 0.140 |
| 6 | 0.373 | 0.373 | 0.730 | 0.285 | 0.140 |
| 5 | 0.373 | 0.373 | 0.720 | 0.276 | 0.140 |
| 4 | 0.373 | 0.373 | 0.720 | 0.261 | 0.120 |
| 3 | 0.367 | 0.367 | 0.720 | 0.251 | 0.120 |
| 2 | 0.366 | 0.366 | 0.720 | 0.222 | 0.100 |
| 1 | 0.360 | 0.360 | 0.710 | 0.185 | 0.070 |
| 0 | 0.338 | 0.338 | 0.700 | 0.040 | 0.040 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1988 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 79.9 $km^2$

PNP : NN + 141.93 m

Lage: 3.2 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Steimke A Nr. 4364106

Gewässer : Ahle

Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.504 | 0.500 | 1.91 | 1.56 | 1.15 | 0.896 | 0.767 | 0.834 | 0.760 | 0.619 | 0.495 | 0.458 | 0.429 | 0.529 |
| 2. | 0.512 | 0.545 | 2.97 | 1.44 | 1.08 | 0.894 | 0.778 | 0.714 | 0.663 | 0.608 | 0.494 | 0.458 | 0.440 | 0.543 |
| 3. | 0.522 | 0.586 | 2.22 | 1.33 | 1.05 | 0.871 | 0.814 | 0.867 | 0.640 | 0.628 | 0.500 | 0.453 | 0.450 | 0.534 |
| 4. | 0.524 | 0.572 | 2.18 | 1.31 | 1.02 | 0.954 | 0.773 | 0.991 | 0.606 | 0.620 | 0.492 | 0.712 | 0.452 | 0.646 |
| 5. | 0.509 | 0.693 | 5.21 | 1.28 | 0.987 | 0.936 | 0.891 | 0.978 | 0.646 | 0.626 | 0.501 | 0.587 | 0.444 | 0.725 |
| 6. | 0.508 | 0.630 | 3.63 | 1.29 | 0.986 | 0.895 | 0.831 | 0.753 | 0.610 | 0.653 | 0.510 | 0.612 | 0.467 | 0.613 |
| 7. | 0.489 | 0.768 | 3.98 | 1.30 | 0.997 | 0.885 | 0.750 | 0.729 | 0.728 | 0.614 | 0.494 | 0.519 | 0.586 | 0.538 |
| 8. | 0.496 | 0.794 | 5.40 | 1.30 | 1.24 | 0.883 | 0.743 | 0.704 | 0.802 | 0.592 | 0.490 | 0.472 | 0.488 | 0.535 |
| 9. | 0.504 | 0.864 | 3.56 | 1.29 | 1.06 | 0.881 | 0.746 | 0.669 | 0.708 | 0.585 | 0.488 | 0.475 | 0.464 | 0.537 |
| 10. | 0.489 | 0.754 | 3.03 | 1.29 | 0.984 | 0.880 | 0.741 | 0.686 | 0.688 | 0.567 | 0.471 | 0.474 | 0.455 | 0.888 |
| 11. | 0.490 | 0.673 | 2.45 | 1.28 | 0.983 | 0.918 | 0.727 | 0.719 | 0.804 | 0.560 | 0.558 | 0.475 | 0.469 | 0.676 |
| 12. | 0.486 | 0.752 | 2.38 | 1.28 | 0.982 | 0.895 | 0.743 | 0.688 | 0.770 | 0.569 | 0.536 | 0.502 | 0.416 | 0.594 |
| 13. | 0.484 | 0.950 | 2.99 | 1.28 | 0.946 | 1.11 | 0.732 | 0.662 | 0.971 | 0.529 | 0.514 | 0.452 | 0.407 | 0.593 |
| 14. | 0.491 | 0.952 | 2.42 | 1.20 | 0.918 | 0.905 | 0.699 | 0.658 | 1.75 | 0.530 | 0.504 | 0.448 | 0.410 | 0.588 |
| 15. | 0.507 | 0.738 | 2.12 | 1.48 | 0.918 | 0.873 | 0.704 | 0.656 | 1.12 | 0.527 | 0.502 | 0.659 | 0.410 | 1.44 |
| 16. | 0.506 | 1.62 | 1.94 | 1.18 | 0.917 | 0.870 | 0.724 | 0.735 | 0.901 | 0.710 | 0.500 | 0.514 | 0.405 | 1.74 |
| 17. | 0.495 | 1.97 | 1.83 | 1.55 | 0.894 | 0.867 | 0.706 | 0.687 | 3.79 | 0.549 | 0.574 | 0.481 | 0.405 | 1.77 |
| 18. | 0.472 | 1.35 | 1.66 | 1.20 | 0.927 | 0.865 | 0.689 | 0.643 | 1.79 | 0.503 | 0.571 | 0.478 | 0.412 | 1.84 |
| 19. | 0.491 | 1.06 | 2.89 | 1.34 | 0.915 | 0.838 | 0.685 | 0.623 | 1.61 | 0.486 | 0.512 | 0.441 | 0.404 | 1.30 |
| 20. | 0.474 | 0.995 | 2.89 | 1.13 | 0.915 | 0.859 | 0.657 | 0.805 | 1.48 | 0.512 | 0.494 | 0.445 | 0.472 | 0.953 |
| 21. | 0.487 | 1.84 | 3.12 | 1.04 | 0.880 | 0.924 | 0.627 | 0.649 | 1.13 | 0.497 | 0.480 | 0.460 | 0.515 | 0.880 |
| 22. | 0.472 | 1.99 | 5.38 | 0.994 | 0.932 | 0.906 | 0.698 | 0.645 | 1.03 | 0.483 | 0.475 | 0.463 | 0.482 | 0.973 |
| 23. | 0.475 | 2.07 | 4.40 | 1.10 | 0.974 | 0.884 | 0.729 | 0.582 | 0.949 | 0.466 | 0.485 | 0.459 | 0.483 | 7.72 |
| 24. | 0.478 | 2.16 | 3.18 | 1.22 | 0.972 | 0.847 | 0.715 | 0.632 | 0.773 | 0.470 | 0.544 | 0.469 | 0.567 | 4.66 |
| 25. | 0.481 | 1.82 | 2.53 | 1.25 | 0.944 | 0.845 | 0.706 | 0.649 | 0.673 | 0.716 | 0.477 | 0.463 | 0.519 | 2.60 |
| 26. | 0.484 | 1.69 | 2.25 | 1.17 | 0.930 | 0.842 | 0.715 | 0.598 | 0.663 | 0.602 | 0.457 | 0.428 | 0.540 | 2.11 |
| 27. | 0.489 | 1.42 | 2.11 | 1.09 | 0.905 | 0.827 | 0.713 | 0.620 | 0.729 | 0.577 | 0.469 | 0.420 | 0.552 | 3.04 |
| 28. | 0.500 | 1.23 | 1.99 | 1.12 | 0.903 | 0.811 | 0.707 | 0.613 | 0.752 | 0.511 | 0.455 | 0.438 | 0.549 | 2.50 |
| 29. | 0.504 | 1.18 | 1.88 | 1.18 | 0.901 | 0.773 | 0.704 | 0.863 | 0.661 | 0.493 | 0.462 | 0.432 | 0.538 | 1.58 |
| 30. | 0.512 | 3.22 | 1.75 | | 0.948 | 0.783 | 0.721 | 0.661 | 0.659 | 0.518 | 0.452 | 0.499 | 0.564 | 1.37 |
| 31. | | 2.08 | 1.66 | | 0.956 | | 0.848 | | 0.642 | 0.515 | | 0.432 | | 1.19 |
| Tag | 18.+ | 1. | 31. | 22. | 21. | 29. | 21. | 23. | 4. | 23. | 30. | 27. | 19. | 1. |
| NQ | 0.472 | 0.500 | 1.66 | 0.994 | 0.880 | 0.773 | 0.627 | 0.582 | 0.606 | 0.466 | 0.452 | 0.420 | 0.404 | 0.529 |
| MQ | 0.494 | 1.24 | 2.84 | 1.26 | 0.971 | 0.881 | 0.735 | 0.710 | 0.984 | 0.562 | 0.499 | 0.486 | 0.473 | 1.49 |
| HQ | 0.581 | 5.10 | 11.1 | 1.98 | 1.47 | 1.77 | 1.60 | 4.59 | 6.95 | 2.38 | 2.36 | 1.98 | 0.743 | 11.7 |
| Tag | 3. | 30. | 5. | 15. | 8. | 13. | 31. | 29. | 17. | 25. | 17. | 4. | 2. | 23. |
| $h_N$ mm / $h_A$ mm | 16 | 42 | 95 | 40 | 33 | 29 | 25 | 23 | 33 | 19 | 16 | 16 | 15 | 50 |
| | 1961/2011 | | 1962/2012 | | | | | | 51 Jahre | | | | | |
| Jahr | 1976 | 1964 | 1993 | 1972 | 1972 | 1976 | 1976 | 1976 | 2009 | 1991 | 1991 | 2001 | 1976 | 1964 |
| NQ | 0.277 | 0.377 | 0.241 | 0.407 | 0.479 | 0.499 | 0.287 | 0.266 | 0.372 | 0.332 | 0.403 | 0.357 | 0.277 | 0.377 |
| MNQ | 0.757 | 0.942 | 1.15 | 1.21 | 1.25 | 1.24 | 0.987 | 0.810 | 0.752 | 0.705 | 0.666 | 0.697 | 0.741 | 0.920 |
| MQ | 1.17 | 1.69 | 1.96 | 1.83 | 1.93 | 1.63 | 1.26 | 1.07 | 1.01 | 0.877 | 0.870 | 0.940 | 1.15 | 1.66 |
| MHQ | 5.10 | 8.45 | 8.24 | 6.43 | 6.76 | 3.73 | 3.47 | 4.62 | 4.77 | 3.49 | 3.64 | 3.50 | 4.98 | 8.46 |
| HQ | 30.6 | 25.8 | 28.3 | 17.6 | 23.3 | 22.0 | 11.6 | 31.4 | 20.0 | 15.6 | 29.6 | 35.1 | 30.6 | 25.8 |
| Jahr | 1998 | 1988 | 1995 | 1970 | 1981 | 1994 | 1984 | 1986 | 1965 | 2007 | 2007 | 1998 | 1998 | 1988 |
| $Mh_N$ mm / $Mh_A$ mm | 38 | 57 | 66 | 57 | 65 | 53 | 42 | 35 | 34 | 29 | 28 | 32 | 37 | 56 |

## Hauptwerte

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.420 | am 27.10.2012 | 0.472 | 0.420 | 0.404 | am 19.11.2012 |
| MQ $m^3/s$ | 0.973 | | 1.29 | 0.663 | 0.993 | |
| HQ $m^3/s$ | 11.1 | am 05.01.2012 bei W= 134 cm | 11.1 | 6.95 | 11.7 | am 23.12.2012 bei W= 140 cm |
| Nq $l/(s km^2)$ | 5.26 | | 5.91 | 5.26 | 5.06 | |
| Mq $l/(s km^2)$ | 12.2 | | 16.1 | 8.30 | 12.4 | |
| Hq $l/(s km^2)$ | 139 | | 139 | 87.0 | 146 | |
| $h_N$ mm / $h_A$ mm | 385 | | 254 | 132 | 393 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| NQ $m^3/s$ | 0.241 | am 05.01.1993 | 0.241 | 0.266 | 0.241 | am 05.01.1993 |
| MNQ $m^3/s$ | 0.518 | | 0.669 | 0.583 | 0.550 | |
| MQ $m^3/s$ | 1.35 | | 1.70 | 1.01 | 1.35 | |
| MHQ $m^3/s$ | 15.5 | | 14.0 | 8.13 | 15.4 | |
| HQ $m^3/s$ | 35.1 | am 28.10.1998 bei W= 266 cm | 30.6 | 35.1 | 35.1 | am 28.10.1998 bei W= 266 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 6.48 | | 8.37 | 7.30 | 6.88 | |
| Mq $l/(s km^2)$ | 16.9 | | 21.3 | 12.6 | 16.9 | |
| MHq $l/(s km^2)$ | 194 | | 175 | 102 | 193 | |
| $Mh_N$ mm / $Mh_A$ mm | 534 | | 335 | 201 | 534 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.241 | 3.02 | 05.01.1993 | 35.1 | 439 | 266 | 28.10.1998 |
| 2 | 0.266 | 3.33 | 01.06.1976 | 31.4 | 393 | 248 | 07.06.1986 |
| 3 | 0.313 | 3.92 | 17.01.1986 | 30.6 | 383 | 243 | 01.11.1998 |
| 4 | 0.332 | 4.16 | 07.08.1991 | 29.6 | 371 | 241 | 29.09.2007 |
| 5 | 0.338 | 4.23 | 19.11.1964 | 28.3 | 354 | 232 | 30.01.1995 |
| 6 | 0.357 | 4.47 | 23.10.2001 | 25.8 | 323 | 218 | 19.12.1988 |
| 7 | 0.372 | 4.66 | 19.07.2009 | 24.5 | 307 | 210 | 15.01.1968 |
| 8 | 0.385 | 4.82 | 07.07.2004 | 23.5 | 294 | 207 | 29.12.1986 |
| 9 | 0.404 | 5.06 | 19.11.2012 | 23.4 | 293 | 206 | 13.11.2010 |
| 10 | 0.407 | 5.09 | 16.02.1972 | 23.3 | 292 | 203 | 10.03.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1962/2012 51 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 5.40 | 7.72 | | | |
| 364 | 5.38 | 5.40 | 22.4 | 8.37 | 2.46 |
| 363 | 5.21 | 5.38 | 17.6 | 6.57 | 2.45 |
| 362 | 4.40 | 5.21 | 16.0 | 5.68 | 2.31 |
| 361 | 3.98 | 4.66 | 14.0 | 5.01 | 2.11 |
| 360 | 3.79 | 4.40 | 13.3 | 4.68 | 1.84 |
| 359 | 3.63 | 3.98 | 10.3 | 4.42 | 1.74 |
| 358 | 3.56 | 3.79 | 9.56 | 4.20 | 1.72 |
| 357 | 3.22 | 3.63 | 9.35 | 4.03 | 1.66 |
| 356 | 3.18 | 3.56 | 8.50 | 3.90 | 1.61 |
| 350 | 2.97 | 2.97 | 5.46 | 3.21 | 1.36 |
| 340 | 2.11 | 2.22 | 4.47 | 2.65 | 1.26 |
| 330 | 1.83 | 1.83 | 3.97 | 2.35 | 1.19 |
| 320 | 1.56 | 1.56 | 3.75 | 2.14 | 1.17 |
| 300 | 1.24 | 1.25 | 3.13 | 1.83 | 1.04 |
| 270 | 0.984 | 0.982 | 2.64 | 1.55 | 0.890 |
| 240 | 0.903 | 0.896 | 2.23 | 1.34 | 0.672 |
| 210 | 0.827 | 0.814 | 1.89 | 1.20 | 0.597 |
| 183 | 0.732 | 0.725 | 1.77 | 1.08 | 0.591 |
| 150 | 0.685 | 0.662 | 1.66 | 0.947 | 0.537 |
| 130 | 0.632 | 0.623 | 1.61 | 0.884 | 0.519 |
| 120 | 0.613 | 0.602 | 1.59 | 0.854 | 0.501 |
| 110 | 0.585 | 0.577 | 1.57 | 0.822 | 0.493 |
| 100 | 0.549 | 0.552 | 1.56 | 0.792 | 0.485 |
| 90 | 0.518 | 0.534 | 1.52 | 0.763 | 0.476 |
| 80 | 0.509 | 0.515 | 1.50 | 0.733 | 0.460 |
| 70 | 0.503 | 0.501 | 1.46 | 0.707 | 0.436 |
| 60 | 0.496 | 0.492 | 1.43 | 0.680 | 0.429 |
| 50 | 0.490 | 0.480 | 1.41 | 0.650 | 0.411 |
| 40 | 0.483 | 0.470 | 1.37 | 0.621 | 0.373 |
| 30 | 0.477 | 0.460 | 1.34 | 0.589 | 0.347 |
| 25 | 0.474 | 0.457 | 1.33 | 0.569 | 0.329 |
| 20 | 0.466 | 0.453 | 1.32 | 0.548 | 0.316 |
| 15 | 0.459 | 0.441 | 1.30 | 0.525 | 0.304 |
| 10 | 0.453 | 0.429 | 1.27 | 0.496 | 0.295 |
| 9 | 0.453 | 0.428 | 1.26 | 0.493 | 0.295 |
| 8 | 0.453 | 0.420 | 1.26 | 0.487 | 0.293 |
| 7 | 0.448 | 0.416 | 1.25 | 0.481 | 0.293 |
| 6 | 0.445 | 0.412 | 1.25 | 0.475 | 0.293 |
| 5 | 0.441 | 0.412 | 1.25 | 0.468 | 0.289 |
| 4 | 0.438 | 0.412 | 1.25 | 0.454 | 0.288 |
| 3 | 0.438 | 0.407 | 1.22 | 0.439 | 0.287 |
| 2 | 0.438 | 0.407 | 1.22 | 0.419 | 0.277 |
| 1 | 0.428 | 0.407 | 1.22 | 0.370 | 0.267 |
| 0 | 0.420 | 0.404 | 1.19 | 0.241 | 0.241 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Solling

NLWKN

$A_{Eo}$ : 103 km²
PNP : NN + 336.97 m
Lage: 90.0 km oberhalb der Mündung, rechts

# Q

m³/s

Pegel : Helminghausen Nr. 44100206
Gewässer : Diemel
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.889 | 0.878 | 1.89 | R 2.19 | 1.59 | 1.08 | 1.01 | 1.01 | 0.995 | 0.943 | 1.01 | 0.921 | 0.913 | 0.919 |
| 2. | 0.918 | 0.870 | 1.91 | R 2.19 | 2.07 | 1.04 | 1.01 | 1.01 | 1.01 | 0.966 | 1.00 | 0.903 | 0.913 | 0.916 |
| 3. | 0.934 | 0.905 | 2.75 | R 2.19 | 2.62 | 1.01 | 1.01 | 1.01 | 0.991 | 0.960 | 0.989 | 0.866 | 0.934 | 0.911 |
| 4. | 0.944 | 0.905 | 3.71 | R 2.19 | 2.51 | 1.05 | 1.01 | 1.01 | 1.01 | 0.932 | 0.965 | 0.910 | 0.961 | 0.908 |
| 5. | 0.944 | 0.904 | 3.78 | R 2.19 | 2.07 | 1.10 | 1.01 | 1.01 | 0.997 | 0.956 | 0.994 | 0.957 | 0.919 | 0.906 |
| 6. | 0.955 | 0.904 | 3.95 | R 2.19 | 2.07 | 1.11 | 1.01 | 0.999 | 1.01 | 0.953 | 1.00 | 0.907 | 0.906 | 0.905 |
| 7. | 0.992 | 0.905 | 3.97 | R 2.18 | 2.07 | 1.11 | 1.01 | 1.00 | 1.00 | 0.928 | 1.00 | 0.909 | 0.921 | 0.908 |
| 8. | 0.932 | 0.905 | 4.02 | R 2.22 | 1.73 | 1.11 | 1.01 | 1.01 | 1.01 | 0.905 | 1.01 | 0.919 | 0.942 | 0.911 |
| 9. | 0.908 | 0.905 | 5.07 | R 2.14 | 1.07 | 1.11 | 1.01 | 1.01 | 1.01 | 0.969 | 0.993 | 0.911 | 0.967 | 0.919 |
| 10. | 0.945 | 0.902 | 7.29 | R 2.23 | 1.08 | 1.11 | 1.01 | 1.01 | 1.00 | 1.00 | 1.00 | 0.944 | 0.925 | 1.51 |
| 11. | 0.984 | 0.904 | 8.46 | 2.19 | 1.09 | 1.11 | 1.01 | 1.01 | 1.00 | 0.973 | 0.997 | 0.933 | 0.949 | 2.00 |
| 12. | 0.941 | 0.903 | 8.27 | 2.19 | 1.10 | 1.11 | 1.01 | 1.01 | 0.992 | 0.966 | 0.985 | 0.926 | 0.939 | 2.09 |
| 13. | 1.00 | 0.895 | 6.96 | 1.52 | 1.09 | 1.11 | 1.01 | 1.01 | 1.01 | 0.905 | 1.00 | 0.957 | 0.931 | 2.11 |
| 14. | 0.955 | 0.875 | 5.77 | 1.14 | 1.08 | 1.11 | 1.01 | 1.01 | 0.990 | 0.905 | 0.925 | 0.980 | 0.932 | 2.08 |
| 15. | 0.956 | 0.836 | 5.76 | 1.11 | 1.10 | 1.11 | 1.01 | 1.01 | 0.977 | 0.905 | 0.906 | 0.954 | 0.908 | 2.07 |
| 16. | 0.964 | 0.966 | 4.72 | 1.10 | 1.10 | 1.11 | 1.01 | 1.01 | 1.01 | 0.905 | 0.924 | 0.910 | 0.952 | 2.07 |
| 17. | 0.975 | 1.04 | 5.07 | 1.55 | 1.08 | 1.10 | 1.01 | 1.01 | 1.01 | 0.961 | 0.905 | 0.905 | 0.945 | 1.48 |
| 18. | 0.969 | 1.11 | 6.67 | 2.19 | 1.08 | 1.11 | 1.01 | 1.00 | 0.985 | 1.01 | 0.938 | 0.905 | 0.916 | 1.01 |
| 19. | 0.975 | 1.09 | 8.24 | 2.19 | 1.08 | 1.06 | 1.01 | 1.01 | 1.01 | 1.01 | 0.978 | 0.905 | 0.906 | 1.01 |
| 20. | 0.988 | 1.15 | 8.24 | 1.65 | 1.07 | 1.01 | 1.01 | 0.991 | 1.01 | 1.01 | 0.956 | 0.905 | 0.908 | 1.01 |
| 21. | 0.998 | 1.21 | 7.17 | 1.16 | 1.08 | 1.01 | 1.01 | 1.01 | 0.995 | 1.01 | 0.965 | 0.905 | 0.911 | 1.01 |
| 22. | 0.999 | 1.20 | 5.81 | 1.16 | 1.10 | 1.01 | 1.01 | 1.01 | 0.998 | 1.01 | 0.970 | 0.912 | 0.920 | 1.01 |
| 23. | 0.985 | 1.20 | 5.88 | 1.15 | 1.07 | 1.01 | 1.01 | 1.01 | 0.980 | 1.01 | 0.931 | 0.899 | 0.925 | 1.04 |
| 24. | 0.993 | 1.20 | 5.91 | 1.21 | 1.09 | 1.01 | 1.01 | 1.00 | 0.979 | 1.01 | 0.944 | 0.880 | 0.921 | 1.05 |
| 25. | 0.924 | 1.20 | 5.79 | 1.20 | 1.09 | 1.01 | 1.01 | 1.01 | 0.997 | 1.01 | 0.929 | 0.919 | 0.912 | 1.01 |
| 26. | 0.871 | 1.19 | 4.87 | 1.17 | 1.09 | 1.01 | 1.01 | 1.01 | 0.981 | 1.01 | 0.941 | 0.931 | 0.907 | 1.01 |
| 27. | 0.869 | 1.18 | 3.11 | 1.19 | 1.08 | 1.01 | 1.01 | 0.998 | 0.995 | 1.01 | 0.918 | 0.924 | 0.906 | 1.01 |
| 28. | 0.868 | 1.17 | 2.27 | 1.17 | 1.10 | 1.01 | 1.01 | 0.986 | 0.978 | 1.01 | 0.944 | 0.922 | 0.915 | 1.55 |
| 29. | 0.890 | 1.42 | 2.22 | 1.20 | 1.10 | 1.01 | 1.01 | 0.998 | 0.975 | 1.00 | 0.915 | 0.916 | 0.920 | 2.07 |
| 30. | 0.891 | 1.92 | 2.21 | | 1.10 | 1.01 | 1.01 | 1.01 | 0.952 | 1.01 | 0.937 | 0.922 | 0.933 | 2.06 |
| 31. | | 1.92 | 2.18 | | 1.07 | | 1.01 | | 0.956 | 1.01 | | 0.928 | | 2.05 |

## Hauptwerte

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 28. | 15. | 1. | 16. | 9.+ | 3.+ | 1.+ | 28. | 30. | 8.+ | 17. | 3. | 6.+ | 6. |
| NQ | 0.868 | 0.836 | 1.89 | 1.10 | 1.07 | 1.01 | 1.01 | 0.986 | 0.952 | 0.905 | 0.905 | 0.866 | 0.906 | 0.905 |
| MQ | 0.945 | 1.08 | 4.97 | 1.70 | 1.35 | 1.06 | 1.01 | 1.01 | 0.994 | 0.973 | 0.962 | 0.919 | 0.925 | 1.34 |
| HQ | 1.01 | 2.07 | 8.98 | 2.44 | 3.25 | 1.21 | 1.11 | 1.01 | 1.11 | 1.11 | 1.01 | 1.01 | 1.21 | 2.19 |
| Tag | 1.+ | 29. | 10.+ | 8. | 3. | 1.+ | 2. | 1.+ | 10. | 9.+ | 1.+ | 1.+ | 9. | 10.+ |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 24 | 28 | 129 | 41 | 35 | 27 | 26 | 25 | 26 | 25 | 24 | 24 | 23 | 35 |

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1960 | 1970 | 1970 | 1960 | 1998 | 1955 + | 1967 | 1959 | 1959 | 1959 | 1959 | 1959 |
| NQ | 0.170 | 0.150 | 0.190 | 0.450 | 0.490 | 0.680 | 0.450 | 0.450 | 0.270 | 0.170 | 0.150 | 0.170 | 0.170 | 0.150 |
| MNQ | 1.28 | 1.22 | 1.30 | 1.42 | 1.20 | 1.18 | 1.03 | 1.05 | 1.04 | 1.09 | 1.16 | 1.29 | 1.25 | 1.20 |
| MQ | 2.09 | 2.17 | 2.65 | 2.75 | 2.54 | 2.26 | 1.57 | 1.44 | 1.78 | 1.70 | 2.15 | 2.16 | 2.01 | 2.15 |
| MHQ | 4.06 | 5.02 | 6.13 | 6.23 | 6.33 | 5.36 | 3.69 | 3.49 | 4.48 | 3.60 | 4.39 | 4.40 | 3.85 | 4.98 |
| HQ | 16.1 | 48.4 | 46.7 | 62.4 | 26.8 | 27.0 | 14.3 | 15.4 | 42.4 | 8.81 | 9.84 | 13.9 | 14.8 | 48.4 |
| Jahr | 1940 | 1947 | 1948 | 1946 | 1981 | 1994 | 1965 | 1966 | 1965 | 1975 + | 1992 | 1992 | 1942 | 1947 |

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 53 | 56 | 69 | 67 | 66 | 57 | 41 | 36 | 46 | 44 | 54 | 56 | 50 | 56 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.836 | am 15.12.2011 | 0.836 | 0.866 | 0.866 | am 03.10.2012 |
| MQ m³/s | 1.42 | | 1.86 | 0.977 | 1.44 | |
| HQ m³/s | 8.98 | am 10.01.2012 bei W= 101 cm | 8.98 | 1.11 | 8.98 | am 10.01.2012 bei W= 101 cm |
| Nq l/(s km²) | 8.12 | | 8.12 | 8.41 | 8.41 | |
| Mq l/(s km²) | 13.8 | | 18.1 | 9.49 | 14.0 | |
| Hq l/(s km²) | 87.2 | | 87.2 | 10.8 | 87.2 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 434 | | 284 | 151 | 441 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 0.150 | am 22.09.1959 | 0.150 | 0.150 | 0.150 | am 22.09.1959 |
| MNQ m³/s | 0.728 | | 0.877 | 0.844 | 0.748 | |
| MQ m³/s | 2.10 | | 2.41 | 1.80 | 2.09 | |
| MHQ m³/s | 12.7 | | 11.2 | 7.71 | 13.1 | |
| HQ m³/s | 62.4 | am 01.02.1946 bei W= 287 cm | 62.4 | 42.4 | 62.4 | am 01.02.1946 bei W= 287 cm |
| $HQ_1$ m³/s | 9.0 | | 8.10 | 5.10 | 9.0 | |
| $HQ_5$ m³/s | 17.0 | | 16.0 | 10.0 | 17.0 | |
| MNq l/(s km²) | 7.07 | | 8.51 | 8.19 | 7.26 | |
| Mq l/(s km²) | 20.4 | | 23.4 | 17.5 | 20.3 | |
| MHq l/(s km²) | 123 | | 109 | 74.9 | 127 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 643 | | 368 | 278 | 642 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.150 | 1.46 | 22.09.1959 | 62.4 | 606 | 287 | 08.02.1946 |
| 2 | 0.190 | 1.84 | 07.11.1949 | 48.4 | 470 | 252 | 28.12.1947 |
| 3 | 0.270 | 2.62 | 25.07.1967 | 46.7 | 453 | 248 | 14.01.1948 |
| 4 | 0.270 | 2.62 | 04.12.1953 | 42.4 | 412 | 238 | 16.07.1965 |
| 5 | 0.350 | 3.40 | 08.10.1969 | 27.0 | 262 | 214 | 14.04.1994 |
| 6 | 0.450 | 4.37 | 21.05.1998 | 26.8 | 260 | 193 | 11.03.1981 |
| 7 | 0.450 | 4.37 | 10.12.1969 | 20.0 | 194 | 170 | 22.07.1980 |
| 8 | 0.450 | 4.37 | 12.09.1968 | 20.0 | 194 | 170 | 25.03.1970 |
| 9 | 0.450 | 4.37 | 04.06.1968 | 19.0 | 184 | 166 | 23.01.1976 |
| 10 | 0.450 | 4.37 | 05.06.1955 | 17.5 | 170 | 165 | 27.03.1988 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 8.46 | 8.46 | | | |
| 364 | 8.27 | 8.27 | 55.6 | 11.8 | 4.07 |
| 363 | 8.27 | 8.27 | 54.0 | 9.76 | 4.06 |
| 362 | 8.24 | 8.24 | 25.9 | 9.04 | 4.06 |
| 361 | 7.29 | 7.29 | 20.5 | 8.62 | 4.06 |
| 360 | 7.17 | 7.17 | 18.5 | 8.34 | 3.92 |
| 359 | 6.96 | 6.96 | 15.7 | 7.99 | 3.92 |
| 358 | 6.67 | 6.67 | 14.6 | 7.52 | 3.92 |
| 357 | 5.91 | 5.91 | 14.3 | 6.91 | 3.80 |
| 356 | 5.88 | 5.88 | 13.9 | 6.44 | 3.67 |
| 350 | 5.07 | 5.07 | 13.9 | 5.01 | 2.50 |
| 340 | 2.62 | 2.62 | 8.61 | 4.61 | 1.28 |
| 330 | 2.21 | 2.21 | 7.50 | 4.34 | 1.28 |
| 320 | 2.14 | 2.11 | 6.09 | 4.12 | 1.28 |
| 300 | 1.21 | 1.52 | 4.87 | 3.43 | 1.21 |
| 270 | 1.11 | 1.11 | 4.73 | 2.40 | 1.05 |
| 240 | 1.04 | 1.04 | 4.33 | 2.11 | 0.906 |
| 210 | 1.04 | 1.04 | 4.00 | 1.59 | 0.906 |
| 183 | 1.04 | 1.04 | 3.34 | 1.29 | 0.870 |
| 150 | 1.01 | 1.04 | 2.98 | 1.15 | 0.810 |
| 130 | 0.998 | 0.999 | 2.93 | 1.08 | 0.500 |
| 120 | 0.992 | 0.993 | 2.84 | 1.08 | 0.270 |
| 110 | 0.981 | 0.981 | 2.66 | 1.08 | 0.230 |
| 100 | 0.973 | 0.967 | 2.53 | 1.04 | 0.230 |
| 90 | 0.961 | 0.957 | 2.35 | 1.02 | 0.200 |
| 80 | 0.954 | 0.945 | 2.20 | 1.02 | 0.200 |
| 70 | 0.943 | 0.933 | 2.01 | 1.01 | 0.190 |
| 60 | 0.929 | 0.926 | 1.83 | 1.01 | 0.190 |
| 50 | 0.921 | 0.921 | 1.60 | 0.986 | 0.190 |
| 40 | 0.910 | 0.916 | 1.56 | 0.957 | 0.190 |
| 30 | 0.906 | 0.911 | 1.53 | 0.916 | 0.190 |
| 25 | 0.906 | 0.909 | 1.50 | 0.889 | 0.190 |
| 20 | 0.905 | 0.907 | 1.47 | 0.820 | 0.190 |
| 15 | 0.903 | 0.906 | 1.46 | 0.757 | 0.170 |
| 10 | 0.890 | 0.906 | 1.45 | 0.561 | 0.170 |
| 9 | 0.889 | 0.906 | 1.45 | 0.553 | 0.170 |
| 8 | 0.880 | 0.906 | 1.45 | 0.512 | 0.170 |
| 7 | 0.878 | 0.906 | 1.45 | 0.501 | 0.170 |
| 6 | 0.875 | 0.906 | 1.45 | 0.501 | 0.170 |
| 5 | 0.871 | 0.906 | 1.45 | 0.455 | 0.170 |
| 4 | 0.870 | 0.905 | 1.44 | 0.401 | 0.170 |
| 3 | 0.869 | 0.903 | 1.44 | 0.274 | 0.170 |
| 2 | 0.868 | 0.899 | 1.41 | 0.250 | 0.170 |
| 1 | 0.866 | 0.880 | 1.37 | 0.190 | 0.170 |
| 0 | 0.836 | 0.866 | 1.36 | 0.150 | 0.150 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Abgabenmenge an der Diemeltalsperre
HQ1, HQ5: Jahresreihe 1940 -2012
Jahresreihe ab 1941
Abfluss aus der Diemeltalsperre
10 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 357.50 km²
PNP : NHN+ 220.39 m
Lage : 64.50 km

# Q

m³/s

Pegel : Westheim Nr. 4433000000100
Gewässer : Diemel
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.10 | 1.67 | 10.6 | 6.71 | 6.56 | 3.11 | 2.50 | 2.69 | 2.18 | 2.11 | 1.92 | 1.55 | 1.76 | 1.94 |
| 2. | 2.11 | 1.78 | 13.1 | 6.06 | 7.30 | 3.08 | 2.91 | 2.38 | 2.13 | 2.03 | 1.79 | 1.56 | 1.81 | 1.99 |
| 3. | 2.06 | 1.85 | 14.2 | 5.68 | 7.22 | 3.01 | 3.36 | 2.81 | 2.09 | 2.03 | 1.71 | 1.53 | 1.83 | 1.96 |
| 4. | 2.01 | 1.90 | 14.9 | 5.60 | 7.17 | 2.87 | 2.87 | 2.84 | 2.09 | 2.02 | 1.69 | 1.98 | 1.84 | 2.03 |
| 5. | 2.01 | 2.18 | 20.4 | 5.32 | 6.41 | 2.71 | 2.96 | 3.03 | 1.96 | 1.96 | 1.63 | 2.02 | 1.88 | 2.06 |
| 6. | 2.02 | 2.15 | 26.5 | 5.04 | 6.07 | 2.67 | 2.97 | 2.58 | 2.01 | 2.83 | 1.60 | 2.10 | 1.85 | 2.00 |
| 7. | 2.04 | 2.37 | 25.7 | 4.75 | 5.85 | 2.72 | 2.79 | 2.45 | 2.01 | 2.09 | 1.59 | 1.95 | 2.14 | 1.99 |
| 8. | 2.00 | 2.83 | 25.7 | 5.04 | 6.13 | 2.67 | 2.75 | 2.34 | 2.12 | 1.94 | 1.56 | 1.77 | 2.15 | 1.87 |
| 9. | 1.97 | 3.81 | 24.2 | 4.85 | 4.93 | 2.67 | 2.79 | 2.26 | 2.02 | 1.98 | 1.55 | 1.71 | 2.07 | 1.98 |
| 10. | 1.93 | 3.80 | 23.4 | 4.85 | 4.69 | 2.65 | 2.81 | 2.21 | 2.25 | 2.05 | 1.52 | 1.68 | 2.03 | 2.75 |
| 11. | 1.96 | 3.53 | 22.4 | 4.48 | 4.55 | 2.66 | 2.77 | 2.25 | 2.40 | 1.96 | 1.89 | 1.69 | 2.03 | 3.00 |
| 12. | 1.90 | 3.41 | 20.6 | 4.31 | 4.52 | 2.90 | 2.73 | 2.33 | 2.31 | 1.93 | 1.98 | 1.74 | 1.97 | 3.09 |
| 13. | 1.89 | 3.58 | 18.7 | 4.08 | 4.33 | 3.19 | 2.69 | 2.23 | 2.45 | 1.92 | 1.76 | 1.73 | 1.95 | 2.97 |
| 14. | 1.88 | 4.17 | 15.6 | 3.48 | 4.24 | 2.78 | 2.63 | 2.23 | 2.93 | 1.87 | 1.63 | 1.80 | 1.97 | 3.03 |
| 15. | 1.84 | 4.20 | 14.3 | 4.25 | 4.20 | 2.69 | 2.69 | 2.22 | 2.93 | 1.83 | 1.55 | 2.16 | 1.94 | 3.83 |
| 16. | 1.83 | 5.21 | 12.4 | 3.76 | 3.96 | 2.69 | 2.76 | 2.26 | 2.69 | 2.30 | 1.58 | 1.88 | 1.93 | 4.32 |
| 17. | 1.83 | 7.10 | 11.2 | 5.86 | 4.09 | 2.66 | 2.63 | 2.16 | 3.33 | 2.02 | 1.57 | 1.78 | 1.95 | 5.02 |
| 18. | 1.81 | 6.70 | 12.0 | 6.36 | 3.92 | 2.65 | 2.56 | 2.11 | 3.28 | 1.88 | 1.56 | 1.79 | 1.94 | 4.91 |
| 19. | 1.79 | 5.95 | 16.4 | 6.62 | 3.78 | 2.65 | 2.53 | 2.07 | 3.12 | 1.80 | 1.61 | 1.75 | 1.97 | 5.04 |
| 20. | 1.77 | 5.82 | 18.6 | 5.50 | 3.74 | 2.64 | 2.59 | 2.31 | 3.41 | 1.74 | 1.60 | 1.74 | 1.91 | 4.84 |
| 21. | 1.76 | 8.30 | 19.5 | 4.48 | 3.48 | 2.56 | 2.49 | 2.27 | 3.04 | 1.75 | 1.60 | 1.73 | 1.89 | 4.70 |
| 22. | 1.77 | 9.78 | 22.1 | 4.29 | 3.46 | 2.61 | 2.47 | 2.15 | 2.85 | 1.78 | 1.56 | 1.73 | 1.88 | 4.70 |
| 23. | 1.75 | 14.4 | 23.0 | 4.44 | 3.39 | 2.59 | 2.41 | 1.99 | 2.73 | 1.74 | 1.59 | 1.70 | 1.90 | 10.7 |
| 24. | 1.72 | 18.4 | 22.5 | 5.01 | 3.31 | 2.59 | 2.46 | 2.02 | 2.52 | 1.77 | 1.59 | 1.67 | 2.00 | 19.2 |
| 25. | 1.70 | 17.1 | 19.4 | 6.13 | 3.26 | 2.56 | 2.37 | 2.14 | 2.40 | 1.99 | 1.57 | 1.74 | 1.93 | 14.5 |
| 26. | 1.67 | 14.1 | 16.2 | 6.74 | 3.17 | 2.58 | 2.34 | 1.99 | 2.36 | 1.83 | 1.56 | 1.75 | 1.94 | 11.8 |
| 27. | 1.65 | 12.4 | 12.7 | 6.32 | 3.15 | 2.54 | 2.30 | 1.95 | 2.35 | 2.10 | 1.56 | 1.75 | 1.95 | 11.6 |
| 28. | 1.65 | 11.0 | 10.1 | 6.10 | 3.14 | 2.54 | 2.27 | 1.94 | 2.52 | 1.88 | 1.57 | 1.73 | 1.96 | 12.7 |
| 29. | 1.62 | 9.71 | 8.97 | 6.09 | 3.10 | 2.51 | 2.25 | 2.39 | 2.39 | 1.78 | 1.56 | 1.76 | 1.96 | 11.5 |
| 30. | 1.66 | 10.8 | 8.11 | | 3.35 | 2.48 | 2.25 | 2.48 | 2.16 | 1.74 | 1.56 | 1.84 | 1.97 | 9.82 |
| 31. | | 10.3 | 7.39 | | 3.22 | | 2.48 | | 2.13 | 1.87 | | 1.80 | | 8.57 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 14. | 29. | 30. | 29.+ | 28. | 5. | 30.+ | 10. | 3. | 1. | 8. |
| NQ | 1.62 | 1.67 | 7.39 | 3.48 | 3.10 | 2.48 | 2.25 | 1.94 | 1.96 | 1.74 | 1.52 | 1.53 | 1.76 | 1.87 |
| MQ | 1.86 | 6.78 | 17.1 | 5.25 | 4.51 | 2.71 | 2.63 | 2.30 | 2.49 | 1.95 | 1.63 | 1.78 | 1.94 | 5.82 |
| HQ | 3.85 | 21.2 | 31.6 | 8.45 | 8.51 | 3.95 | 8.43 | 3.97 | 4.53 | 6.95 | 3.91 | 3.04 | 2.47 | 29.5 |
| Tag | 8. | 24. | 8. | 17. | 3. | 12. | 2. | 29. | 10. | 6. | 11. | 4. | 10. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 13 | 51 | 128 | 37 | 34 | 20 | 20 | 17 | 19 | 15 | 12 | 13 | 14 | 44 |

| | 1974/2011 | | 1975/2012 38 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 2005 | 1996 | 1975 | 1975 | 1976 | 1976 | 1990 | 1990 | 1976 | 1991 | 1976 | 1976 | 2005 |
| NQ | 0.737 | 0.936 | 1.10 | 1.23 | 1.29 | 1.57 | 1.58 | 1.49 | 1.33 | 0.863 | 0.708 | 0.722 | 0.737 | 0.936 |
| MNQ | 2.62 | 3.08 | 3.57 | 4.20 | 3.89 | 3.36 | 2.44 | 2.21 | 1.84 | 1.81 | 1.92 | 2.37 | 2.53 | 2.85 |
| MQ | 5.10 | 6.61 | 8.56 | 7.78 | 8.54 | 6.02 | 3.75 | 3.32 | 2.83 | 2.84 | 3.32 | 3.83 | 4.97 | 6.29 |
| MHQ | 13.3 | 19.3 | 23.6 | 20.1 | 21.5 | 13.3 | 9.70 | 9.67 | 7.93 | 8.50 | 8.42 | 9.50 | 12.9 | 19.0 |
| HQ | 43.8 | 57.1 | 55.9 | 55.2 | 53.6 | 56.4 | 42.3 | 33.0 | 45.8 | 55.6 | 26.8 | 39.1 | 43.8 | 57.1 |
| Jahr | 2007 | 1988 | 1986 | 1980 | 1981 | 1994 | 1984 | 1984 | 1980 | 2007 | 1984+ | 1998 | 2007 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 37 | 50 | 64 | 53 | 64 | 44 | 28 | 24 | 21 | 21 | 24 | 29 | 36 | 47 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.52 | am 10.09.2012 | 1.62 | 1.52 | 1.52 | am 10.09.2012 |
| MQ | m³/s | 4.27 | | 6.43 | 2.13 | 4.19 | |
| HQ | m³/s | 31.6 | am 08.01.2012 bei W = 123 cm | 31.6 | 8.43 | 31.6 | am 08.01.2012 bei W = 123 cm |
| Nq | l/(skm²) | 4.26 | | 4.54 | 4.26 | 4.26 | |
| Mq | l/(skm²) | 11.9 | | 18.0 | 5.96 | 11.7 | |
| Hq | l/(skm²) | 88.5 | | 88.5 | 23.6 | 88.5 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 378 | | 283 | 95 | 371 | |

| | | 1975/2012 (*) 38 Jahre | | | | 1975/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.708 | am 04.09.1991 | 0.737 | 0.708 | 0.708 | am 04.09.1991 |
| MNQ | m³/s | 1.36 | | 1.94 | 1.52 | 1.47 | |
| MQ | m³/s | 5.20 | | 7.11 | 3.32 | 5.16 | |
| MHQ | m³/s | 38.8 | | 37.5 | 16.3 | 38.0 | |
| HQ | m³/s | 57.1 | am 19.12.1988 bei W = 157 cm | 57.1 | 55.6 | 57.1 | am 19.12.1988 bei W = 157 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.80 | | 5.44 | 4.26 | 4.12 | |
| Mq | l/(skm²) | 14.5 | | 19.9 | 9.27 | 14.4 | |
| MHq | l/(skm²) | 109 | | 105 | 45.7 | 106 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 459 | | 311 | 147 | 456 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.708 | 1.98 | 04.09.1991 | 57.1 | 160 | 157 | 19.12.1988 |
| 2 | 0.722 | 2.02 | 28.10.1976 | 56.4 | 158 | 155 | 14.04.1994 |
| 3 | 0.936 | 2.62 | 01.12.2005 | 55.9 | 156 | 157 | 20.01.1986 |
| 4 | 0.956 | 2.67 | 25.12.1975 | 55.6 | 156 | 158 | 22.08.2007 |
| 5 | 1.02 | 2.84 | 30.08.1988 | 55.6 | 155 | 152 | 30.01.1995 |
| 6 | 1.04 | 2.91 | 03.11.1985 | 55.2 | 154 | 156 | 06.02.1980 |
| 7 | 1.10 | 3.07 | 23.01.1996 | 53.8 | 150 | 155 | 04.12.1981 |
| 8 | 1.11 | 3.10 | 09.12.2003 | 53.6 | 150 | 153 | 11.03.1981 |
| 9 | 1.23 | 3.44 | 27.02.1975 | 52.5 | 147 | 157 | 14.01.2011 |
| 10 | 1.27 | 3.56 | 18.08.1986 | 51.9 | 145 | 151 | 31.12.1986 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1975/2012 38 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 26.5 | 26.5 | 52.3 | 32.3 | 14.3 |
| 363 | 25.7 | 25.7 | 47.7 | 28.7 | 14.0 |
| 362 | 25.7 | 25.7 | 42.6 | 26.2 | 13.0 |
| 361 | 24.2 | 24.2 | 41.6 | 24.2 | 11.5 |
| 360 | 23.4 | 23.4 | 38.4 | 22.9 | 11.1 |
| 359 | 23.0 | 23.0 | 38.1 | 21.8 | 9.77 |
| 358 | 22.5 | 22.5 | 38.1 | 20.7 | 9.46 |
| 357 | 22.4 | 22.4 | 35.7 | 19.8 | 8.97 |
| 356 | 22.1 | 22.1 | 35.3 | 19.1 | 8.93 |
| 350 | 18.6 | 18.7 | 25.3 | 15.8 | 8.40 |
| 340 | 14.1 | 12.7 | 21.6 | 12.8 | 7.50 |
| 330 | 10.3 | 10.1 | 17.7 | 10.8 | 6.40 |
| 320 | 7.17 | 6.71 | 15.6 | 9.35 | 4.83 |
| 300 | 5.68 | 5.04 | 12.4 | 7.48 | 3.85 |
| 270 | 3.81 | 3.76 | 9.97 | 5.89 | 3.10 |
| 240 | 3.01 | 2.96 | 8.30 | 4.90 | 2.72 |
| 210 | 2.69 | 2.67 | 7.23 | 4.13 | 2.52 |
| 183 | 2.50 | 2.48 | 6.24 | 3.52 | 2.23 |
| 150 | 2.25 | 2.22 | 5.62 | 3.06 | 1.95 |
| 130 | 2.10 | 2.07 | 5.33 | 2.84 | 1.78 |
| 120 | 2.03 | 2.02 | 5.05 | 2.73 | 1.58 |
| 110 | 2.01 | 1.99 | 4.88 | 2.62 | 1.35 |
| 100 | 1.96 | 1.97 | 4.72 | 2.51 | 1.19 |
| 90 | 1.92 | 1.95 | 4.55 | 2.40 | 1.12 |
| 80 | 1.87 | 1.93 | 4.39 | 2.30 | 1.08 |
| 70 | 1.80 | 1.88 | 4.26 | 2.21 | 1.06 |
| 60 | 1.77 | 1.83 | 3.93 | 2.11 | 1.03 |
| 50 | 1.75 | 1.77 | 3.83 | 2.02 | 0.997 |
| 40 | 1.73 | 1.74 | 3.27 | 1.93 | 0.968 |
| 30 | 1.67 | 1.71 | 3.12 | 1.83 | 0.910 |
| 25 | 1.63 | 1.68 | 3.07 | 1.79 | 0.861 |
| 20 | 1.60 | 1.60 | 2.93 | 1.74 | 0.833 |
| 15 | 1.58 | 1.58 | 2.83 | 1.69 | 0.796 |
| 10 | 1.56 | 1.56 | 2.65 | 1.64 | 0.790 |
| 9 | 1.56 | 1.56 | 2.64 | 1.63 | 0.781 |
| 8 | 1.56 | 1.56 | 2.58 | 1.62 | 0.780 |
| 7 | 1.56 | 1.56 | 2.56 | 1.61 | 0.774 |
| 6 | 1.56 | 1.56 | 2.56 | 1.60 | 0.765 |
| 5 | 1.56 | 1.56 | 2.53 | 1.58 | 0.754 |
| 4 | 1.56 | 1.56 | 2.53 | 1.56 | 0.747 |
| 3 | 1.55 | 1.55 | 2.51 | 1.55 | 0.740 |
| 2 | 1.55 | 1.55 | 2.50 | 1.54 | 0.738 |
| 1 | 1.55 | 1.55 | 2.50 | 1.52 | 0.720 |
| 0 | 1.52 | 1.52 | 2.43 | 1.47 | 0.708 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Talsperrenbeeinflussungen, Grundmessstelle des Landes (GL)

LANUV NRW

$A_{Eo}$ : 1757 km²
PNP : NHN + 98.56 m
Lage: 3.1 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Helmarshausen Nr. 44950055
Gewässer : Diemel
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.53 | 5.40 | 21.1 | R20.2 | 17.6 | 9.26 | 7.36 | 9.48 | 6.57 | 5.89 | 5.26 | 4.73 | 5.54 | 5.10 |
| 2. | 6.28 | 5.32 | 24.7 | R17.8 | 18.1 | 9.04 | 6.64 | 6.99 | 6.19 | 5.70 | 4.98 | 4.56 | 5.68 | 5.14 |
| 3. | 6.31 | 5.89 | 29.0 | R17.0 | 17.8 | 8.93 | 9.43 | 6.94 | 6.00 | 5.69 | 4.83 | 4.52 | 5.98 | 5.47 |
| 4. | 6.06 | 6.25 | 28.5 | R17.1 | 17.6 | 9.13 | 7.87 | 9.20 | 5.77 | 5.96 | 4.84 | 5.40 | 6.09 | 5.39 |
| 5. | 6.03 | 6.34 | 35.0 | R15.8 | 16.7 | 8.86 | 8.00 | 15.2 | 5.77 | 5.74 | 4.85 | 6.93 | 5.75 | 6.09 |
| 6. | 5.96 | 6.84 | 58.6 | R14.3 | 15.7 | 8.66 | 9.38 | 9.31 | 5.78 | 6.20 | 4.66 | 7.82 | 5.77 | 5.86 |
| 7. | 6.11 | 6.67 | 53.8 | R13.4 | 14.8 | 8.61 | 7.97 | 8.18 | 5.77 | 6.37 | 4.67 | 6.15 | 5.81 | 5.43 |
| 8. | 5.76 | 7.70 | 52.5 | R14.7 | 16.4 | 8.54 | 7.64 | 7.33 | 6.70 | 5.55 | 4.72 | 5.86 | 6.08 | 5.28 |
| 9. | 6.03 | 8.24 | 49.9 | R14.3 | 15.7 | 8.42 | 7.34 | 6.72 | 6.32 | 5.33 | 4.61 | 5.57 | 5.87 | 5.36 |
| 10. | 5.89 | 9.69 | 45.2 | R13.7 | 14.0 | 8.52 | 7.38 | 6.35 | 5.63 | 5.39 | 4.60 | 5.60 | 5.83 | 6.75 |
| 11. | 5.63 | 8.56 | 40.9 | R13.1 | 13.5 | 8.46 | 7.07 | 6.31 | 6.88 | 5.39 | 4.74 | 5.28 | 6.05 | 8.47 |
| 12. | 5.80 | 8.02 | 37.4 | R12.5 | 12.9 | 8.44 | 6.96 | 6.39 | 7.17 | 5.31 | 7.00 | 5.53 | 5.41 | 7.17 |
| 13. | 5.86 | 8.23 | 36.4 | R13.0 | 12.5 | 10.9 | 6.94 | 6.40 | 7.43 | 5.18 | 5.52 | 5.93 | 5.62 | 7.00 |
| 14. | 5.84 | 9.79 | 33.0 | R12.0 | 12.2 | 9.49 | 6.82 | 6.16 | 11.7 | 5.26 | 4.93 | 5.61 | 5.26 | 6.93 |
| 15. | 5.86 | 9.75 | 29.7 | R14.6 | 11.9 | 8.72 | 7.03 | 6.18 | 11.1 | 4.69 | 4.84 | 7.30 | 4.99 | 9.99 |
| 16. | 5.74 | 10.5 | 27.4 | R15.7 | 11.6 | 8.60 | 7.93 | 6.60 | 9.83 | 5.97 | 4.81 | 7.31 | 5.13 | 14.3 |
| 17. | 5.67 | 18.8 | 23.8 | R15.3 | 11.3 | 8.22 | 7.43 | 6.84 | 12.6 | 6.27 | 4.83 | 6.25 | 5.06 | 15.2 |
| 18. | 5.40 | 18.8 | 23.4 | R20.0 | 11.3 | 8.25 | 6.95 | 5.80 | 12.5 | 5.20 | 4.63 | 5.76 | 5.13 | 15.6 |
| 19. | 5.62 | 15.1 | 28.9 | 18.6 | 10.9 | 8.09 | 7.29 | 5.73 | 9.97 | 4.93 | 4.66 | 5.42 | 5.38 | 18.7 |
| 20. | 5.57 | 13.3 | 45.7 | 18.1 | 10.5 | 7.97 | 7.25 | 7.13 | 10.0 | 4.84 | 4.77 | 5.37 | 5.24 | 15.9 |
| 21. | 5.45 | 16.9 | 42.1 | 15.4 | 10.3 | 8.06 | 7.07 | 8.94 | 8.73 | 4.84 | 4.69 | 5.42 | 4.76 | 13.7 |
| 22. | 5.70 | 19.3 | 58.1 | 14.7 | 10.0 | 8.37 | 6.74 | 7.01 | 7.60 | 5.12 | 4.74 | 5.24 | 4.86 | 13.9 |
| 23. | 5.40 | 24.5 | 54.6 | 14.8 | 10.0 | 8.47 | 6.58 | 6.39 | 7.22 | 4.77 | 4.68 | 5.17 | 5.04 | 28.1 |
| 24. | 5.37 | 27.7 | 57.4 | 15.8 | 9.81 | 8.05 | 6.68 | 5.89 | 6.89 | 4.79 | 4.89 | 5.18 | 5.45 | 55.8 |
| 25. | 5.46 | 34.5 | 49.1 | 18.1 | 9.65 | 7.85 | 6.18 | 6.38 | 6.59 | 6.12 | 5.45 | 5.22 | 5.28 | 41.4 |
| 26. | 5.56 | 26.2 | 41.8 | 18.4 | 9.34 | 7.61 | 6.06 | 6.17 | 6.43 | 5.75 | 4.86 | 5.24 | 5.12 | 34.0 |
| 27. | 5.42 | 22.4 | 36.3 | 18.6 | 9.08 | 7.11 | 5.94 | 5.82 | 6.04 | 5.66 | 4.74 | 5.36 | 5.16 | 32.2 |
| 28. | 5.44 | 19.9 | R31.4 | 17.9 | 9.10 | 7.25 | 5.87 | 5.92 | 9.71 | 5.52 | 4.69 | 5.15 | 5.18 | 39.5 |
| 29. | 5.27 | 17.8 | R28.4 | 18.0 | 9.07 | 7.39 | 5.87 | 5.89 | 7.49 | 4.88 | 4.67 | 5.24 | 5.12 | 33.1 |
| 30. | 5.33 | 20.2 | R26.3 | | 9.19 | 6.84 | 5.87 | 7.98 | 6.54 | 4.94 | 4.69 | 5.48 | 5.09 | 28.3 |
| 31. | | 22.6 | R23.1 | | 9.57 | | 5.76 | | 6.09 | 5.44 | | 5.94 | | 25.1 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 2. | 1. | 14. | 29. | 30. | 31. | 19. | 10. | 15. | 10. | 3. | 21. | 1. |
| NQ | 5.27 | 5.32 | 21.1 | 12.0 | 9.07 | 6.84 | 5.76 | 5.73 | 5.63 | 4.69 | 4.60 | 4.52 | 4.76 | 5.10 |
| MQ | 5.74 | 14.2 | 37.9 | 16.0 | 12.5 | 8.40 | 7.07 | 7.19 | 7.71 | 5.44 | 4.90 | 5.66 | 5.42 | 16.8 |
| HQ | 12.3 | 39.6 | 62.9 | 24.1 | 24.2 | 14.7 | 15.2 | 20.0 | 16.1 | 9.12 | 8.31 | 16.4 | 8.76 | 59.2 |
| Tag | 8. | 25. | 22. | 29. | 1. | 30. | 4. | 5. | 17. | 14. | 12. | 6. | 23. | 24. |
| $h_N$ mm | 2 | 111 | 118 | 24 | 13 | 33 | 59 | 81 | 95 | 45 | 26 | 48 | 31 | 113 |
| $h_A$ mm | 8 | 22 | 58 | 23 | 19 | 12 | 11 | 11 | 12 | 8 | 7 | 9 | 8 | 26 |

| | 1963/2011 | | 1964/2012 48 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1997 | 1996 | 1996 | 1977 | 1977 | 1996 | 1996 | 1993 | 1996 | 1976 | 1976 | 1971 | 1997 |
| NQ | 3.68 | 4.87 | 5.11 | 4.70 | 5.63 | 5.96 | 4.24 | 3.47 | 2.62 | 3.75 | 3.20 | 3.34 | 3.90 | 4.87 |
| MNQ | 8.40 | 10.5 | 12.1 | 13.7 | 13.6 | 12.8 | 9.55 | 8.43 | 7.15 | 6.63 | 6.91 | 7.68 | 8.44 | 10.5 |
| MQ | 13.0 | 17.9 | 22.1 | 21.7 | 23.1 | 18.4 | 13.2 | 11.3 | 10.4 | 8.86 | 9.11 | 10.5 | 12.8 | 17.9 |
| MHQ | 29.6 | 46.0 | 57.5 | 53.6 | 50.3 | 31.4 | 28.0 | 25.6 | 38.8 | 20.7 | 19.5 | 20.2 | 29.2 | 46.5 |
| HQ | 118 | 163 | 228 | 196 | 140 | 108 | 96.6 | 85.0 | 820 | 86.0 | 98.6 | 70.0 | 118 | 163 |
| Jahr | 1998 | 1988 | 1968 | 1970 | 1981 | 1994 | 1984 | 1984 | 1965 | 1981 | 2007 | 1998 | 1998 | 1988 |

| | 1963/2011 | | 1964/2012 49 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 67 | 72 | 65 | 52 | 59 | 52 | 67 | 75 | 74 | 69 | 62 | 57 | 66 | 74 |
| $Mh_A$ mm | 19 | 27 | 34 | 31 | 35 | 27 | 20 | 17 | 16 | 14 | 13 | 16 | 19 | 27 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 4.52 | am 03.10.2012 | 5.27 | 4.52 | 4.52 | am 03.10.2012 |
| MQ m³/s | 11.1 | | 15.9 | 6.33 | 11.3 | |
| HQ m³/s | 62.9 | am 22.01.2012 | 62.9 | 20.0 | 62.9 | am 22.01.2012 |
| Nq l/(s km²) | 2.57 | | 3.00 | 2.57 | 2.57 | |
| Mq l/(s km²) | 6.31 | | 9.04 | 3.60 | 6.41 | |
| Hq l/(s km²) | 35.8 | | 35.8 | 11.4 | 35.8 | |
| $h_N$ mm | 655 | | 301 | 354 | 686 | |
| $h_A$ mm | 199 | | 142 | 57 | 203 | |
| | 1964/2012 (*) 48 Jahre | | | | 1964/2012 | |
| NQ m³/s | 2.62 | am 17.07.1993 | 3.68 | 2.62 | 2.62 | am 17.07.1993 |
| MNQ m³/s | 5.56 | | 7.48 | 6.05 | 5.95 | |
| MQ m³/s | 14.9 | | 19.4 | 10.5 | 14.9 | |
| MHQ m³/s | 108 | | 89.8 | 56.5 | 107 | |
| HQ m³/s | 820 | am 17.07.1965 | 228 | 820 | 820 | am 17.07.1965 |
| $HQ_1$ m³/s | 62.9 | | 60.2 | 24.1 | 62.9 | |
| $HQ_5$ m³/s | 108 | | 108 | 50.8 | 108 | |
| MNq l/(s km²) | 3.16 | | 4.26 | 3.44 | 3.39 | |
| Mq l/(s km²) | 8.48 | | 11.0 | 5.98 | 8.48 | |
| MHq l/(s km²) | 61.5 | | 51.1 | 32.2 | 60.9 | |
| | 1964/2012 (*) 49 Jahre | | | | 1964/2012 | |
| $Mh_N$ mm | 772 | | 368 | 404 | 773 | |
| $Mh_A$ mm | 267 | | 174 | 95 | 268 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.62 | 1.49 | 17.07.1993 | 820 | 467 | | 17.07.1965 |
| 2 | 3.20 | 1.82 | 22.09.1976 | 260 | 148 | | 20.07.1956 |
| 3 | 3.47 | 1.97 | 08.06.1996 | 228 | 130 | | 15.01.1968 |
| 4 | 3.83 | 2.18 | 02.11.1991 | 196 | 112 | | 23.02.1970 |
| 5 | 3.90 | 2.22 | 11.08.1977 | 163 | 92.8 | 391 | 20.12.1988 |
| 6 | 3.90 | 2.22 | 09.11.1971 | 162 | 92.2 | | 05.12.1981 |
| 7 | 4.05 | 2.30 | 12.09.1974 | 159 | 90.5 | 388 | 02.01.1987 |
| 8 | 4.37 | 2.49 | 20.08.1995 | 140 | 79.7 | | 11.03.1981 |
| 9 | 4.40 | 2.50 | 29.06.1964 | 137 | 78.0 | | 07.02.1980 |
| 10 | 4.50 | 2.56 | 28.09.1992 | 136 | 77.4 | 370 | 20.01.1986 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1964/2012 48 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 58.6 | 58.6 | | | |
| 364 | 58.1 | 58.1 | 400 | 85.5 | 23.6 |
| 363 | 57.4 | 57.4 | 170 | 73.3 | 22.6 |
| 362 | 54.6 | 55.8 | 117 | 65.7 | 21.6 |
| 361 | 53.8 | 54.6 | 102 | 60.1 | 20.3 |
| 360 | 52.5 | 53.8 | 99.0 | 56.9 | 19.4 |
| 359 | 49.9 | 52.5 | 95.7 | 54.0 | 18.5 |
| 358 | 49.1 | 49.9 | 95.7 | 51.3 | 18.2 |
| 357 | 45.7 | 49.1 | 84.5 | 48.7 | 17.9 |
| 356 | 45.2 | 45.7 | 77.6 | 47.1 | 17.6 |
| 350 | 36.3 | 39.5 | 65.0 | 39.6 | 13.4 |
| 340 | 27.7 | 29.7 | 53.4 | 32.6 | 12.8 |
| 330 | 22.4 | 24.7 | 44.3 | 28.3 | 12.2 |
| 320 | 18.6 | 18.4 | 40.3 | 25.5 | 11.9 |
| 300 | 15.8 | 15.6 | 34.4 | 21.0 | 11.3 |
| 270 | 11.6 | 11.6 | 27.7 | 16.8 | 10.4 |
| 240 | 9.10 | 9.07 | 23.8 | 14.4 | 8.25 |
| 210 | 7.98 | 7.85 | 21.6 | 12.6 | 7.15 |
| 183 | 7.11 | 7.01 | 19.7 | 11.4 | 6.58 |
| 150 | 6.39 | 6.31 | 17.9 | 9.81 | 6.03 |
| 130 | 6.11 | 5.97 | 16.7 | 9.03 | 5.81 |
| 120 | 5.96 | 5.89 | 16.4 | 8.69 | 5.69 |
| 110 | 5.89 | 5.78 | 15.8 | 8.38 | 5.57 |
| 100 | 5.78 | 5.70 | 15.2 | 8.02 | 5.45 |
| 90 | 5.73 | 5.54 | 15.0 | 7.72 | 5.18 |
| 80 | 5.60 | 5.43 | 14.8 | 7.41 | 5.13 |
| 70 | 5.46 | 5.36 | 14.4 | 7.19 | 5.01 |
| 60 | 5.40 | 5.26 | 14.2 | 6.91 | 4.92 |
| 50 | 5.28 | 5.15 | 14.0 | 6.69 | 4.79 |
| 40 | 5.18 | 5.04 | 13.6 | 6.41 | 4.65 |
| 30 | 4.86 | 4.85 | 13.4 | 6.08 | 4.50 |
| 25 | 4.84 | 4.84 | 13.2 | 5.91 | 4.35 |
| 20 | 4.79 | 4.77 | 13.0 | 5.70 | 4.20 |
| 15 | 4.73 | 4.73 | 12.8 | 5.49 | 3.90 |
| 10 | 4.69 | 4.69 | 12.6 | 5.26 | 3.76 |
| 9 | 4.68 | 4.68 | 12.6 | 5.16 | 3.62 |
| 8 | 4.68 | 4.68 | 12.6 | 5.14 | 3.62 |
| 7 | 4.67 | 4.67 | 12.4 | 5.06 | 3.62 |
| 6 | 4.67 | 4.67 | 12.4 | 4.91 | 3.62 |
| 5 | 4.66 | 4.66 | 12.2 | 4.85 | 3.62 |
| 4 | 4.63 | 4.63 | 12.2 | 4.76 | 3.48 |
| 3 | 4.61 | 4.61 | 12.0 | 4.66 | 3.48 |
| 2 | 4.60 | 4.60 | 11.6 | 4.51 | 3.48 |
| 1 | 4.56 | 4.56 | 11.6 | 4.22 | 3.34 |
| 0 | 4.52 | 4.52 | 11.4 | 2.62 | 2.62 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1991; AJ 1991;

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 78.01 km²
PNP : NHN+ 295.30 m
Lage : 4.45 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Bredelar Nr. 4427000000100
Gewässer : Hoppecke
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.480 | 0.274 | 5.57 | 1.75 | 3.40 | 0.849 | 0.508 | 0.624 | 0.347 | 0.424 | 0.355 | 0.184 | 0.236 | 0.307 |
| 2. | 0.469 | 0.325 | 7.52 | 1.51 | 3.37 | 0.834 | 0.643 | 0.475 | 0.350 | 0.408 | 0.272 | 0.177 | 0.254 | 0.318 |
| 3. | 0.464 | 0.364 | 7.78 | 1.41 | 3.06 | 0.820 | 0.901 | 0.582 | 0.320 | 0.398 | 0.251 | 0.188 | 0.287 | 0.307 |
| 4. | 0.461 | 0.393 | 7.36 | 1.37 | 2.76 | 0.811 | 0.701 | 0.613 | 0.291 | 0.394 | 0.242 | 0.395 | 0.262 | 0.307 |
| 5. | 0.436 | 0.613 | 7.96 | 1.25 | 2.55 | 0.772 | 0.712 | 0.743 | 0.273 | 0.396 | 0.233 | 0.422 | 0.246 | 0.339 |
| 6. | 0.430 | 0.652 | 8.68 | 1.13 | 2.30 | 0.728 | 0.699 | 0.595 | 0.258 | 0.540 | 0.218 | 0.561 | 0.251 | 0.314 |
| 7. | 0.420 | 0.832 | 8.92 | 1.06 | 2.12 | 0.750 | 0.681 | 0.542 | 0.311 | 0.378 | 0.208 | 0.510 | 0.397 | 0.297 |
| 8. | 0.393 | 0.974 | 9.36 | 1.17 | 2.16 | 0.708 | 0.651 | 0.492 | 0.329 | 0.357 | 0.200 | 0.406 | 0.425 | 0.247 |
| 9. | 0.355 | 1.70 | 8.68 | 1.11 | 1.91 | 0.703 | 0.634 | 0.453 | 0.310 | 0.372 | 0.196 | 0.376 | 0.377 | 0.280 |
| 10. | 0.354 | 1.73 | 7.53 | 1.10 | 1.80 | 0.707 | 0.635 | 0.429 | 0.273 | 0.352 | 0.188 | 0.356 | 0.359 | 0.356 |
| 11. | 0.356 | 1.58 | 6.46 | 0.988 | 1.75 | 0.694 | 0.609 | 0.413 | 0.350 | 0.314 | 0.264 | 0.330 | 0.380 | 0.317 |
| 12. | 0.331 | 1.67 | 5.77 | 0.906 | 1.69 | 0.718 | 0.611 | 0.384 | 0.384 | 0.293 | 0.433 | 0.326 | 0.343 | 0.296 |
| 13. | 0.325 | 1.85 | 5.31 | 0.982 | 1.65 | 0.758 | 0.580 | 0.367 | 0.424 | 0.274 | 0.292 | 0.305 | 0.331 | 0.268 |
| 14. | 0.321 | 2.19 | 4.47 | 0.962 | 1.59 | 0.671 | 0.559 | 0.361 | 0.576 | 0.257 | 0.257 | 0.319 | 0.322 | 0.272 |
| 15. | 0.318 | 2.34 | 3.65 | 1.06 | 1.53 | 0.645 | 0.592 | 0.373 | 0.570 | 0.241 | 0.238 | 0.431 | 0.319 | 0.609 |
| 16. | 0.306 | 2.78 | 2.99 | 0.978 | 1.47 | 0.636 | 0.642 | 0.386 | 0.500 | 0.342 | 0.222 | 0.360 | 0.310 | 0.816 |
| 17. | 0.306 | 3.14 | 2.55 | 1.33 | 1.42 | 0.594 | 0.610 | 0.366 | 0.889 | 0.273 | 0.208 | 0.341 | 0.299 | 1.14 |
| 18. | 0.304 | 3.12 | 2.28 | 1.58 | 1.38 | 0.603 | 0.556 | 0.322 | 0.931 | 0.238 | 0.207 | 0.313 | 0.305 | 1.53 |
| 19. | 0.286 | 2.96 | 3.08 | 1.81 | 1.33 | 0.597 | 0.532 | 0.307 | 0.917 | 0.219 | 0.206 | 0.302 | 0.311 | 1.68 |
| 20. | 0.290 | 2.88 | 3.99 | 1.44 | 1.36 | 0.587 | 0.567 | 0.362 | 1.15 | 0.213 | 0.221 | 0.289 | 0.291 | 1.64 |
| 21. | 0.286 | 3.43 | 4.96 | 1.27 | 1.12 | 0.576 | 0.513 | 0.376 | 0.988 | 0.220 | 0.208 | 0.268 | 0.278 | 1.59 |
| 22. | 0.282 | 4.09 | 7.00 | 1.24 | 1.07 | 0.590 | 0.505 | 0.355 | 0.881 | 0.225 | 0.198 | 0.267 | 0.273 | 1.52 |
| 23. | 0.276 | 6.79 | 7.62 | 1.45 | 1.03 | 0.585 | 0.485 | 0.309 | 0.796 | 0.212 | 0.195 | 0.249 | 0.273 | 5.99 |
| 24. | 0.268 | 7.83 | 6.91 | 1.96 | 0.989 | 0.585 | 0.521 | 0.307 | 0.733 | 0.220 | 0.190 | 0.250 | 0.332 | 12.5 |
| 25. | 0.279 | 7.53 | 5.56 | 2.98 | 0.962 | 0.565 | 0.463 | 0.349 | 0.661 | 0.279 | 0.183 | 0.246 | 0.299 | 9.10 |
| 26. | 0.282 | 7.12 | 4.44 | 3.43 | 0.943 | 0.590 | 0.442 | 0.311 | 0.601 | 0.262 | 0.185 | 0.255 | 0.289 | 6.83 |
| 27. | 0.275 | 6.92 | 3.56 | 3.16 | 0.916 | 0.555 | 0.416 | 0.293 | 0.598 | 0.332 | 0.194 | 0.241 | 0.307 | 6.30 |
| 28. | 0.274 | 6.29 | 2.94 | 2.96 | 0.867 | 0.537 | 0.401 | 0.271 | 0.632 | 0.258 | 0.213 | 0.251 | 0.296 | 6.35 |
| 29. | 0.265 | 5.45 | 2.51 | 3.08 | 0.853 | 0.518 | 0.384 | 0.368 | 0.526 | 0.229 | 0.191 | 0.251 | 0.302 | 5.55 |
| 30. | 0.274 | 5.27 | 2.22 | | 0.979 | 0.509 | 0.368 | 0.463 | 0.480 | 0.214 | 0.184 | 0.289 | 0.321 | 4.43 |
| 31. | | 4.78 | 1.98 | | 0.906 | | 0.447 | | 0.445 | 0.239 | | 0.271 | | 3.48 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 12. | 29. | 30. | 30. | 28. | 6. | 23. | 25. | 2. | 1. | 8. |
| NQ | 0.265 | 0.274 | 1.98 | 0.906 | 0.853 | 0.509 | 0.368 | 0.271 | 0.258 | 0.212 | 0.183 | 0.177 | 0.236 | 0.247 |
| MQ | 0.339 | 3.16 | 5.47 | 1.60 | 1.65 | 0.660 | 0.567 | 0.420 | 0.552 | 0.302 | 0.228 | 0.314 | 0.309 | 2.43 |
| HQ | 0.540 | 8.15 | 9.83 | 3.54 | 3.51 | 1.03 | 1.44 | 0.860 | 1.28 | 0.730 | 0.630 | 0.670 | 0.530 | 13.5 |
| Tag | 8. | 24. | 8. | 26. | 1. | 12. | 2. | 5. | 20. | 6. | 12. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 108 | 188 | 51 | 57 | 22 | 19 | 14 | 19 | 10 | 8 | 11 | 10 | 83 |

| | 1975/2011 | | 1976/2012 37 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1978 | 1996 | 1996 | 1985 | 1976 | 1976 | 2011 | 1976 | 2003 | 2003 | 1976 | 1983 | 1978 |
| NQ | 0.125 | 0.195 | 0.150 | 0.140 | 0.383 | 0.307 | 0.178 | 0.172 | 0.130 | 0.084 | 0.083 | 0.123 | 0.125 | 0.195 |
| MNQ | 0.497 | 0.744 | 0.950 | 0.982 | 1.03 | 0.916 | 0.588 | 0.432 | 0.335 | 0.289 | 0.297 | 0.398 | 0.497 | 0.741 |
| MQ | 1.30 | 1.96 | 2.53 | 2.11 | 2.46 | 1.76 | 1.02 | 0.807 | 0.638 | 0.537 | 0.661 | 0.782 | 1.29 | 2.01 |
| MHQ | 3.76 | 6.54 | 8.02 | 6.14 | 6.99 | 3.83 | 2.57 | 2.36 | 2.12 | 1.74 | 2.17 | 2.10 | 3.75 | 6.87 |
| HQ | 14.1 | 25.2 | 24.9 | 19.6 | 21.9 | 14.3 | 12.2 | 8.69 | 16.4 | 17.4 | 11.9 | 13.7 | 14.1 | 25.2 |
| Jahr | 2007 | 1986 | 2011 | 1980 | 1999 | 1994 | 1984 | 1984 | 1980 | 2007 | 2007 | 1998 | 2007 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 43 | 67 | 87 | 66 | 85 | 59 | 35 | 27 | 22 | 18 | 22 | 27 | 43 | 69 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.177 | am 02.10.2012 | 0.265 | 0.177 | 0.177 | am 02.10.2012 |
| MQ | m³/s | 1.28 | | 2.17 | 0.398 | 1.22 | |
| HQ | m³/s | 9.83 | am 08.01.2012 bei W = 105 cm | 9.83 | 1.44 | 13.5 | am 24.12.2012 bei W = 128 cm |
| Nq | l/(skm²) | 2.27 | | 3.40 | 2.27 | 2.27 | |
| Mq | l/(skm²) | 16.4 | | 27.8 | 5.10 | 15.6 | |
| Hq | l/(skm²) | 126 | | 126 | 18.5 | 173 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 519 | | 438 | 81 | 493 | |

| | | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.083 | am 22.09.2003 | 0.125 | 0.083 | 0.083 | am 22.09.2003 |
| MNQ | m³/s | 0.193 | | 0.405 | 0.219 | 0.216 | |
| MQ | m³/s | 1.38 | | 2.02 | 0.741 | 1.38 | |
| MHQ | m³/s | 13.5 | | 13.1 | 4.57 | 13.5 | |
| HQ | m³/s | 25.2 | am 31.12.1986 bei W = 194 cm | 25.2 | 17.4 | 25.2 | am 31.12.1986 bei W = 194 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.48 | | 5.20 | 2.81 | 2.77 | |
| Mq | l/(skm²) | 17.7 | | 26.0 | 9.50 | 17.7 | |
| MHq | l/(skm²) | 173 | | 167 | 58.5 | 173 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 558 | | 407 | 151 | 559 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.083 | 1.07 | 22.09.2003 | 25.2 | 323 | 194 | 31.12.1986 |
| 2 | 0.085 | 1.09 | 26.08.1976 | 24.9 | 319 | 199 | 14.01.2011 |
| 3 | 0.102 | 1.30 | 04.09.1991 | 22.1 | 283 | 185 | 20.01.1986 |
| 4 | 0.112 | 1.44 | 13.08.1990 | 21.9 | 281 | 178 | 19.12.1988 |
| 5 | 0.115 | 1.47 | 28.09.1997 | 21.9 | 280 | 178 | 03.03.1999 |
| 6 | 0.125 | 1.61 | 03.11.1983 | 19.6 | 251 | 171 | 06.02.1980 |
| 7 | 0.130 | 1.66 | 01.09.2001 | 18.9 | 242 | 157 | 10.03.1981 |
| 8 | 0.135 | 1.73 | 15.09.1999 | 18.2 | 233 | 159 | 10.03.2000 |
| 9 | 0.140 | 1.79 | 07.02.1996 | 17.4 | 224 | 155 | 22.08.2007 |
| 10 | 0.140 | 1.79 | 25.10.1979 | 17.1 | 220 | 154 | 23.12.1991 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1976/2012 37 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 9.36 | 12.5 | 24.1 | 12.0 | 4.27 |
| 363 | 8.92 | 9.36 | 19.4 | 10.4 | 4.14 |
| 362 | 8.68 | 9.10 | 19.3 | 9.21 | 4.13 |
| 361 | 8.68 | 8.92 | 12.9 | 8.16 | 4.00 |
| 360 | 7.96 | 8.68 | 11.9 | 7.54 | 3.93 |
| 359 | 7.83 | 8.68 | 11.2 | 7.03 | 3.86 |
| 358 | 7.78 | 7.96 | 11.0 | 6.60 | 3.80 |
| 357 | 7.62 | 7.78 | 10.9 | 6.30 | 3.48 |
| 356 | 7.53 | 7.62 | 10.8 | 6.02 | 3.45 |
| 350 | 6.92 | 6.83 | 7.75 | 4.82 | 2.69 |
| 340 | 5.27 | 4.96 | 5.93 | 3.79 | 2.14 |
| 330 | 3.43 | 3.37 | 5.13 | 3.15 | 1.59 |
| 320 | 2.98 | 2.55 | 4.44 | 2.72 | 1.27 |
| 300 | 1.85 | 1.59 | 3.14 | 2.14 | 1.04 |
| 270 | 1.13 | 0.989 | 2.45 | 1.61 | 0.826 |
| 240 | 0.832 | 0.728 | 2.02 | 1.26 | 0.603 |
| 210 | 0.624 | 0.595 | 1.78 | 1.01 | 0.426 |
| 183 | 0.556 | 0.510 | 1.50 | 0.833 | 0.346 |
| 150 | 0.429 | 0.384 | 1.25 | 0.678 | 0.243 |
| 130 | 0.378 | 0.356 | 1.16 | 0.603 | 0.219 |
| 120 | 0.362 | 0.341 | 1.12 | 0.568 | 0.208 |
| 110 | 0.352 | 0.321 | 1.08 | 0.532 | 0.195 |
| 100 | 0.329 | 0.311 | 1.03 | 0.500 | 0.195 |
| 90 | 0.313 | 0.307 | 0.989 | 0.470 | 0.187 |
| 80 | 0.304 | 0.293 | 0.964 | 0.443 | 0.180 |
| 70 | 0.286 | 0.279 | 0.918 | 0.417 | 0.174 |
| 60 | 0.274 | 0.271 | 0.879 | 0.395 | 0.160 |
| 50 | 0.265 | 0.257 | 0.839 | 0.372 | 0.160 |
| 40 | 0.251 | 0.247 | 0.798 | 0.346 | 0.141 |
| 30 | 0.233 | 0.233 | 0.760 | 0.320 | 0.123 |
| 25 | 0.220 | 0.220 | 0.742 | 0.307 | 0.117 |
| 20 | 0.213 | 0.213 | 0.705 | 0.293 | 0.105 |
| 15 | 0.208 | 0.208 | 0.677 | 0.278 | 0.105 |
| 10 | 0.196 | 0.196 | 0.650 | 0.262 | 0.100 |
| 9 | 0.195 | 0.195 | 0.642 | 0.258 | 0.099 |
| 8 | 0.194 | 0.194 | 0.608 | 0.255 | 0.098 |
| 7 | 0.191 | 0.191 | 0.590 | 0.251 | 0.098 |
| 6 | 0.190 | 0.190 | 0.579 | 0.247 | 0.096 |
| 5 | 0.188 | 0.188 | 0.570 | 0.244 | 0.095 |
| 4 | 0.188 | 0.188 | 0.567 | 0.240 | 0.094 |
| 3 | 0.185 | 0.185 | 0.566 | 0.235 | 0.089 |
| 2 | 0.184 | 0.184 | 0.565 | 0.231 | 0.085 |
| 1 | 0.184 | 0.184 | 0.548 | 0.226 | 0.084 |
| 0 | 0.177 | 0.177 | 0.541 | 0.216 | 0.083 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Verdichtungsmessstelle des Landes ,

LANUV NRW

$A_{Eo}$ : 117 km²
PNP : NHN + 213.75 m
Lage: 19.8 km oberhalb der Mündung, links

Q
m³/s

Pegel : Braunsen Nr. 44430055
Gewässer : Twiste
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.412 | 0.374 | 0.888 | R0.967 | 0.796 | 0.591 | 0.544 | 0.546 | 0.393 | 0.380 | 0.378 | 0.309 | 0.414 | 0.414 |
| 2. | 0.414 | 0.401 | 1.07 | R0.914 | 0.790 | 0.593 | 1.49 | 0.475 | 0.390 | 0.374 | 0.324 | 0.300 | 0.458 | 0.419 |
| 3. | 0.414 | 0.385 | 0.983 | R0.872 | 0.757 | 0.593 | 0.946 | 0.527 | 0.415 | 0.377 | 0.324 | 0.311 | 0.486 | 0.417 |
| 4. | 0.408 | 0.413 | 1.21 | D0.825 | 0.725 | 0.614 | 0.649 | 0.564 | 0.390 | 0.374 | 0.324 | 0.411 | 0.483 | 0.426 |
| 5. | 0.414 | 0.484 | 3.87 | D0.779 | 0.723 | 0.593 | 0.711 | 0.589 | 0.397 | 0.382 | 0.324 | 0.359 | 0.468 | 0.457 |
| 6. | 0.412 | 0.430 | 4.32 | D0.743 | 0.719 | 0.593 | 0.650 | 0.512 | 0.394 | 0.398 | 0.324 | 0.409 | 0.456 | 0.415 |
| 7. | 0.408 | 0.523 | 2.63 | D0.708 | 0.695 | 0.593 | 0.595 | 0.516 | 0.398 | 0.391 | 0.309 | 0.354 | 0.448 | 0.416 |
| 8. | 0.410 | 0.528 | 2.53 | R0.673 | 0.768 | 0.593 | 0.542 | 0.502 | 0.388 | 0.379 | 0.314 | 0.325 | 0.447 | 0.410 |
| 9. | 0.406 | 0.577 | 2.09 | R0.648 | 0.722 | 0.593 | 0.554 | 0.481 | 0.362 | 0.355 | 0.314 | 0.324 | 0.446 | 0.414 |
| 10. | 0.403 | 0.495 | 1.70 | R0.634 | 0.722 | 0.593 | 0.560 | 0.481 | 0.356 | 0.354 | 0.303 | 0.324 | 0.450 | 0.538 |
| 11. | 0.398 | 0.467 | 1.45 | R0.619 | 0.709 | 0.593 | 0.529 | 0.471 | 0.367 | 0.346 | 0.333 | 0.324 | 0.465 | 0.469 |
| 12. | 0.387 | 0.448 | 1.31 | R0.601 | 0.669 | 0.601 | 0.517 | 0.477 | 0.373 | 0.331 | 0.358 | 0.326 | 0.435 | 0.425 |
| 13. | 0.388 | 0.471 | 1.25 | R0.601 | 0.657 | 0.630 | 0.517 | 0.438 | 0.389 | 0.325 | 0.324 | 0.325 | 0.417 | 0.415 |
| 14. | 0.387 | 0.603 | 1.13 | R0.619 | 0.657 | 0.594 | 0.529 | 0.445 | 0.545 | 0.324 | 0.324 | 0.329 | 0.421 | 0.431 |
| 15. | 0.382 | 0.577 | 1.06 | R0.969 | 0.657 | 0.593 | 0.540 | 0.442 | 0.402 | 0.324 | 0.324 | 0.483 | 0.419 | 0.867 |
| 16. | 0.387 | 1.07 | 0.989 | 0.792 | 0.657 | 0.588 | 0.524 | 0.441 | 0.398 | 0.391 | 0.324 | 0.394 | 0.431 | 0.736 |
| 17. | 0.382 | 1.17 | 0.929 | 0.959 | 0.649 | 0.577 | 0.520 | 0.420 | 0.415 | 0.326 | 0.337 | 0.369 | 0.431 | 0.781 |
| 18. | 0.382 | 0.789 | 0.859 | 0.843 | 0.655 | 0.585 | 0.536 | 0.400 | 0.415 | 0.324 | 0.342 | 0.368 | 0.436 | 0.799 |
| 19. | 0.385 | 0.657 | 1.35 | 0.882 | 0.642 | 0.584 | 0.540 | 0.403 | 0.421 | 0.324 | 0.330 | 0.367 | 0.426 | 0.688 |
| 20. | 0.384 | 0.617 | 1.58 | 0.797 | 0.601 | 0.565 | 0.543 | 0.587 | 0.445 | 0.323 | 0.324 | 0.367 | 0.424 | 0.641 |
| 21. | 0.381 | 0.873 | 1.69 | 0.732 | 0.609 | 0.574 | 0.525 | 0.485 | 0.414 | 0.337 | 0.324 | 0.367 | 0.422 | 0.623 |
| 22. | 0.377 | 0.860 | 2.22 | 0.727 | 0.604 | 0.593 | 0.516 | 0.487 | 0.414 | 0.325 | 0.324 | 0.367 | 0.420 | 0.657 |
| 23. | 0.381 | 0.935 | 2.02 | 0.783 | 0.599 | 0.598 | 0.565 | 0.412 | 0.406 | 0.324 | 0.324 | 0.369 | 0.423 | 1.42 |
| 24. | 0.372 | 1.27 | 2.25 | 0.795 | 0.593 | 0.593 | 0.605 | 0.420 | 0.397 | 0.324 | 0.335 | 0.367 | 0.434 | 1.39 |
| 25. | 0.375 | 1.13 | 1.72 | 0.830 | 0.593 | 0.593 | 0.481 | 0.434 | 0.402 | 0.443 | 0.342 | 0.367 | 0.429 | 1.08 |
| 26. | 0.374 | 0.901 | 1.45 | 0.791 | 0.597 | 0.602 | 0.450 | 0.406 | 0.394 | 0.326 | 0.325 | 0.367 | 0.431 | 1.03 |
| 27. | 0.381 | 0.814 | R1.32 | 0.790 | 0.593 | 0.582 | 0.489 | 0.404 | 0.425 | 0.339 | 0.324 | 0.368 | 0.443 | 1.20 |
| 28. | 0.378 | 0.759 | R1.24 | 0.790 | 0.593 | 0.563 | 0.491 | 0.404 | 0.451 | 0.324 | 0.324 | 0.364 | 0.436 | 1.43 |
| 29. | 0.376 | 0.723 | R1.15 | 0.794 | 0.593 | 0.551 | 0.482 | 0.510 | 0.398 | 0.324 | 0.322 | 0.399 | 0.421 | 1.08 |
| 30. | 0.375 | 1.09 | R1.08 | | 0.597 | 0.538 | 0.478 | 0.467 | 0.395 | 0.324 | 0.311 | 0.420 | 0.414 | 0.978 |
| 31. | | 0.967 | R1.02 | | 0.595 | | 0.515 | | 0.389 | 0.412 | | 0.413 | | 0.927 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 18. | 12.+ | 24.+ | 30. | 26. | 18. | 10. | 20. | 10. | 2. | 1.+ | 8. |
| NQ | 0.372 | 0.374 | 0.859 | 0.601 | 0.593 | 0.538 | 0.450 | 0.400 | 0.356 | 0.323 | 0.303 | 0.300 | 0.414 | 0.410 |
| MQ | 0.391 | 0.703 | 1.62 | 0.775 | 0.662 | 0.588 | 0.585 | 0.472 | 0.404 | 0.352 | 0.327 | 0.363 | 0.438 | 0.722 |
| HQ | 0.467 | 1.85 | 9.38 | 1.37 | 0.859 | 0.723 | 7.47 | 0.904 | 0.790 | 0.790 | 0.529 | 0.593 | 0.593 | 1.85 |
| Tag | 1.+ | 24. | 5. | 15. | 1.+ | 13. | 2. | 29. | 14. | 31. | 1. | 15. | 3. | 23. |
| $h_N$ mm | 3 | 116 | 109 | 20 | 10 | 35 | 72 | 74 | 72 | 39 | 22 | 48 | 31 | 93 |
| $h_A$ mm | 9 | 16 | 37 | 17 | 15 | 13 | 13 | 10 | 9 | 8 | 7 | 8 | 10 | 17 |

| | 1976/2011 | | 1977/2012 36 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1976 | 1997 | 1996 | 1998 | 1977 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 2006 |
| NQ | 0.286 | 0.320 | 0.318 | 0.360 | 0.400 | 0.380 | 0.306 | 0.247 | 0.187 | 0.112 | 0.129 | 0.250 | 0.286 | 0.332 |
| MNQ | 0.440 | 0.535 | 0.635 | 0.710 | 0.760 | 0.743 | 0.574 | 0.485 | 0.416 | 0.384 | 0.373 | 0.394 | 0.442 | 0.537 |
| MQ | 0.640 | 0.825 | 1.07 | 1.11 | 1.16 | 0.937 | 0.751 | 0.622 | 0.518 | 0.463 | 0.462 | 0.487 | 0.641 | 0.833 |
| MHQ | 2.65 | 3.70 | 4.88 | 5.01 | 3.41 | 1.98 | 2.79 | 2.28 | 1.82 | 1.79 | 1.62 | 1.33 | 2.65 | 3.73 |
| HQ | 15.6 | 16.6 | 16.0 | 16.5 | 14.3 | 12.1 | 13.6 | 9.08 | 8.01 | 8.04 | 8.02 | 8.34 | 15.6 | 16.6 |
| Jahr | 2007 | 2002 | 1995 | 1984 | 1990 | 1994 | 1999 | 2010 | 1980 | 2002 | 1999 | 1998 | 2007 | 2002 |

| | 1976/2011 | | 1977/2012 36 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | 64 | 69 | 63 | 50 | 56 | 45 | 60 | 67 | 65 | 65 | 63 | 53 | 63 | 71 |
| $Mh_A$ mm | 14 | 19 | 24 | 24 | 27 | 21 | 17 | 14 | 12 | 11 | 10 | 11 | 14 | 19 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.300 | am 02.10.2012 | 0.372 | 0.300 | 0.300 | am 02.10.2012 |
| MQ m³/s | 0.605 | | 0.794 | 0.417 | 0.610 | |
| HQ m³/s | 9.38 | am 05.01.2012 bei W= 116 cm | 9.38 | 7.47 | 9.38 | am 05.01.2012 bei W= 116 cm |
| Nq l/(s km²) | 2.56 | | 3.18 | 2.56 | 2.56 | |
| Mq l/(s km²) | 5.17 | | 6.78 | 3.56 | 5.21 | |
| Hq l/(s km²) | 80.1 | | 80.1 | 63.8 | 80.1 | |
| $h_N$ mm | 620 | | 293 | 327 | 625 | |
| $h_A$ mm | 163 | | 107 | 57 | 165 | |
| | 1977/2012 (*) 36 Jahre | | | | 1977/2012 | |
| NQ m³/s | 0.112 | am 28.08.1991 | 0.286 | 0.112 | 0.112 | am 28.08.1991 |
| MNQ m³/s | 0.338 | | 0.427 | 0.353 | 0.351 | |
| MQ m³/s | 0.752 | | 0.957 | 0.551 | 0.753 | |
| MHQ m³/s | 9.73 | | 9.28 | 4.67 | 9.70 | |
| HQ m³/s | 16.6 | am 31.12.2002 bei W= 159 cm | 16.6 | 13.6 | 16.6 | am 31.12.2002 bei W= 159 cm |
| $HQ_1$ m³/s | 8.01 | | 6.77 | 3.02 | 8.01 | |
| $HQ_5$ m³/s | 13.6 | | 13.6 | 8.01 | 13.6 | |
| MNq l/(s km²) | 2.89 | | 3.65 | 3.01 | 3.00 | |
| Mq l/(s km²) | 6.42 | | 8.17 | 4.71 | 6.43 | |
| MHq l/(s km²) | 83.1 | | 79.2 | 39.9 | 82.8 | |
| | 1977/2012 (*) 36 Jahre | | | | 1977/2012 | |
| $Mh_N$ mm | 721 | | 348 | 373 | 721 | |
| $Mh_A$ mm | 203 | | 129 | 75 | 203 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.112 | 0.956 | 28.08.1991 | 16.6 | 142 | 159 | 31.12.2002 |
| 2 | 0.263 | 2.25 | 23.10.1992 | 16.5 | 141 | 157 | 07.02.1984 |
| 3 | 0.270 | 2.31 | 21.09.1977 | 16.0 | 137 | 155 | 23.01.1995 |
| 4 | 0.286 | 2.44 | 31.07.2010 | 15.8 | 135 | 154 | 17.02.1996 |
| 5 | 0.298 | 2.54 | 28.07.1998 | 15.6 | 133 | 153 | 12.11.2007 |
| 6 | 0.300 | 2.56 | 02.10.2012 | 14.9 | 127 | 149 | 22.02.2009 |
| 7 | 0.300 | 2.56 | 22.08.2003 | 14.5 | 124 | 153 | 01.03.1990 |
| 8 | 0.300 | 2.56 | 07.08.1996 | 13.7 | 117 | 142 | 13.01.2011 |
| 9 | 0.300 | 2.56 | 01.10.1986 | 13.6 | 116 | 143 | 03.01.2003 |
| 10 | 0.318 | 2.72 | 01.06.1989 | 13.6 | 116 | 143 | 30.05.1999 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalenderjahr 2012 | 1977/2012 36 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.32 | 4.32 | | | |
| 364 | 3.87 | 3.87 | 9.61 | 4.67 | 1.55 |
| 363 | 2.63 | 2.63 | 7.00 | 3.75 | 1.32 |
| 362 | 2.53 | 2.53 | 7.00 | 3.22 | 1.20 |
| 361 | 2.25 | 2.25 | 5.14 | 2.91 | 1.06 |
| 360 | 2.22 | 2.22 | 5.07 | 2.64 | 1.02 |
| 359 | 2.09 | 2.09 | 4.57 | 2.50 | 0.940 |
| 358 | 2.02 | 2.02 | 4.25 | 2.34 | 0.940 |
| 357 | 1.72 | 1.72 | 4.00 | 2.21 | 0.940 |
| 356 | 1.70 | 1.70 | 3.95 | 2.11 | 0.900 |
| 350 | 1.35 | 1.43 | 3.25 | 1.75 | 0.820 |
| 340 | 1.13 | 1.15 | 2.77 | 1.45 | 0.780 |
| 330 | 0.969 | 0.983 | 2.14 | 1.29 | 0.700 |
| 320 | 0.873 | 0.882 | 2.06 | 1.16 | 0.660 |
| 300 | 0.768 | 0.768 | 1.86 | 0.981 | 0.630 |
| 270 | 0.630 | 0.634 | 1.49 | 0.832 | 0.549 |
| 240 | 0.594 | 0.594 | 1.22 | 0.741 | 0.505 |
| 210 | 0.543 | 0.542 | 0.966 | 0.661 | 0.453 |
| 183 | 0.484 | 0.482 | 0.887 | 0.601 | 0.407 |
| 150 | 0.415 | 0.434 | 0.841 | 0.531 | 0.365 |
| 130 | 0.404 | 0.419 | 0.814 | 0.501 | 0.345 |
| 120 | 0.399 | 0.415 | 0.794 | 0.486 | 0.328 |
| 110 | 0.391 | 0.409 | 0.771 | 0.471 | 0.319 |
| 100 | 0.387 | 0.399 | 0.741 | 0.455 | 0.301 |
| 90 | 0.380 | 0.393 | 0.729 | 0.441 | 0.291 |
| 80 | 0.375 | 0.378 | 0.720 | 0.436 | 0.286 |
| 70 | 0.368 | 0.368 | 0.713 | 0.421 | 0.286 |
| 60 | 0.358 | 0.358 | 0.691 | 0.411 | 0.277 |
| 50 | 0.337 | 0.337 | 0.663 | 0.401 | 0.264 |
| 40 | 0.326 | 0.326 | 0.625 | 0.381 | 0.245 |
| 30 | 0.325 | 0.325 | 0.616 | 0.368 | 0.232 |
| 25 | 0.325 | 0.325 | 0.616 | 0.361 | 0.217 |
| 20 | 0.325 | 0.325 | 0.609 | 0.352 | 0.195 |
| 15 | 0.325 | 0.325 | 0.595 | 0.342 | 0.187 |
| 10 | 0.324 | 0.324 | 0.564 | 0.329 | 0.151 |
| 9 | 0.323 | 0.323 | 0.560 | 0.325 | 0.151 |
| 8 | 0.322 | 0.322 | 0.560 | 0.321 | 0.144 |
| 7 | 0.322 | 0.322 | 0.560 | 0.321 | 0.141 |
| 6 | 0.314 | 0.314 | 0.560 | 0.321 | 0.132 |
| 5 | 0.314 | 0.314 | 0.560 | 0.318 | 0.129 |
| 4 | 0.311 | 0.311 | 0.560 | 0.304 | 0.121 |
| 3 | 0.311 | 0.311 | 0.560 | 0.296 | 0.121 |
| 2 | 0.309 | 0.309 | 0.560 | 0.283 | 0.121 |
| 1 | 0.303 | 0.303 | 0.559 | 0.245 | 0.121 |
| 0 | 0.300 | 0.300 | 0.556 | 0.112 | 0.112 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 433.73 km²
PNP : NHN+ 165.31 m
Lage : 4.63 km oberhalb der Mündung rechts

Q
m³/s

Pegel : Welda Nr. 4449900000100
Gewässer : Twiste
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.00 | 1.25 | 2.68 | 2.63 | 2.83 | 1.89 | 1.63 | 2.17 | 1.56 | 1.36 | 1.47 | 0.913 | 1.48 | 1.32 |
| 2. | 1.02 | 1.36 | 3.84 | 2.40 | 2.68 | 1.88 | 1.82 | 1.54 | 1.64 | 1.34 | 1.09 | 0.939 | 1.82 | 1.40 |
| 3. | 1.04 | 1.37 | 3.52 | 2.31 | 2.45 | 1.92 | 2.06 | 1.96 | 1.65 | 1.35 | 1.11 | 0.908 | 1.81 | 1.37 |
| 4. | 1.02 | 1.42 | 3.74 | 2.30 | 2.37 | 2.04 | 1.68 | 1.97 | 1.46 | 1.36 | 0.987 | 1.96 | 1.85 | 1.42 |
| 5. | 1.03 | 1.76 | 10.5 | 2.13 | 2.29 | 1.90 | 2.02 | 3.62 | 1.57 | 1.38 | 1.18 | 1.90 | 1.64 | 1.69 |
| 6. | 1.03 | 1.53 | 13.2 | 1.88 | 2.24 | 1.88 | 2.03 | 1.84 | 1.49 | 1.56 | 1.04 | 2.97 | 1.61 | 1.49 |
| 7. | 1.05 | 2.03 | 8.88 | 1.90 | 2.12 | 1.89 | 1.75 | 1.70 | 1.64 | 1.46 | 1.01 | 1.86 | 1.65 | 1.41 |
| 8. | 1.07 | 2.05 | 8.29 | 1.96 | 2.60 | 1.92 | 1.71 | 1.58 | 1.64 | 1.22 | 0.971 | 1.41 | 1.61 | 1.39 |
| 9. | 1.11 | 2.30 | 6.77 | 1.85 | 2.28 | 1.85 | 1.62 | 1.50 | 1.72 | 1.22 | 1.09 | 1.42 | 1.66 | 1.38 |
| 10. | 1.09 | 1.81 | 5.65 | 1.85 | 2.12 | 1.91 | 1.64 | 1.53 | 1.45 | 1.25 | 0.938 | 1.63 | 1.59 | 2.54 |
| 11. | 1.09 | 1.54 | 4.61 | 1.77 | 2.05 | 1.87 | 1.57 | 1.55 | 1.75 | 1.32 | 1.22 | 1.52 | 1.45 | 1.92 |
| 12. | 1.09 | 1.49 | 4.04 | 1.80 | 2.03 | 1.91 | 1.65 | 1.65 | 1.83 | 1.27 | 2.10 | 1.63 | 1.33 | 1.54 |
| 13. | 1.10 | 1.59 | 3.92 | 1.88 | 2.01 | 2.30 | 1.55 | 1.58 | 2.26 | 1.26 | 1.04 | 1.58 | 1.29 | 1.51 |
| 14. | 1.11 | 1.93 | 3.51 | 1.91 | 2.00 | 1.90 | 1.57 | 1.59 | 4.13 | 1.19 | 0.983 | 1.68 | 1.20 | 1.49 |
| 15. | 1.07 | 1.76 | 3.08 | 2.82 | 2.00 | 1.85 | 1.69 | 1.60 | 2.32 | 1.26 | 0.898 | 3.23 | 1.23 | 3.72 |
| 16. | 1.06 | 3.15 | 2.95 | 2.37 | 1.97 | 1.94 | 1.70 | 1.80 | 1.87 | 2.46 | 1.05 | 1.93 | 1.29 | 3.38 |
| 17. | 1.09 | 4.75 | 3.04 | 2.97 | 1.98 | 1.85 | 1.57 | 1.71 | 2.44 | 1.55 | 0.826 | 1.63 | 1.18 | 3.43 |
| 18. | 1.10 | 3.27 | 2.81 | 3.19 | 1.98 | 1.84 | 1.55 | 1.58 | 1.91 | 1.30 | 0.986 | 1.55 | 1.27 | 3.46 |
| 19. | 1.11 | 2.31 | 5.12 | 3.34 | 1.93 | 1.79 | 1.68 | 1.55 | 1.62 | 1.27 | 0.835 | 1.49 | 1.28 | 3.09 |
| 20. | 1.12 | 2.10 | 6.77 | 3.07 | 1.89 | 1.79 | 1.72 | 2.86 | 1.90 | 1.21 | 0.917 | 1.48 | 1.30 | 2.44 |
| 21. | 1.14 | 3.40 | 6.24 | 2.87 | 1.93 | 1.80 | 1.65 | 2.25 | 1.46 | 1.39 | 0.837 | 1.60 | 1.31 | 2.32 |
| 22. | 1.13 | 3.13 | 10.4 | 2.93 | 1.96 | 1.89 | 1.58 | 2.15 | 1.35 | 1.60 | 0.890 | 1.35 | 1.21 | 2.52 |
| 23. | 1.17 | 3.56 | 8.73 | 3.01 | 1.90 | 1.85 | 1.68 | 1.71 | 1.28 | 1.29 | 0.886 | 1.47 | 1.26 | 7.03 |
| 24. | 1.14 | 4.79 | 9.88 | 3.05 | 1.91 | 1.85 | 1.65 | 1.66 | 1.15 | 1.26 | 0.985 | 1.51 | 1.39 | 6.49 |
| 25. | 1.15 | 4.69 | 7.68 | 3.05 | 1.90 | 1.81 | 1.48 | 1.83 | 1.14 | 2.59 | 1.67 | 1.43 | 1.30 | 4.26 |
| 26. | 1.19 | 2.93 | 6.60 | 2.82 | 1.85 | 1.82 | 1.46 | 1.63 | 1.11 | 1.33 | 0.990 | 1.40 | 1.30 | 4.11 |
| 27. | 1.21 | 2.53 | 6.31 | 2.79 | 1.84 | 1.71 | 1.46 | 1.58 | 1.35 | 1.93 | 0.964 | 1.40 | 1.44 | 4.40 |
| 28. | 1.23 | 2.28 | 5.89 | 2.72 | 1.86 | 1.72 | 1.45 | 1.60 | 2.81 | 1.32 | 0.932 | 1.32 | 1.34 | 6.31 |
| 29. | 1.27 | 2.07 | 5.51 | 2.83 | 1.88 | 1.72 | 1.46 | 1.84 | 1.61 | 1.15 | 0.952 | 1.38 | 1.31 | 3.97 |
| 30. | 1.25 | 3.44 | 4.72 | | 1.92 | 1.71 | 1.42 | 2.42 | 1.37 | 1.05 | 0.870 | 1.53 | 1.36 | 3.42 |
| 31. | | 3.13 | 3.38 | | 1.95 | | 1.84 | | 1.31 | 1.44 | | 1.51 | | 3.20 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 1. | 1. | 1. | 11. | 27. | 27.+ | 30. | 9. | 26. | 30. | 17. | 3. | 17. | 1. |
| NQ | 1.00 | 1.25 | 2.68 | 1.77 | 1.84 | 1.71 | 1.42 | 1.50 | 1.11 | 1.05 | 0.826 | 0.908 | 1.18 | 1.32 |
| MQ | 1.11 | 2.47 | 5.88 | 2.50 | 2.09 | 1.87 | 1.66 | 1.85 | 1.74 | 1.42 | 1.06 | 1.60 | 1.42 | 2.89 |
| HQ | 2.08 | 9.12 | 19.3 | 5.39 | 6.33 | 3.47 | 6.73 | 8.99 | 7.82 | 4.91 | 4.46 | 5.52 | 4.86 | 11.7 |
| Tag | 24. | 24. | 5. | 15. | 3. | 30. | 23. | 5. | 14. | 25. | 12. | 15. | 9. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 15 | 36 | 14 | 13 | 11 | 10 | 11 | 11 | 9 | 6 | 10 | 9 | 18 |

| | 1968/2011 | | 1969/2012 44 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 1976 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 2012 | 1996 | 2011 | 1976 |
| NQ | 1.00 | 1.06 | 1.23 | 1.12 | 1.40 | 1.15 | 1.17 | 1.16 | 0.866 | 1.04 | 0.826 | 0.844 | 1.00 | 1.06 |
| MNQ | 1.75 | 2.00 | 2.37 | 2.59 | 2.72 | 2.50 | 2.13 | 1.87 | 1.67 | 1.53 | 1.50 | 1.70 | 1.72 | 1.98 |
| MQ | 2.52 | 3.01 | 3.79 | 3.94 | 4.07 | 3.32 | 2.77 | 2.47 | 2.17 | 1.95 | 1.92 | 2.26 | 2.50 | 3.02 |
| MHQ | 6.68 | 9.00 | 10.9 | 11.3 | 10.2 | 6.70 | 8.31 | 8.50 | 7.38 | 7.17 | 5.77 | 5.40 | 6.73 | 9.18 |
| HQ | 26.9 | 30.7 | 25.8 | 52.7 | 29.7 | 25.0 | 38.5 | 26.4 | 55.3 | 26.5 | 21.9 | 23.7 | 26.9 | 30.7 |
| Jahr | 1998 | 1981 | 2011 | 1970 | 1990 | 1994 | 2002 | 1984 | 2002 | 1992 | 2007 | 1998 | 1998 | 1981 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 15 | 19 | 23 | 22 | 25 | 20 | 17 | 15 | 13 | 12 | 11 | 14 | 15 | 19 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.826 | am 17.09.2012 | 1.00 | 0.826 | 0.826 | am 17.09.2012 |
| MQ | m³/s | 2.11 | | 2.67 | 1.55 | 2.17 | |
| HQ | m³/s | 19.3 | am 05.01.2012 bei W = 160 cm | 19.3 | 8.99 | 19.3 | am 05.01.2012 bei W = 160 cm |
| Nq | l/(skm²) | 1.90 | | 2.31 | 1.90 | 1.90 | |
| Mq | l/(skm²) | 4.86 | | 6.15 | 3.58 | 5.00 | |
| Hq | l/(skm²) | 44.4 | | 44.4 | 20.7 | 44.4 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 154 | | 97 | 57 | 158 | |

| | | 1969/2012 (*) 44 Jahre | | | | 1969/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.826 | am 17.09.2012 | 1.00 | 0.826 | 0.826 | am 17.09.2012 |
| MNQ | m³/s | 1.29 | | 1.59 | 1.39 | 1.34 | |
| MQ | m³/s | 2.84 | | 3.44 | 2.26 | 2.84 | |
| MHQ | m³/s | 21.3 | | 18.6 | 13.5 | 20.8 | |
| HQ | m³/s | 55.3 | am 18.07.2002 bei W = 310 cm | 52.7 | 55.3 | 55.3 | am 18.07.2002 bei W = 310 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.98 | | 3.67 | 3.20 | 3.08 | |
| Mq | l/(skm²) | 6.56 | | 7.93 | 5.20 | 6.55 | |
| MHq | l/(skm²) | 49.0 | | 42.8 | 31.2 | 48.1 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 207 | | 124 | 83 | 207 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.826 | 1.90 | 17.09.2012 | 55.3 | 127 | 310 | 18.07.2002 |
| 2 | 0.844 | 1.95 | 15.10.1996 | 52.7 | 121 | 282 | 23.02.1970 |
| 3 | 0.947 | 2.18 | 01.10.1983 | 38.5 | 88.8 | 248 | 11.05.2002 |
| 4 | 0.986 | 2.27 | 18.07.1976 | 30.7 | 70.8 | 232 | 05.12.1981 |
| 5 | 1.00 | 2.31 | 01.11.2011 | 29.7 | 68.4 | 231 | 01.03.1990 |
| 6 | 1.04 | 2.40 | 15.10.1974 | 27.9 | 64.2 | 221 | 19.12.1988 |
| 7 | 1.05 | 2.41 | 21.10.1977 | 27.9 | 64.2 | 224 | 01.07.1987 |
| 8 | 1.05 | 2.42 | 25.09.1992 | 27.4 | 63.2 | 215 | 30.05.1984 |
| 9 | 1.06 | 2.45 | 10.08.1998 | 26.9 | 62.1 | 220 | 01.11.1998 |
| 10 | 1.12 | 2.58 | 10.02.1996 | 26.5 | 61.2 | 210 | 01.08.1992 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1969/2012 44 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 13.2 | 13.2 | 47.3 | 14.9 | 5.89 |
| 363 | 10.5 | 10.5 | 24.3 | 12.0 | 3.84 |
| 362 | 10.4 | 10.4 | 20.8 | 10.8 | 3.74 |
| 361 | 9.88 | 9.88 | 20.2 | 10.0 | 3.69 |
| 360 | 8.88 | 8.88 | 15.2 | 9.08 | 3.41 |
| 359 | 8.73 | 8.73 | 15.0 | 8.60 | 3.32 |
| 358 | 8.29 | 8.29 | 14.4 | 8.18 | 3.32 |
| 357 | 7.68 | 7.68 | 13.8 | 7.85 | 3.19 |
| 356 | 6.78 | 7.03 | 13.2 | 7.58 | 3.14 |
| 350 | 5.65 | 6.31 | 11.5 | 6.44 | 2.92 |
| 340 | 3.92 | 4.13 | 9.94 | 5.39 | 2.57 |
| 330 | 3.34 | 3.51 | 8.60 | 4.79 | 2.42 |
| 320 | 3.05 | 3.09 | 7.72 | 4.34 | 2.30 |
| 300 | 2.63 | 2.72 | 6.49 | 3.73 | 2.09 |
| 270 | 2.07 | 2.12 | 4.93 | 3.17 | 1.77 |
| 240 | 1.92 | 1.91 | 4.47 | 2.82 | 1.53 |
| 210 | 1.85 | 1.85 | 4.06 | 2.52 | 1.44 |
| 183 | 1.72 | 1.71 | 3.76 | 2.32 | 1.41 |
| 150 | 1.60 | 1.62 | 3.41 | 2.11 | 1.30 |
| 130 | 1.55 | 1.56 | 3.18 | 2.01 | 1.27 |
| 120 | 1.51 | 1.53 | 3.09 | 1.96 | 1.24 |
| 110 | 1.46 | 1.49 | 3.05 | 1.92 | 1.22 |
| 100 | 1.42 | 1.46 | 3.00 | 1.87 | 1.21 |
| 90 | 1.36 | 1.42 | 2.95 | 1.83 | 1.19 |
| 80 | 1.32 | 1.38 | 2.89 | 1.79 | 1.18 |
| 70 | 1.26 | 1.35 | 2.83 | 1.75 | 1.17 |
| 60 | 1.21 | 1.31 | 2.79 | 1.71 | 1.15 |
| 50 | 1.14 | 1.28 | 2.73 | 1.67 | 1.13 |
| 40 | 1.10 | 1.22 | 2.66 | 1.62 | 1.09 |
| 30 | 1.05 | 1.15 | 2.63 | 1.58 | 1.04 |
| 25 | 1.03 | 1.09 | 2.61 | 1.55 | 1.03 |
| 20 | 1.00 | 1.01 | 2.54 | 1.52 | 1.01 |
| 15 | 0.983 | 0.983 | 2.30 | 1.48 | 0.977 |
| 10 | 0.938 | 0.938 | 2.27 | 1.45 | 0.934 |
| 9 | 0.932 | 0.932 | 2.27 | 1.44 | 0.929 |
| 8 | 0.917 | 0.917 | 2.26 | 1.44 | 0.917 |
| 7 | 0.913 | 0.913 | 2.26 | 1.42 | 0.913 |
| 6 | 0.908 | 0.908 | 2.25 | 1.41 | 0.908 |
| 5 | 0.898 | 0.898 | 2.25 | 1.40 | 0.889 |
| 4 | 0.890 | 0.890 | 2.25 | 1.39 | 0.883 |
| 3 | 0.886 | 0.886 | 2.24 | 1.39 | 0.883 |
| 2 | 0.870 | 0.870 | 2.23 | 1.37 | 0.870 |
| 1 | 0.837 | 0.837 | 2.22 | 1.36 | 0.837 |
| 0 | 0.826 | 0.826 | 2.21 | 1.34 | 0.826 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Talsperrenbeeinflussung, Grundmessstelle des Landes (GL)

LANUV NRW

$A_{Eo}$ : 137 km²
PNP : NHN + 191.75 m
Lage: 5.6 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Ehringen Nr. 44480552
Gewässer : Erpe
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.273 | 0.230 | 0.808 | R0.866 | 0.803 | 0.460 | 0.349 | 0.498 | 0.232 | 0.164 | 0.150 | 0.134 | 0.186 | 0.175 |
| 2. | 0.257 | 0.264 | 1.20 | R0.800 | 0.768 | 0.447 | 0.364 | 0.299 | 0.230 | 0.151 | 0.134 | 0.119 | 0.295 | 0.171 |
| 3. | 0.249 | 0.257 | 1.19 | R0.756 | 0.733 | 0.462 | 0.381 | 0.384 | 0.230 | 0.153 | 0.134 | 0.124 | 0.316 | 0.206 |
| 4. | 0.241 | 0.282 | 1.31 | R0.716 | 0.699 | 0.518 | 0.371 | 0.464 | 0.214 | 0.136 | 0.134 | 0.294 | 0.270 | 0.201 |
| 5. | 0.233 | 0.465 | 3.15 | R0.681 | 0.667 | 0.490 | 0.495 | 0.785 | 0.235 | 0.134 | 0.134 | 0.269 | 0.230 | R0.242 |
| 6. | 0.226 | 0.306 | 3.20 | R0.648 | 0.655 | 0.488 | 0.494 | 0.373 | 0.214 | 0.192 | 0.134 | 0.411 | 0.231 | R0.203 |
| 7. | 0.218 | 0.470 | 2.33 | D0.619 | 0.612 | 0.494 | 0.364 | 0.321 | 0.201 | 0.137 | 0.134 | 0.236 | 0.204 | R0.181 |
| 8. | 0.211 | 0.500 | 2.28 | D0.602 | 0.815 | 0.457 | 0.349 | 0.294 | 0.271 | 0.134 | 0.134 | 0.163 | 0.196 | R0.168 |
| 9. | 0.204 | 0.679 | 1.92 | D0.595 | 0.720 | 0.455 | 0.349 | 0.276 | 0.253 | 0.134 | 0.134 | 0.164 | 0.208 | R0.153 |
| 10. | 0.208 | 0.451 | 1.69 | R0.590 | 0.670 | 0.490 | 0.367 | 0.230 | 0.197 | 0.134 | 0.134 | 0.146 | 0.197 | R0.375 |
| 11. | 0.230 | 0.340 | 1.43 | R0.589 | 0.606 | 0.490 | 0.318 | 0.230 | 0.273 | 0.134 | 0.234 | 0.134 | 0.243 | R0.266 |
| 12. | 0.230 | 0.358 | 1.28 | R0.596 | 0.596 | 0.470 | 0.316 | 0.235 | 0.330 | 0.134 | 0.357 | 0.141 | 0.186 | R0.203 |
| 13. | 0.230 | 0.405 | 1.22 | R0.590 | 0.597 | 0.486 | 0.306 | 0.241 | 0.365 | 0.115 | 0.144 | 0.147 | 0.164 | R0.196 |
| 14. | 0.219 | 0.584 | 1.14 | R0.649 | 0.554 | 0.440 | 0.306 | 0.230 | 0.840 | 0.133 | 0.134 | 0.153 | 0.164 | 0.197 |
| 15. | 0.230 | 0.473 | 1.06 | R1.02 | 0.542 | 0.424 | 0.369 | 0.239 | 0.401 | 0.134 | 0.134 | 0.512 | 0.196 | 0.989 |
| 16. | 0.230 | 1.01 | 0.941 | 0.842 | 0.542 | 0.455 | 0.325 | 0.316 | 0.294 | 0.319 | 0.134 | 0.226 | 0.186 | 0.902 |
| 17. | 0.230 | 1.27 | 0.858 | 1.15 | 0.542 | 0.440 | 0.279 | 0.284 | 0.424 | 0.170 | 0.134 | 0.174 | 0.196 | 0.852 |
| 18. | 0.230 | 0.952 | 0.816 | 0.930 | 0.542 | 0.440 | 0.276 | 0.228 | 0.300 | 0.134 | 0.134 | 0.149 | 0.207 | 0.855 |
| 19. | 0.230 | 0.658 | 1.39 | 0.968 | 0.506 | 0.440 | 0.341 | 0.223 | 0.277 | 0.134 | 0.134 | 0.134 | 0.217 | 0.682 |
| 20. | 0.230 | 0.557 | 1.89 | 0.815 | 0.498 | 0.440 | 0.403 | 0.726 | 0.338 | 0.134 | 0.134 | 0.138 | 0.196 | 0.518 |
| 21. | 0.219 | 0.876 | 2.08 | 0.784 | 0.496 | 0.536 | 0.279 | 0.454 | 0.234 | 0.134 | 0.134 | 0.152 | 0.196 | 0.502 |
| 22. | 0.230 | 1.02 | 2.94 | 0.833 | 0.490 | 0.489 | 0.267 | 0.391 | 0.230 | 0.134 | 0.134 | 0.134 | 0.196 | 0.541 |
| 23. | 0.230 | 1.18 | 2.37 | 0.788 | 0.490 | 0.459 | 0.236 | 0.297 | 0.214 | 0.126 | 0.134 | 0.134 | 0.196 | 1.42 |
| 24. | 0.230 | 1.22 | 2.43 | 0.792 | 0.490 | 0.447 | 0.237 | 0.237 | 0.213 | 0.152 | 0.202 | 0.134 | 0.236 | 1.52 |
| 25. | 0.230 | 1.35 | 1.97 | 0.975 | 0.465 | 0.443 | 0.230 | 0.260 | 0.196 | 0.395 | 0.255 | 0.134 | 0.210 | 1.11 |
| 26. | 0.230 | 0.922 | 1.60 | 0.976 | 0.444 | 0.424 | 0.230 | 0.229 | 0.169 | 0.157 | 0.139 | 0.134 | 0.196 | 0.924 |
| 27. | 0.230 | 0.794 | 1.43 | 0.943 | 0.440 | 0.385 | 0.230 | 0.230 | 0.202 | 0.314 | 0.134 | 0.134 | 0.253 | 1.00 |
| 28. | 0.230 | 0.695 | 1.25 | 0.877 | 0.444 | 0.405 | 0.230 | 0.227 | 0.569 | 0.142 | 0.140 | 0.144 | 0.212 | 1.41 |
| 29. | 0.230 | 0.608 | R1.19 | 0.840 | 0.467 | 0.393 | 0.230 | 0.374 | 0.255 | 0.134 | 0.134 | 0.175 | 0.184 | 0.991 |
| 30. | 0.226 | 1.01 | R1.09 | | 0.460 | 0.358 | 0.238 | 0.371 | 0.170 | 0.134 | 0.134 | 0.199 | 0.196 | 0.835 |
| 31. | | 0.891 | R0.992 | | 0.474 | | 0.392 | | 0.155 | 0.142 | | 0.204 | | 0.747 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 9. | 1. | 1. | 11. | 27. | 30. | 25.+ | 19. | 31. | 13. | 2.+ | 2. | 13.+ | 9. |
| NQ | 0.204 | 0.230 | 0.808 | 0.589 | 0.440 | 0.358 | 0.230 | 0.223 | 0.155 | 0.115 | 0.134 | 0.119 | 0.164 | 0.153 |
| MQ | 0.230 | 0.680 | 1.63 | 0.787 | 0.575 | 0.454 | 0.320 | 0.332 | 0.281 | 0.160 | 0.152 | 0.182 | 0.212 | 0.604 |
| HQ | 0.306 | 1.72 | 5.29 | 1.48 | 0.841 | 0.841 | 0.976 | 2.11 | 1.88 | 1.05 | 1.33 | 1.05 | 0.597 | 1.95 |
| Tag | 1. | 16.+ | 5. | 17. | 8. | 21. | 31. | 5. | 14. | 25. | 11. | 4. | 2. | 23. |
| $h_N$ mm | 1 | 100 | 104 | 18 | 10 | 30 | 54 | 79 | 81 | 45 | 22 | 44 | 28 | 93 |
| $h_A$ mm | 4 | 13 | 32 | 14 | 11 | 9 | 6 | 6 | 5 | 3 | 3 | 4 | 4 | 12 |
| | 1961/2011 | | 1962/2012 51 Jahre | | | | | | | | | | | |
| Jahr | 1964 | 1964 | 1965 | 1965 | 1965 + | 1965 + | 1964 + | 1964 | 1964 | 2012 | 1976 | 2012 | 1964 | 1964 |
| NQ | 0.100 | 0.110 | 0.150 | 0.190 | 0.190 | 0.280 | 0.220 | 0.110 | 0.110 | 0.115 | 0.110 | 0.119 | 0.100 | 0.110 |
| MNQ | 0.375 | 0.478 | 0.562 | 0.642 | 0.696 | 0.667 | 0.495 | 0.380 | 0.310 | 0.301 | 0.304 | 0.328 | 0.371 | 0.469 |
| MQ | 0.601 | 0.849 | 1.01 | 1.08 | 1.18 | 0.931 | 0.753 | 0.599 | 0.554 | 0.454 | 0.422 | 0.468 | 0.592 | 0.840 |
| MHQ | 2.19 | 3.42 | 4.00 | 4.21 | 4.11 | 2.34 | 4.38 | 4.93 | 5.08 | 3.46 | 2.10 | 1.74 | 2.16 | 3.34 |
| HQ | 11.1 | 18.6 | 19.2 | 23.6 | 16.8 | 16.5 | 38.9 | 60.7 | 60.0 | 31.5 | 13.0 | 8.13 | 11.1 | 18.6 |
| Jahr | 1998 | 1981 | 1968 | 1970 | 1990 | 1994 | 2002 | 1984 | 1965 | 1992 | 1999 | 1998 | 1998 | 1981 |
| | 1961/2011 | | 1962/2012 51 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | 62 | 63 | 57 | 45 | 53 | 49 | 68 | 75 | 68 | 68 | 60 | 53 | 61 | 63 |
| $Mh_A$ mm | 11 | 17 | 20 | 20 | 23 | 18 | 15 | 11 | 11 | 9 | 8 | 9 | 11 | 16 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.115 | am 13.08.2012 | 0.204 | 0.115 | 0.115 | am 13.08.2012 |
| MQ m³/s | 0.482 | | 0.729 | 0.238 | 0.474 | |
| HQ m³/s | 5.29 | am 05.01.2012 bei W= 105 cm | 5.29 | 2.11 | 5.29 | am 05.01.2012 bei W= 105 cm |
| Nq l/(s km²) | 0.839 | | 1.49 | 0.839 | 0.839 | |
| Mq l/(s km²) | 3.52 | | 5.32 | 1.74 | 3.46 | |
| Hq l/(s km²) | 38.6 | | 38.6 | 15.4 | 38.6 | |
| $h_N$ mm | 588 | | 263 | 325 | 608 | |
| $h_A$ mm | 111 | | 84 | 28 | 109 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| NQ m³/s | 0.100 | am 12.11.1964 | 0.100 | 0.110 | 0.100 | am 12.11.1964 |
| MNQ m³/s | 0.223 | | 0.336 | 0.241 | 0.234 | |
| MQ m³/s | 0.740 | | 0.941 | 0.542 | 0.739 | |
| MHQ m³/s | 13.2 | | 8.12 | 9.76 | 13.1 | |
| HQ m³/s | 60.7 | am 08.06.1984 | 23.6 | 60.7 | 60.7 | am 08.06.1984 |
| $HQ_1$ m³/s | 5.49 | | 4.29 | 3.11 | 5.49 | |
| $HQ_5$ m³/s | 12.9 | | 10.1 | 6.58 | 12.9 | |
| MNq l/(s km²) | 1.63 | | 2.45 | 1.76 | 1.71 | |
| Mq l/(s km²) | 5.40 | | 6.87 | 3.95 | 5.39 | |
| MHq l/(s km²) | 96.3 | | 59.2 | 71.2 | 95.6 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| $Mh_N$ mm | 720 | | 329 | 391 | 719 | |
| $Mh_A$ mm | 170 | | 108 | 63 | 171 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.100 | 0.730 | 12.11.1964 | 60.7 | 443 | 301 | 08.06.1984 |
| 2 | 0.110 | 0.803 | 01.09.1976 | 60.0 | 438 | 300 | 16.07.1965 |
| 3 | 0.115 | 0.839 | 13.08.2012 | 38.9 | 284 | 272 | 11.05.2002 |
| 4 | 0.130 | 0.949 | 02.09.1974 | 34.4 | 251 | 236 | 01.07.1987 |
| 5 | 0.136 | 0.992 | 25.08.1991 | 34.2 | 250 | 257 | 18.07.2002 |
| 6 | 0.164 | 1.20 | 07.08.2009 | 34.2 | 250 | 257 | 30.05.1999 |
| 7 | 0.164 | 1.20 | 30.08.2005 | 31.5 | 230 | 249 | 01.08.1992 |
| 8 | 0.164 | 1.20 | 21.07.1996 | 23.6 | 172 | 195 | 23.02.1970 |
| 9 | 0.168 | 1.23 | 14.08.1990 | 20.0 | 146 | 200 | 30.05.1984 |
| 10 | 0.169 | 1.23 | 12.08.2011 | 19.2 | 140 | 175 | 15.01.1968 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1962/2012 51 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 3.20 | 3.20 | | | |
| 364 | 3.15 | 3.15 | 18.2 | 5.43 | 1.63 |
| 363 | 2.94 | 2.94 | 15.0 | 4.28 | 1.47 |
| 362 | 2.43 | 2.43 | 7.76 | 3.70 | 1.32 |
| 361 | 2.37 | 2.37 | 6.90 | 3.28 | 1.18 |
| 360 | 2.33 | 2.33 | 5.96 | 3.08 | 1.12 |
| 359 | 2.28 | 2.28 | 5.96 | 2.89 | 1.12 |
| 358 | 2.08 | 2.08 | 5.83 | 2.72 | 0.830 |
| 357 | 1.97 | 1.97 | 5.70 | 2.56 | 0.830 |
| 356 | 1.92 | 1.92 | 5.58 | 2.42 | 0.710 |
| 350 | 1.39 | 1.43 | 3.69 | 1.98 | 0.650 |
| 340 | 1.19 | 1.19 | 3.17 | 1.64 | 0.550 |
| 330 | 0.992 | 0.989 | 2.87 | 1.43 | 0.500 |
| 320 | 0.877 | 0.866 | 2.50 | 1.28 | 0.450 |
| 300 | 0.756 | 0.756 | 2.14 | 1.09 | 0.400 |
| 270 | 0.554 | 0.542 | 1.87 | 0.861 | 0.400 |
| 240 | 0.467 | 0.460 | 1.71 | 0.711 | 0.320 |
| 210 | 0.401 | 0.381 | 1.55 | 0.601 | 0.280 |
| 183 | 0.325 | 0.314 | 1.39 | 0.541 | 0.220 |
| 150 | 0.255 | 0.237 | 1.10 | 0.451 | 0.190 |
| 130 | 0.232 | 0.231 | 0.890 | 0.418 | 0.190 |
| 120 | 0.232 | 0.214 | 0.830 | 0.401 | 0.190 |
| 110 | 0.232 | 0.203 | 0.770 | 0.394 | 0.170 |
| 100 | 0.227 | 0.197 | 0.770 | 0.361 | 0.170 |
| 90 | 0.213 | 0.192 | 0.716 | 0.355 | 0.170 |
| 80 | 0.196 | 0.171 | 0.710 | 0.328 | 0.170 |
| 70 | 0.157 | 0.155 | 0.650 | 0.321 | 0.155 |
| 60 | 0.146 | 0.146 | 0.642 | 0.305 | 0.146 |
| 50 | 0.136 | 0.136 | 0.621 | 0.281 | 0.136 |
| 40 | 0.136 | 0.136 | 0.605 | 0.268 | 0.136 |
| 30 | 0.136 | 0.136 | 0.574 | 0.250 | 0.136 |
| 25 | 0.136 | 0.136 | 0.564 | 0.231 | 0.136 |
| 20 | 0.136 | 0.136 | 0.554 | 0.221 | 0.130 |
| 15 | 0.136 | 0.136 | 0.553 | 0.201 | 0.130 |
| 10 | 0.136 | 0.136 | 0.533 | 0.192 | 0.130 |
| 9 | 0.136 | 0.136 | 0.533 | 0.181 | 0.130 |
| 8 | 0.136 | 0.136 | 0.533 | 0.181 | 0.130 |
| 7 | 0.136 | 0.136 | 0.524 | 0.171 | 0.130 |
| 6 | 0.136 | 0.136 | 0.523 | 0.171 | 0.130 |
| 5 | 0.134 | 0.134 | 0.523 | 0.168 | 0.130 |
| 4 | 0.133 | 0.133 | 0.500 | 0.153 | 0.130 |
| 3 | 0.126 | 0.126 | 0.492 | 0.151 | 0.110 |
| 2 | 0.124 | 0.124 | 0.490 | 0.136 | 0.110 |
| 1 | 0.119 | 0.119 | 0.488 | 0.133 | 0.110 |
| 0 | 0.115 | 0.115 | 0.476 | 0.100 | 0.100 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 46.7 km²
PNP : NHN + 152.79 m
Lage: 2.0 km oberhalb der Mündung, rechts

Q
m³/s

Pegel : Hofgeismar Nr. 44840308
Gewässer : Lempe
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.115 | 0.116 | 0.165 | R0.138 | 0.252 | 0.140 | 0.090 | 0.148 | 0.105 | 0.101 | 0.090 | 0.082 | 0.114 | 0.084 |
| 2. | 0.115 | 0.121 | 0.355 | R0.135 | 0.230 | 0.142 | 0.093 | 0.115 | 0.102 | 0.091 | 0.089 | 0.079 | 0.097 | 0.085 |
| 3. | 0.118 | 0.127 | 0.344 | R0.132 | 0.206 | 0.142 | 0.101 | 0.151 | 0.094 | 0.090 | 0.081 | 0.085 | 0.099 | 0.097 |
| 4. | 0.115 | 0.129 | 0.245 | R0.130 | 0.195 | 0.142 | 0.107 | 0.207 | 0.090 | 0.090 | 0.079 | 0.099 | 0.098 | R0.107 |
| 5. | 0.115 | 0.140 | 0.457 | R0.128 | 0.176 | 0.136 | 0.118 | 0.655 | 0.118 | 0.092 | 0.086 | 0.115 | 0.093 | R0.091 |
| 6. | 0.115 | 0.140 | 0.552 | R0.125 | 0.155 | 0.131 | 0.117 | 0.266 | 0.129 | 0.101 | 0.080 | 0.112 | 0.087 | R0.091 |
| 7. | 0.115 | 0.138 | 0.473 | D0.122 | 0.159 | 0.135 | 0.103 | 0.203 | 0.110 | 0.082 | 0.086 | 0.094 | 0.082 | R0.090 |
| 8. | 0.115 | 0.128 | 0.551 | D0.120 | 0.219 | 0.120 | 0.106 | 0.158 | 0.114 | 0.070 | 0.082 | 0.093 | 0.090 | R0.090 |
| 9. | 0.115 | 0.143 | 0.517 | D0.119 | 0.219 | 0.136 | 0.113 | 0.132 | 0.103 | 0.072 | 0.081 | 0.092 | 0.090 | R0.090 |
| 10. | 0.122 | 0.140 | 0.390 | D0.119 | 0.200 | 0.148 | 0.101 | 0.119 | 0.102 | 0.073 | 0.068 | 0.091 | 0.097 | R0.090 |
| 11. | 0.116 | 0.140 | 0.278 | D0.118 | 0.195 | 0.142 | 0.099 | 0.113 | 0.116 | 0.073 | 0.147 | 0.093 | 0.096 | R0.090 |
| 12. | 0.115 | 0.142 | 0.235 | D0.117 | 0.172 | 0.128 | 0.090 | 0.099 | 0.110 | 0.079 | 0.119 | 0.092 | 0.073 | R0.090 |
| 13. | 0.118 | 0.144 | 0.223 | R0.116 | 0.170 | 0.119 | 0.090 | 0.088 | 0.136 | 0.077 | 0.082 | 0.100 | 0.068 | R0.092 |
| 14. | 0.115 | 0.140 | 0.200 | R0.129 | 0.170 | 0.115 | 0.112 | 0.080 | 0.282 | 0.070 | 0.081 | 0.107 | 0.066 | R0.103 |
| 15. | 0.115 | 0.138 | 0.192 | R0.173 | 0.171 | 0.110 | 0.118 | 0.089 | 0.248 | 0.079 | 0.075 | 0.128 | 0.070 | R0.177 |
| 16. | 0.118 | 0.140 | 0.166 | R0.150 | 0.173 | 0.107 | 0.103 | 0.096 | 0.210 | 0.114 | 0.079 | 0.100 | 0.073 | 0.280 |
| 17. | 0.115 | 0.185 | 0.149 | R0.216 | 0.166 | 0.107 | 0.093 | 0.087 | 0.672 | 0.088 | 0.076 | 0.090 | 0.083 | 0.310 |
| 18. | 0.115 | 0.171 | 0.151 | 0.198 | 0.158 | 0.114 | 0.112 | 0.085 | 0.488 | 0.083 | 0.075 | 0.091 | 0.090 | 0.301 |
| 19. | 0.118 | 0.140 | 0.404 | 0.186 | 0.140 | 0.115 | 0.113 | 0.082 | 0.322 | 0.077 | 0.070 | 0.090 | 0.091 | 0.311 |
| 20. | 0.115 | 0.129 | 0.651 | 0.155 | 0.140 | 0.114 | 0.115 | 0.150 | 0.246 | 0.076 | 0.073 | 0.091 | 0.083 | 0.234 |
| 21. | 0.115 | 0.140 | 0.582 | 0.143 | 0.136 | 0.112 | 0.115 | 0.152 | 0.153 | 0.087 | 0.080 | 0.093 | 0.088 | 0.173 |
| 22. | 0.115 | 0.196 | 1.02 | 0.148 | 0.132 | 0.118 | 0.104 | 0.134 | 0.123 | 0.086 | 0.071 | 0.087 | 0.082 | 0.202 |
| 23. | 0.115 | 0.247 | 0.816 | 0.174 | 0.140 | 0.115 | 0.097 | 0.108 | 0.106 | 0.088 | 0.082 | 0.081 | 0.087 | 1.23 |
| 24. | 0.116 | 0.203 | 0.725 | 0.219 | 0.140 | 0.116 | 0.091 | 0.112 | 0.101 | 0.091 | 0.098 | 0.090 | 0.112 | 1.51 |
| 25. | 0.115 | 0.190 | 0.438 | 0.270 | 0.136 | 0.115 | 0.090 | 0.116 | 0.097 | 0.093 | 0.087 | 0.090 | 0.107 | 0.701 |
| 26. | 0.119 | 0.158 | 0.310 | 0.262 | 0.132 | 0.098 | 0.090 | 0.102 | 0.082 | 0.093 | 0.085 | 0.090 | 0.104 | 0.586 |
| 27. | 0.117 | 0.140 | 0.250 | 0.222 | 0.133 | 0.091 | 0.090 | 0.109 | 0.159 | 0.087 | 0.084 | 0.081 | 0.102 | 0.581 |
| 28. | 0.116 | 0.125 | R0.221 | 0.230 | 0.140 | 0.094 | 0.092 | 0.110 | 0.248 | 0.082 | 0.074 | 0.070 | 0.106 | 0.722 |
| 29. | 0.120 | 0.118 | R0.200 | 0.258 | 0.142 | 0.102 | 0.091 | 0.115 | 0.164 | 0.081 | 0.078 | 0.070 | 0.098 | 0.416 |
| 30. | 0.115 | 0.161 | R0.185 | | 0.140 | 0.091 | 0.090 | 0.108 | 0.130 | 0.106 | 0.078 | 0.093 | 0.082 | 0.310 |
| 31. | | 0.148 | R0.162 | | 0.149 | | 0.130 | | 0.104 | 0.103 | | 0.100 | | 0.270 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 1.+ | 1. | 17. | 13. | 22.+ | 27.+ | 1.+ | 14. | 26. | 8.+ | 10. | 28.+ | 14. | 1. |
| NQ | 0.115 | 0.116 | 0.149 | 0.116 | 0.132 | 0.091 | 0.090 | 0.080 | 0.082 | 0.070 | 0.068 | 0.070 | 0.066 | 0.084 |
| MQ | 0.116 | 0.149 | 0.374 | 0.164 | 0.167 | 0.120 | 0.102 | 0.143 | 0.173 | 0.086 | 0.084 | 0.093 | 0.090 | 0.310 |
| HQ | 0.170 | 0.270 | 1.30 | 0.270 | 0.270 | 0.170 | 0.350 | 1.06 | 1.24 | 0.310 | 0.820 | 0.170 | 0.140 | 2.31 |
| Tag | 13. | 23. | 22. | 17.+ | 1.+ | 2.+ | 31. | 5. | 27. | 30. | 11. | 5.+ | 2.+ | 23.+ |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 9 | 21 | 9 | 10 | 7 | 6 | 8 | 10 | 5 | 5 | 5 | 5 | 18 |
| | 1975/2011 | | 1976/2012 37 Jahre | | | | | | | | | | | |
| Jahr | 1975 | 1975 | 1976 | 1998 | 1992 | 1977 | 1977 | 1996 | 1996 | 1996 + | 1977 | 1976 | 1983 + | 1991 + |
| NQ | 0.040 | 0.070 | 0.040 | 0.050 | 0.032 | 0.070 | 0.040 | 0.031 | 0.032 | 0.032 | 0.040 | 0.050 | 0.060 | 0.079 |
| MNQ | 0.126 | 0.144 | 0.155 | 0.162 | 0.174 | 0.172 | 0.131 | 0.108 | 0.100 | 0.089 | 0.095 | 0.111 | 0.127 | 0.144 |
| MQ | 0.231 | 0.306 | 0.365 | 0.366 | 0.389 | 0.284 | 0.221 | 0.195 | 0.163 | 0.142 | 0.148 | 0.163 | 0.231 | 0.312 |
| MHQ | 1.14 | 1.92 | 1.87 | 1.73 | 1.87 | 2.40 | 1.50 | 1.42 | 1.31 | 1.02 | 1.16 | 0.760 | 1.14 | 1.98 |
| HQ | 6.54 | 13.8 | 7.30 | 6.00 | 9.65 | 63.0 | 8.62 | 8.38 | 5.20 | 7.50 | 16.4 | 8.06 | 6.54 | 13.8 |
| Jahr | 2010 | 1988 | 1987 | 1984 | 1994 | 1994 | 2004 | 1981 | 1980 | 1981 | 2007 | 1993 | 2010 | 1988 |
| | 1975/2011 | | 1976/2012 37 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 13 | 18 | 21 | 20 | 22 | 16 | 13 | 11 | 9 | 8 | 8 | 9 | 13 | 18 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.068 | am 10.09.2012 | 0.091 | 0.068 | 0.066 | am 14.11.2012 |
| MQ m³/s | 0.148 | | 0.183 | 0.114 | 0.159 | |
| HQ m³/s | 1.30 | am 22.01.2012 bei W= 135 cm | 1.30 | 1.24 | 2.31 | am 23.12.2012 bei W= 151 cm |
| Nq l/(s km²) | 1.46 | | 1.95 | 1.46 | 1.41 | |
| Mq l/(s km²) | 3.17 | | 3.92 | 2.44 | 3.40 | |
| Hq l/(s km²) | 27.8 | | 27.8 | 26.6 | 49.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 100 | | 62 | 39 | 108 | |
| | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
| NQ m³/s | 0.031 | am 22.06.1996 | 0.032 | 0.031 | 0.031 | am 22.06.1996 |
| MNQ m³/s | 0.075 | | 0.112 | 0.078 | 0.075 | |
| MQ m³/s | 0.247 | | 0.324 | 0.172 | 0.248 | |
| MHQ m³/s | 6.42 | | 5.39 | 3.13 | 6.40 | |
| HQ m³/s | 63.0 | am 25.04.1994 bei W= 337 cm | 63.0 | 16.4 | 63.0 | am 25.04.1994 bei W= 337 cm |
| $HQ_1$ m³/s | 3.11 | | 2.67 | 1.48 | 3.11 | |
| $HQ_5$ m³/s | 6.97 | | 6.30 | 3.21 | 6.97 | |
| MNq l/(s km²) | 1.61 | | 2.40 | 1.67 | 1.61 | |
| Mq l/(s km²) | 5.29 | | 6.94 | 3.68 | 5.31 | |
| MHq l/(s km²) | 137 | | 115 | 67.0 | 137 | |
| | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 167 | | 109 | 59 | 168 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.031 | 0.664 | 22.06.1996 | 63.0 | 1350 | 337 | 25.04.1994 |
| 2 | 0.032 | 0.685 | 14.08.1998 | 16.4 | 351 | 245 | 29.09.2007 |
| 3 | 0.032 | 0.685 | 09.03.1992 | 13.8 | 296 | 235 | 19.12.1988 |
| 4 | 0.040 | 0.857 | 19.05.1977 | 9.65 | 207 | 216 | 15.03.1994 |
| 5 | 0.040 | 0.857 | 11.07.1976 | 9.55 | 204 | 216 | 04.12.1981 |
| 6 | 0.040 | 0.857 | 21.11.1975 | 8.62 | 185 | 210 | 07.05.2004 |
| 7 | 0.041 | 0.878 | 25.08.2001 | 8.38 | 179 | 214 | 04.06.1981 |
| 8 | 0.045 | 0.964 | 11.09.1992 | 8.06 | 173 | 207 | 03.10.1993 |
| 9 | 0.050 | 1.07 | 06.02.1998 | 7.50 | 161 | 207 | 11.08.1981 |
| 10 | 0.050 | 1.07 | 12.08.1990 | 7.34 | 157 | 203 | 02.01.1987 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1976/2012 37 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 1.02 | 1.51 | | | |
| 364 | 0.816 | 1.23 | 9.79 | 2.82 | 0.805 |
| 363 | 0.725 | 1.02 | 4.93 | 2.20 | 0.700 |
| 362 | 0.672 | 0.816 | 4.67 | 1.81 | 0.663 |
| 361 | 0.655 | 0.725 | 4.63 | 1.55 | 0.615 |
| 360 | 0.651 | 0.722 | 3.50 | 1.33 | 0.574 |
| 359 | 0.582 | 0.701 | 3.34 | 1.25 | 0.480 |
| 358 | 0.552 | 0.672 | 3.21 | 1.16 | 0.440 |
| 357 | 0.551 | 0.655 | 3.14 | 1.06 | 0.440 |
| 356 | 0.517 | 0.651 | 3.04 | 0.980 | 0.440 |
| 350 | 0.390 | 0.517 | 2.22 | 0.716 | 0.360 |
| 340 | 0.258 | 0.322 | 1.56 | 0.521 | 0.260 |
| 330 | 0.230 | 0.270 | 1.15 | 0.441 | 0.200 |
| 320 | 0.206 | 0.235 | 1.00 | 0.380 | 0.200 |
| 300 | 0.172 | 0.198 | 0.650 | 0.316 | 0.170 |
| 270 | 0.144 | 0.151 | 0.520 | 0.243 | 0.150 |
| 240 | 0.138 | 0.133 | 0.440 | 0.206 | 0.130 |
| 210 | 0.121 | 0.117 | 0.360 | 0.187 | 0.110 |
| 183 | 0.117 | 0.112 | 0.320 | 0.165 | 0.103 |
| 150 | 0.115 | 0.102 | 0.290 | 0.145 | 0.094 |
| 130 | 0.107 | 0.097 | 0.260 | 0.136 | 0.089 |
| 120 | 0.103 | 0.094 | 0.260 | 0.131 | 0.080 |
| 110 | 0.101 | 0.092 | 0.260 | 0.131 | 0.080 |
| 100 | 0.096 | 0.091 | 0.230 | 0.127 | 0.080 |
| 90 | 0.094 | 0.091 | 0.230 | 0.118 | 0.078 |
| 80 | 0.092 | 0.091 | 0.230 | 0.111 | 0.071 |
| 70 | 0.091 | 0.089 | 0.200 | 0.111 | 0.062 |
| 60 | 0.090 | 0.087 | 0.200 | 0.103 | 0.061 |
| 50 | 0.087 | 0.083 | 0.189 | 0.100 | 0.061 |
| 40 | 0.083 | 0.083 | 0.182 | 0.091 | 0.058 |
| 30 | 0.082 | 0.080 | 0.174 | 0.088 | 0.050 |
| 25 | 0.080 | 0.079 | 0.172 | 0.081 | 0.050 |
| 20 | 0.079 | 0.077 | 0.171 | 0.080 | 0.048 |
| 15 | 0.077 | 0.074 | 0.170 | 0.071 | 0.044 |
| 10 | 0.074 | 0.072 | 0.159 | 0.071 | 0.036 |
| 9 | 0.074 | 0.071 | 0.157 | 0.068 | 0.035 |
| 8 | 0.073 | 0.071 | 0.153 | 0.062 | 0.035 |
| 7 | 0.072 | 0.071 | 0.153 | 0.061 | 0.034 |
| 6 | 0.071 | 0.071 | 0.153 | 0.061 | 0.034 |
| 5 | 0.071 | 0.071 | 0.153 | 0.055 | 0.034 |
| 4 | 0.071 | 0.071 | 0.152 | 0.051 | 0.034 |
| 3 | 0.071 | 0.070 | 0.150 | 0.051 | 0.034 |
| 2 | 0.071 | 0.070 | 0.149 | 0.047 | 0.034 |
| 1 | 0.070 | 0.068 | 0.145 | 0.044 | 0.032 |
| 0 | 0.068 | 0.066 | 0.141 | 0.031 | 0.031 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Reihenwerte ohne 1991 (Ausfalljahr)
HQ1 und HQ5 ab Jahresreihe 1987 ermittelt

HLUG Wiesbaden

$A_{Eo}$ : 431.05 km²
PNP : NHN+ 101.38 m
Lage : 6.34 km oberhalb der Mündung links

# Q

m³/s

Pegel : Ottbergen Nr. 4529500000100
Gewässer : Nethe
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.74 | 1.43 | 10.3 | 7.63 | 8.42 | 3.90 | 2.93 | 3.36 | 1.97 | 2.34 | 1.62 | 1.34 | 1.55 | 1.62 |
| 2. | 1.72 | 1.63 | 13.1 | 7.05 | 7.54 | 3.77 | 2.90 | 2.55 | 1.94 | 2.32 | 1.61 | 1.34 | 1.57 | 1.64 |
| 3. | 1.71 | 1.86 | 11.3 | 6.65 | 6.88 | 3.81 | 3.20 | 2.54 | 1.87 | 2.26 | 1.64 | 1.34 | 1.49 | 1.80 |
| 4. | 1.72 | 2.29 | 11.3 | 6.40 | 6.46 | 3.86 | 2.95 | 3.24 | 1.82 | 2.19 | 1.60 | 2.53 | 1.55 | 1.98 |
| 5. | 1.70 | 2.64 | 22.5 | 6.06 | 6.16 | 3.62 | 3.01 | 5.45 | 1.84 | 2.41 | 1.56 | 2.60 | 1.46 | 2.88 |
| 6. | 1.67 | 2.77 | 22.3 | 5.76 | 5.71 | 3.57 | 3.09 | 3.40 | 1.76 | 3.71 | 1.54 | 2.69 | 1.54 | 2.51 |
| 7. | 1.64 | 3.36 | 18.6 | 5.45 | 5.75 | 3.75 | 2.91 | 2.94 | 2.58 | 2.62 | 1.44 | 2.32 | 2.16 | 2.13 |
| 8. | 1.63 | 4.07 | 23.5 | 5.38 | 7.51 | 3.41 | 2.82 | 2.67 | 3.19 | 2.29 | 1.60 | 1.86 | 2.49 | 1.97 |
| 9. | 1.64 | 4.17 | 21.6 | 5.24 | 7.04 | 3.52 | 2.80 | 2.32 | 2.47 | 2.21 | 1.54 | 1.66 | 2.00 | 1.89 |
| 10. | 1.60 | 3.61 | 17.0 | 5.05 | 6.36 | 3.59 | 2.90 | 2.19 | 2.21 | 2.13 | 1.76 | 1.64 | 1.75 | 6.05 |
| 11. | 1.60 | 2.75 | 13.6 | 4.81 | 6.02 | 3.48 | 2.83 | 2.19 | 2.66 | 2.11 | 1.43 | 1.57 | 1.96 | 4.24 |
| 12. | 1.58 | 2.67 | 12.4 | 4.61 | 5.70 | 3.46 | 2.76 | 2.16 | 3.04 | 2.05 | 1.87 | 1.62 | 1.79 | 3.07 |
| 13. | 1.58 | 3.42 | 15.2 | 4.65 | 5.45 | 3.72 | 2.75 | 2.10 | 3.69 | 2.00 | 1.64 | 1.67 | 1.69 | 2.71 |
| 14. | 1.57 | 5.38 | 13.4 | 4.72 | 5.20 | 3.48 | 2.76 | 1.98 | 4.68 | 1.97 | 1.53 | 1.61 | 1.58 | 2.59 |
| 15. | 1.58 | 4.74 | 11.0 | 7.80 | 4.98 | 3.32 | 2.91 | 2.00 | 6.17 | 1.95 | 1.48 | 1.94 | 1.59 | 5.20 |
| 16. | 1.57 | 7.22 | 9.51 | 6.58 | 4.91 | 3.22 | 3.06 | 2.20 | 4.78 | 2.43 | 1.48 | 1.86 | 1.58 | 7.74 |
| 17. | 1.56 | 15.5 | 8.53 | 9.58 | 4.80 | 3.18 | 3.08 | 2.11 | 12.8 | 2.10 | 1.49 | 1.69 | 1.55 | 7.94 |
| 18. | 1.55 | 11.5 | 7.74 | 7.30 | 4.72 | 3.19 | 2.78 | 1.98 | 9.20 | 1.90 | 1.42 | 1.63 | 1.58 | 8.12 |
| 19. | 1.55 | 8.11 | 14.3 | 7.59 | 4.59 | 3.16 | 2.40 | 1.85 | 5.95 | 1.83 | 1.48 | 1.53 | 1.50 | 11.5 |
| 20. | 1.51 | 6.42 | 21.8 | 6.57 | 4.26 | 3.17 | 2.47 | 2.12 | 5.34 | 1.80 | 1.48 | 1.55 | 1.41 | 7.18 |
| 21. | 1.53 | 13.4 | 19.8 | 5.89 | 4.30 | 3.28 | 2.33 | 2.20 | 4.17 | 1.79 | 1.47 | 1.51 | 1.43 | 6.04 |
| 22. | 1.54 | 11.5 | 27.9 | 5.80 | 4.22 | 3.27 | 2.24 | 2.06 | 3.61 | 1.80 | 1.39 | 1.49 | 1.40 | 6.51 |
| 23. | 1.51 | 13.3 | 29.3 | 8.52 | 4.17 | 3.35 | 2.18 | 1.90 | 3.31 | 1.69 | 1.43 | 1.46 | 1.43 | 24.1 |
| 24. | 1.49 | 12.6 | 21.5 | 9.63 | 4.08 | 3.26 | 2.15 | 1.91 | 3.14 | 1.80 | 1.45 | 1.51 | 1.65 | 36.3 |
| 25. | 1.51 | 12.6 | 16.8 | 12.1 | 3.98 | 3.19 | 2.05 | 2.14 | 3.01 | 1.76 | 1.45 | 1.47 | 1.62 | 18.2 |
| 26. | 1.59 | 8.26 | 14.1 | 9.21 | 3.84 | 3.20 | 2.03 | 1.95 | 2.87 | 1.73 | 1.45 | 1.42 | 1.64 | 13.7 |
| 27. | 1.52 | 7.09 | 12.3 | 8.79 | 3.88 | 3.06 | 2.02 | 1.96 | 2.83 | 2.31 | 1.40 | 1.41 | 2.04 | 12.7 |
| 28. | 1.47 | 6.22 | 10.9 | 8.42 | 3.69 | 3.02 | 1.97 | 2.17 | 3.64 | 1.78 | 1.49 | 1.40 | 1.99 | 16.2 |
| 29. | 1.43 | 5.59 | 9.89 | 9.21 | 3.75 | 2.99 | 1.95 | 2.93 | 2.89 | 1.73 | 1.28 | 1.41 | 1.80 | 10.9 |
| 30. | 1.45 | 12.0 | 9.10 | | 3.99 | 2.94 | 1.95 | 2.51 | 2.61 | 1.69 | 1.36 | 1.79 | 1.75 | 8.89 |
| 31. | | 11.2 | 8.36 | | 4.09 | | 2.22 | | 2.42 | 1.63 | | 1.77 | | 7.59 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 18. | 12. | 28. | 30. | 29.+ | 19. | 6. | 31. | 29. | 1.+ | 22. | 1. |
| NQ | 1.43 | 1.43 | 7.74 | 4.61 | 3.69 | 2.94 | 1.95 | 1.85 | 1.76 | 1.63 | 1.28 | 1.34 | 1.40 | 1.62 |
| MQ | 1.58 | 6.75 | 15.5 | 6.98 | 5.24 | 3.39 | 2.59 | 2.44 | 3.69 | 2.07 | 1.51 | 1.70 | 1.68 | 7.93 |
| HQ | 1.90 | 18.3 | 34.0 | 15.5 | 9.00 | 5.07 | 5.68 | 8.92 | 20.1 | 5.39 | 4.03 | 4.15 | 2.89 | 57.1 |
| Tag | 2. | 24.+ | 23. | 25. | 1. | 7. | 18. | 29. | 17. | 6. | 10. | 4. | 7.+ | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 42 | 96 | 41 | 33 | 20 | 16 | 15 | 23 | 13 | 9 | 11 | 10 | 49 |

| | 1977/2011 | | 1978/2012 35 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 2011 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1991 | 1991 | 1991 | 1991 | 2011 |
| NQ | 1.13 | 1.43 | 1.73 | 1.59 | 2.97 | 1.83 | 1.56 | 1.37 | 1.15 | 0.996 | 0.968 | 1.07 | 1.13 | 1.43 |
| MNQ | 2.49 | 3.42 | 4.93 | 5.39 | 5.37 | 4.55 | 3.21 | 2.63 | 2.19 | 1.99 | 1.88 | 2.07 | 2.47 | 3.38 |
| MQ | 5.41 | 7.86 | 10.1 | 9.42 | 10.1 | 6.47 | 4.42 | 3.56 | 3.06 | 2.69 | 2.88 | 3.32 | 5.25 | 7.92 |
| MHQ | 24.4 | 40.5 | 39.7 | 29.3 | 36.2 | 13.9 | 11.5 | 10.3 | 10.8 | 9.64 | 12.9 | 14.6 | 23.7 | 41.6 |
| HQ | 120 | 191 | 141 | 57.1 | 123 | 39.4 | 32.4 | 56.5 | 42.0 | 68.4 | 126 | 148 | 120 | 191 |
| Jahr | 2010 | 1986 | 1987 | 1987 | 1994 | 1994 | 1984 | 1981 | 2002 | 2007 | 2007 | 1998 | 2010 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 33 | 49 | 63 | 53 | 63 | 39 | 27 | 21 | 19 | 17 | 17 | 21 | 32 | 49 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.28 | am 29.09.2012 | 1.43 | 1.28 | 1.28 | am 29.09.2012 |
| MQ | m³/s | 4.46 | | 6.61 | 2.34 | 4.57 | |
| HQ | m³/s | 34.0 | am 23.01.2012 bei W = 254 cm | 34.0 | 20.1 | 57.1 | am 24.12.2012 bei W = 301 cm |
| Nq | l/(skm²) | 2.97 | | 3.31 | 2.97 | 2.97 | |
| Mq | l/(skm²) | 10.3 | | 15.3 | 5.43 | 10.6 | |
| Hq | l/(skm²) | 78.8 | | 78.8 | 46.6 | 133 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 327 | | 241 | 86 | 335 | |

| | | 1978/2012 (*) 35 Jahre | | | | 1978/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.968 | am 05.09.1991 | 1.13 | 0.968 | 0.968 | am 05.09.1991 |
| MNQ | m³/s | 1.54 | | 2.24 | 1.70 | 1.67 | |
| MQ | m³/s | 5.76 | | 8.23 | 3.32 | 5.75 | |
| MHQ | m³/s | 73.6 | | 68.2 | 26.1 | 75.2 | |
| HQ | m³/s | 191 | am 30.12.1986 bei W = 344 cm | 191 | 148 | 191 | am 30.12.1986 bei W = 344 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.57 | | 5.20 | 3.95 | 3.87 | |
| Mq | l/(skm²) | 13.4 | | 19.1 | 7.71 | 13.3 | |
| MHq | l/(skm²) | 171 | | 158 | 60.5 | 174 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 422 | | 299 | 123 | 421 | |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1978/2012 35 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 29.3 | 36.3 | 139 | 47.7 | 21.1 |
| 363 | 27.9 | 29.3 | 94.6 | 37.0 | 19.0 |
| 362 | 23.5 | 27.9 | 86.3 | 31.4 | 17.8 |
| 361 | 22.5 | 24.1 | 77.6 | 28.8 | 16.0 |
| 360 | 22.3 | 23.5 | 76.8 | 26.5 | 15.9 |
| 359 | 21.8 | 22.5 | 45.3 | 24.0 | 14.6 |
| 358 | 21.6 | 22.3 | 43.5 | 23.1 | 14.6 |
| 357 | 21.5 | 21.8 | 42.9 | 21.7 | 13.5 |
| 356 | 19.8 | 21.6 | 39.6 | 20.7 | 12.6 |
| 350 | 14.3 | 16.8 | 30.3 | 16.8 | 9.64 |
| 340 | 12.4 | 12.7 | 22.1 | 13.5 | 7.60 |
| 330 | 10.9 | 10.3 | 19.2 | 11.5 | 6.66 |
| 320 | 8.79 | 8.79 | 16.6 | 10.2 | 5.63 |
| 300 | 6.65 | 6.88 | 13.8 | 8.45 | 4.29 |
| 270 | 4.91 | 4.98 | 10.7 | 6.72 | 3.52 |
| 240 | 3.73 | 3.71 | 9.43 | 5.54 | 2.97 |
| 210 | 3.19 | 3.16 | 8.26 | 4.68 | 2.38 |
| 183 | 2.83 | 2.80 | 7.62 | 4.01 | 1.99 |
| 150 | 2.31 | 2.26 | 6.70 | 3.35 | 1.71 |
| 130 | 2.11 | 2.11 | 6.10 | 3.03 | 1.59 |
| 120 | 2.00 | 2.00 | 5.81 | 2.90 | 1.54 |
| 110 | 1.95 | 1.96 | 5.67 | 2.79 | 1.50 |
| 100 | 1.86 | 1.90 | 5.54 | 2.69 | 1.42 |
| 90 | 1.78 | 1.80 | 5.25 | 2.58 | 1.37 |
| 80 | 1.71 | 1.76 | 5.11 | 2.49 | 1.29 |
| 70 | 1.64 | 1.69 | 4.84 | 2.40 | 1.20 |
| 60 | 1.61 | 1.63 | 4.61 | 2.31 | 1.17 |
| 50 | 1.57 | 1.58 | 4.37 | 2.23 | 1.12 |
| 40 | 1.53 | 1.54 | 4.13 | 2.14 | 1.09 |
| 30 | 1.49 | 1.49 | 3.88 | 2.05 | 1.07 |
| 25 | 1.48 | 1.48 | 3.78 | 2.01 | 1.05 |
| 20 | 1.46 | 1.45 | 3.71 | 1.96 | 1.03 |
| 15 | 1.44 | 1.43 | 3.60 | 1.90 | 1.02 |
| 10 | 1.42 | 1.42 | 3.50 | 1.84 | 1.00 |
| 9 | 1.42 | 1.41 | 3.48 | 1.83 | 1.00 |
| 8 | 1.42 | 1.41 | 3.47 | 1.82 | 0.999 |
| 7 | 1.41 | 1.40 | 3.43 | 1.80 | 0.996 |
| 6 | 1.40 | 1.40 | 3.42 | 1.79 | 0.996 |
| 5 | 1.40 | 1.40 | 3.42 | 1.78 | 0.993 |
| 4 | 1.39 | 1.39 | 3.40 | 1.77 | 0.989 |
| 3 | 1.36 | 1.36 | 3.39 | 1.75 | 0.984 |
| 2 | 1.34 | 1.34 | 3.37 | 1.74 | 0.983 |
| 1 | 1.34 | 1.34 | 3.33 | 1.72 | 0.978 |
| 0 | 1.28 | 1.28 | 3.13 | 1.67 | 0.968 |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.968 | 2.25 | 05.09.1991 | 191 | 443 | 344 | 30.12.1986 |
| 2 | 1.05 | 2.43 | 06.08.1996 | 179 | 415 | 342 | 19.12.1988 |
| 3 | 1.20 | 2.78 | 30.09.2011 | 148 | 344 | 328 | 28.10.1998 |
| 4 | 1.24 | 2.87 | 16.11.1983 | 141 | 326 | 331 | 02.01.1987 |
| 5 | 1.24 | 2.88 | 30.08.1990 | 126 | 293 | 322 | 30.09.2007 |
| 6 | 1.28 | 2.97 | 29.09.2012 | 123 | 285 | 323 | 19.03.1994 |
| 7 | 1.31 | 3.05 | 22.09.2009 | 120 | 278 | 322 | 13.11.2010 |
| 8 | 1.34 | 3.11 | 04.11.1985 | 116 | 269 | 322 | 01.11.1998 |
| 9 | 1.36 | 3.16 | 21.08.1989 | 111 | 258 | 318 | 09.03.2000 |
| 10 | 1.38 | 3.20 | 29.09.1992 | 107 | 249 | 315 | 20.01.1986 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
unterhalb Kläranlageneinleitung

LANUV NRW

$A_{Eo}$ : 77.06 km²
PNP : NHN+ 138.91 m
Lage : 2.99 km oberhalb der Mündung rechts

Q
m³/s

Pegel : Rustenhof Nr. 4526900000100
Gewässer : Aa, 4526
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.241 | 0.203 | 3.75 | 1.25 | 2.19 | 0.600 | 0.421 | 1.08 | 0.200 | 0.296 | 0.162 | 0.144 | 0.251 | 0.362 |
| 2. | 0.240 | 0.340 | 4.97 | 1.12 | 1.78 | 0.574 | 0.418 | 0.457 | 0.236 | 0.268 | 0.159 | 0.140 | 0.242 | 0.431 |
| 3. | 0.240 | 0.470 | 3.32 | 1.02 | 1.50 | 0.535 | 0.476 | 0.617 | 0.197 | 0.259 | 0.161 | 0.147 | 0.286 | 0.459 |
| 4. | 0.237 | 0.638 | 4.05 | 0.953 | 1.30 | 0.543 | 0.415 | 1.17 | 0.188 | 0.255 | 0.159 | 1.06 | 0.246 | 0.772 |
| 5. | 0.234 | 0.991 | 9.77 | 0.871 | 1.20 | 0.511 | 0.480 | 2.09 | 0.190 | 0.319 | 0.158 | 0.601 | 0.260 | 1.22 |
| 6. | 0.221 | 0.758 | 6.07 | 0.787 | 1.06 | 0.494 | 0.452 | 0.790 | 0.179 | 0.932 | 0.152 | 0.907 | 0.293 | 0.693 |
| 7. | 0.218 | 1.65 | 6.29 | 0.723 | 1.03 | 0.537 | 0.434 | 0.563 | 0.595 | 0.366 | 0.153 | 0.468 | 1.28 | 0.524 |
| 8. | 0.215 | 1.61 | 8.33 | 0.737 | 1.90 | 0.483 | 0.400 | 0.447 | 0.377 | 0.277 | 0.136 | 0.316 | 0.895 | 0.413 |
| 9. | 0.210 | 1.90 | 6.20 | 0.671 | 1.52 | 0.517 | 0.425 | 0.365 | 0.293 | 0.254 | 0.149 | 0.256 | 0.561 | 0.587 |
| 10. | 0.208 | 1.17 | 4.72 | 0.666 | 1.24 | 0.529 | 0.415 | 0.321 | 0.275 | 0.245 | 0.145 | 0.235 | 0.467 | 4.19 |
| 11. | 0.210 | 0.733 | 3.43 | 0.630 | 1.19 | 0.496 | 0.449 | 0.305 | 0.424 | 0.234 | 0.329 | 0.226 | 0.622 | 1.76 |
| 12. | 0.203 | 0.929 | 3.64 | 0.600 | 1.08 | 0.494 | 0.384 | 0.296 | 0.415 | 0.225 | 0.302 | 0.280 | 0.444 | 1.03 |
| 13. | 0.197 | 1.60 | 4.53 | 0.611 | 1.01 | 0.524 | 0.364 | 0.285 | 0.738 | 0.220 | 0.168 | 0.260 | 0.366 | 0.795 |
| 14. | 0.201 | 2.44 | 3.20 | 0.638 | 0.951 | 0.475 | 0.354 | 0.283 | 1.53 | 0.202 | 0.163 | 0.242 | 0.335 | 0.686 |
| 15. | 0.200 | 1.79 | 2.43 | 2.52 | 0.895 | 0.460 | 0.405 | 0.288 | 1.63 | 0.197 | 0.160 | 0.512 | 0.312 | 3.09 |
| 16. | 0.198 | 4.38 | 1.96 | 1.16 | 0.822 | 0.445 | 0.516 | 0.358 | 0.908 | 0.415 | 0.154 | 0.349 | 0.289 | 3.90 |
| 17. | 0.190 | 6.42 | 1.71 | 2.86 | 0.788 | 0.442 | 0.469 | 0.287 | 6.14 | 0.233 | 0.162 | 0.283 | 0.277 | 3.40 |
| 18. | 0.190 | 4.37 | 1.52 | 1.60 | 0.804 | 0.450 | 0.418 | 0.258 | 2.28 | 0.197 | 0.154 | 0.250 | 0.277 | 3.84 |
| 19. | 0.186 | 2.80 | 6.01 | 2.21 | 0.754 | 0.434 | 0.406 | 0.236 | 1.41 | 0.184 | 0.152 | 0.234 | 0.265 | 4.55 |
| 20. | 0.184 | 2.31 | 6.52 | 1.41 | 0.681 | 0.462 | 0.392 | 0.368 | 1.37 | 0.176 | 0.148 | 0.223 | 0.254 | 2.35 |
| 21. | 0.188 | 5.78 | 7.44 | 1.13 | 0.669 | 0.454 | 0.342 | 0.314 | 0.809 | 0.172 | 0.147 | 0.225 | 0.263 | 1.75 |
| 22. | 0.182 | 4.22 | 8.60 | 1.14 | 0.653 | 0.476 | 0.326 | 0.284 | 0.588 | 0.166 | 0.149 | 0.220 | 0.259 | 2.54 |
| 23. | 0.180 | 4.88 | 8.69 | 3.24 | 0.644 | 0.478 | 0.304 | 0.226 | 0.499 | 0.162 | 0.148 | 0.215 | 0.272 | 16.9 |
| 24. | 0.180 | 4.47 | 5.73 | 3.79 | 0.622 | 0.457 | 0.298 | 0.279 | 0.430 | 0.219 | 0.156 | 0.222 | 0.431 | 9.67 |
| 25. | 0.202 | 3.16 | 4.19 | 4.22 | 0.582 | 0.446 | 0.288 | 0.341 | 0.384 | 0.194 | 0.157 | 0.213 | 0.355 | 5.38 |
| 26. | 0.220 | 2.24 | 3.27 | 2.80 | 0.554 | 0.481 | 0.283 | 0.267 | 0.359 | 0.237 | 0.148 | 0.208 | 0.371 | 3.98 |
| 27. | 0.191 | 1.87 | 2.68 | 2.30 | 0.539 | 0.433 | 0.270 | 0.302 | 0.500 | 0.376 | 0.151 | 0.203 | 0.791 | 4.40 |
| 28. | 0.193 | 1.58 | 2.25 | 2.40 | 0.533 | 0.433 | 0.268 | 0.350 | 0.782 | 0.199 | 0.149 | 0.201 | 0.557 | 4.41 |
| 29. | 0.187 | 1.46 | 1.95 | 2.86 | 0.523 | 0.422 | 0.271 | 0.257 | 0.426 | 0.181 | 0.152 | 0.199 | 0.450 | 2.98 |
| 30. | 0.178 | 5.27 | 1.73 | | 0.761 | 0.410 | 0.262 | 0.230 | 0.360 | 0.172 | 0.149 | 0.587 | 0.405 | 2.33 |
| 31. | | 3.19 | 1.50 | | 0.699 | | 0.610 | | 0.320 | 0.172 | | 0.327 | | 1.90 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 12. | 29. | 30. | 30. | 23. | 6. | 23. | 8. | 2. | 2. | 1. |
| NQ | 0.178 | 0.203 | 1.50 | 0.600 | 0.523 | 0.410 | 0.262 | 0.226 | 0.179 | 0.162 | 0.136 | 0.140 | 0.242 | 0.362 |
| MQ | 0.204 | 2.44 | 4.53 | 1.62 | 0.982 | 0.483 | 0.388 | 0.457 | 0.808 | 0.258 | 0.164 | 0.321 | 0.413 | 2.95 |
| HQ | 0.359 | 9.79 | 16.8 | 6.29 | 2.52 | 0.671 | 2.42 | 4.03 | 11.7 | 3.38 | 1.43 | 2.77 | 1.87 | 31.7 |
| Tag | 5. | 16. | 5. | 24.+ | 1. | 4. | 31. | 4.+ | 17. | 6. | 11. | 4. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 85 | 157 | 53 | 34 | 16 | 13 | 15 | 28 | 9 | 6 | 11 | 14 | 102 |

| | 1969/2011 | | 1970/2012 43 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1971 | 1969 | 1970 | 1996 | 1972 | 2007 | 2011 | 2011 | 2010 | 1996 | 1991 | 2012 | 1971 | 2011 |
| NQ | 0.158 | 0.198 | 0.140 | 0.245 | 0.262 | 0.280 | 0.166 | 0.128 | 0.112 | 0.102 | 0.126 | 0.140 | 0.158 | 0.203 |
| MNQ | 0.481 | 0.714 | 0.920 | 0.946 | 0.864 | 0.751 | 0.457 | 0.355 | 0.299 | 0.263 | 0.277 | 0.354 | 0.476 | 0.718 |
| MQ | 1.56 | 2.29 | 2.60 | 2.26 | 2.34 | 1.39 | 0.849 | 0.660 | 0.611 | 0.523 | 0.641 | 0.851 | 1.55 | 2.34 |
| MHQ | 11.3 | 15.9 | 16.5 | 11.9 | 13.4 | 5.14 | 5.41 | 5.06 | 5.46 | 5.98 | 5.58 | 6.96 | 11.2 | 16.6 |
| HQ | 46.6 | 53.2 | 53.4 | 34.7 | 56.0 | 13.4 | 36.0 | 30.2 | 27.4 | 48.7 | 32.4 | 71.2 | 46.6 | 53.2 |
| Jahr | 1998 | 1988 | 1995 | 1970 | 2000 | 1980+ | 2003 | 1981 | 2002 | 2002 | 2007 | 1998 | 1998 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 52 | 79 | 90 | 72 | 81 | 47 | 30 | 22 | 21 | 18 | 22 | 30 | 52 | 81 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.136 | am 08.09.2012 | 0.178 | 0.136 | 0.136 | am 08.09.2012 |
| MQ | m³/s | 1.06 | | 1.73 | 0.400 | 1.12 | |
| HQ | m³/s | 16.8 | am 05.01.2012 bei W = 215 cm | 16.8 | 11.7 | 31.7 | am 23.12.2012 bei W = 284 cm |
| Nq | l/(skm²) | 1.77 | | 2.31 | 1.77 | 1.77 | |
| Mq | l/(skm²) | 13.7 | | 22.4 | 5.20 | 14.5 | |
| Hq | l/(skm²) | 218 | | 218 | 152 | 411 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 435 | | 352 | 83 | 459 | |

| | | 1970/2012 (*) 43 Jahre | | | | 1970/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.102 | am 10.08.1996 | 0.140 | 0.102 | 0.102 | am 10.08.1996 |
| MNQ | m³/s | 0.204 | | 0.395 | 0.218 | 0.211 | |
| MQ | m³/s | 1.38 | | 2.08 | 0.690 | 1.38 | |
| MHQ | m³/s | 29.7 | | 27.6 | 13.7 | 30.0 | |
| HQ | m³/s | 71.2 | am 28.10.1998 bei W = 400 cm | 56.0 | 71.2 | 71.2 | am 28.10.1998 bei W = 400 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.64 | | 5.13 | 2.83 | 2.74 | |
| Mq | l/(skm²) | 17.9 | | 27.0 | 8.95 | 17.9 | |
| MHq | l/(skm²) | 385 | | 358 | 177 | 389 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 565 | | 422 | 142 | 566 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.102 | 1.32 | 10.08.1996 | 71.2 | 924 | 400 | 28.10.1998 |
| 2 | 0.111 | 1.45 | 21.07.2010 | 56.0 | 727 | 356 | 09.03.2000 |
| 3 | 0.118 | 1.53 | 03.08.2011 | 53.4 | 693 | 340 | 30.01.1995 |
| 4 | 0.124 | 1.61 | 12.08.2003 | 53.2 | 691 | 329 | 19.12.1988 |
| 5 | 0.126 | 1.63 | 01.09.1991 | 51.5 | 668 | 333 | 30.12.1986 |
| 6 | 0.133 | 1.72 | 16.09.1997 | 48.7 | 632 | 334 | 23.08.2002 |
| 7 | 0.136 | 1.77 | 08.09.2012 | 46.6 | 605 | 329 | 01.11.1998 |
| 8 | 0.138 | 1.79 | 12.09.2009 | 45.5 | 591 | 310 | 13.03.1992 |
| 9 | 0.139 | 1.81 | 17.09.2008 | 43.2 | 560 | 304 | 19.03.1994 |
| 10 | 0.140 | 1.82 | 20.01.1970 | 42.7 | 554 | 306 | 02.01.1987 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1970/2012 43 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 9.77 | 16.9 | 36.9 | 16.0 | 6.23 |
| 363 | 8.69 | 9.77 | 27.3 | 11.8 | 4.22 |
| 362 | 8.60 | 9.67 | 21.7 | 10.3 | 4.22 |
| 361 | 8.33 | 8.69 | 18.5 | 9.15 | 3.50 |
| 360 | 7.44 | 8.60 | 14.1 | 8.35 | 3.45 |
| 359 | 6.52 | 8.33 | 13.5 | 7.71 | 3.05 |
| 358 | 6.42 | 7.44 | 13.0 | 7.36 | 3.03 |
| 357 | 6.29 | 6.52 | 12.5 | 6.95 | 2.98 |
| 356 | 6.20 | 6.29 | 12.2 | 6.61 | 2.98 |
| 350 | 5.27 | 5.38 | 9.33 | 5.17 | 2.57 |
| 340 | 4.19 | 4.05 | 6.39 | 3.91 | 2.14 |
| 330 | 3.19 | 3.27 | 5.14 | 3.22 | 1.83 |
| 320 | 2.40 | 2.52 | 4.35 | 2.73 | 1.69 |
| 300 | 1.61 | 1.63 | 3.41 | 2.09 | 1.18 |
| 270 | 1.01 | 0.953 | 2.64 | 1.53 | 0.774 |
| 240 | 0.644 | 0.653 | 2.06 | 1.18 | 0.534 |
| 210 | 0.500 | 0.523 | 1.72 | 0.943 | 0.434 |
| 183 | 0.434 | 0.450 | 1.44 | 0.776 | 0.317 |
| 150 | 0.350 | 0.384 | 1.25 | 0.621 | 0.257 |
| 130 | 0.293 | 0.335 | 1.16 | 0.540 | 0.237 |
| 120 | 0.279 | 0.305 | 1.12 | 0.507 | 0.225 |
| 110 | 0.259 | 0.288 | 1.08 | 0.476 | 0.213 |
| 100 | 0.240 | 0.279 | 1.05 | 0.448 | 0.203 |
| 90 | 0.233 | 0.267 | 1.02 | 0.424 | 0.197 |
| 80 | 0.220 | 0.256 | 0.968 | 0.401 | 0.190 |
| 70 | 0.208 | 0.237 | 0.923 | 0.379 | 0.185 |
| 60 | 0.199 | 0.225 | 0.844 | 0.357 | 0.180 |
| 50 | 0.190 | 0.203 | 0.807 | 0.336 | 0.168 |
| 40 | 0.181 | 0.190 | 0.742 | 0.315 | 0.158 |
| 30 | 0.166 | 0.166 | 0.684 | 0.294 | 0.149 |
| 25 | 0.161 | 0.161 | 0.671 | 0.284 | 0.147 |
| 20 | 0.157 | 0.157 | 0.629 | 0.272 | 0.143 |
| 15 | 0.152 | 0.152 | 0.615 | 0.257 | 0.134 |
| 10 | 0.149 | 0.149 | 0.607 | 0.244 | 0.133 |
| 9 | 0.149 | 0.149 | 0.607 | 0.242 | 0.133 |
| 8 | 0.149 | 0.149 | 0.606 | 0.239 | 0.122 |
| 7 | 0.148 | 0.148 | 0.602 | 0.236 | 0.120 |
| 6 | 0.148 | 0.148 | 0.592 | 0.233 | 0.116 |
| 5 | 0.148 | 0.148 | 0.586 | 0.230 | 0.114 |
| 4 | 0.147 | 0.147 | 0.586 | 0.227 | 0.113 |
| 3 | 0.147 | 0.147 | 0.586 | 0.224 | 0.112 |
| 2 | 0.145 | 0.145 | 0.583 | 0.221 | 0.111 |
| 1 | 0.144 | 0.144 | 0.578 | 0.218 | 0.109 |
| 0 | 0.136 | 0.136 | 0.547 | 0.211 | 0.102 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 65.1 $km^2$

PNP : NN + 125.01 m

Lage: 8.9 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Oelkassen Nr. 4545104

Gewässer : Lenne

Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.120 | 0.091 | 1.50 | 0.727 | 0.774 | 0.254 | 0.195 | 0.224 | 0.162 | 0.117 | 0.081 | 0.072 | 0.088 | 0.110 |
| 2. | 0.123 | 0.121 | 2.63 | 0.690 | 0.664 | 0.240 | 0.194 | 0.169 | 0.149 | 0.113 | 0.081 | 0.077 | 0.088 | 0.118 |
| 3. | 0.126 | 0.181 | 2.10 | 0.653 | 0.596 | 0.232 | 0.302 | 0.249 | 0.148 | 0.106 | 0.077 | 0.087 | 0.105 | 0.112 |
| 4. | 0.125 | 0.170 | 1.99 | 0.617 | 0.536 | 0.250 | 0.219 | 0.502 | 0.137 | 0.101 | 0.076 | 0.242 | 0.090 | 0.177 |
| 5. | 0.121 | 0.206 | 6.64 | 0.582 | 0.499 | 0.228 | 0.255 | 0.682 | 0.135 | 0.101 | 0.078 | 0.152 | 0.093 | 0.233 |
| 6. | 0.126 | 0.301 | 3.53 | 0.547 | 0.441 | 0.227 | 0.268 | 0.334 | 0.133 | 0.212 | 0.073 | 0.180 | 0.092 | 0.171 |
| 7. | 0.129 | 0.580 | 2.75 | 0.514 | 0.440 | 0.228 | 0.247 | 0.270 | 0.155 | 0.100 | 0.073 | 0.126 | 0.105 | 0.141 |
| 8. | 0.129 | 0.881 | 3.55 | 0.481 | 0.687 | 0.209 | 0.225 | 0.217 | 0.172 | 0.097 | 0.072 | 0.102 | 0.098 | 0.131 |
| 9. | 0.127 | 1.09 | 2.46 | 0.449 | 0.542 | 0.216 | 0.241 | 0.184 | 0.173 | 0.097 | 0.070 | 0.097 | 0.097 | 0.153 |
| 10. | 0.126 | 0.573 | 2.13 | 0.419 | 0.488 | 0.219 | 0.251 | 0.166 | 0.139 | 0.097 | 0.069 | 0.090 | 0.101 | 0.346 |
| 11. | 0.123 | 0.400 | 1.61 | 0.389 | 0.454 | 0.223 | 0.268 | 0.166 | 0.183 | 0.094 | 0.135 | 0.085 | 0.098 | 0.217 |
| 12. | 0.119 | 0.496 | 1.46 | 0.359 | 0.436 | 0.330 | 0.210 | 0.230 | 0.183 | 0.092 | 0.094 | 0.099 | 0.086 | 0.174 |
| 13. | 0.116 | 0.819 | 1.58 | 0.326 | 0.415 | 0.916 | 0.191 | 0.176 | 0.300 | 0.085 | 0.081 | 0.100 | 0.082 | 0.159 |
| 14. | 0.119 | 1.34 | 1.49 | 0.326 | 0.397 | 0.465 | 0.191 | 0.155 | 0.396 | 0.084 | 0.075 | 0.101 | 0.081 | 0.172 |
| 15. | 0.116 | 1.18 | 1.21 | 0.621 | 0.381 | 0.353 | 0.225 | 0.149 | 0.374 | 0.083 | 0.078 | 0.142 | 0.080 | 0.889 |
| 16. | 0.109 | 2.96 | 0.995 | 0.427 | 0.377 | 0.320 | 0.217 | 0.174 | 0.311 | 0.132 | 0.073 | 0.122 | 0.079 | 1.15 |
| 17. | 0.103 | 2.74 | 0.855 | 0.679 | 0.351 | 0.304 | 0.198 | 0.158 | 1.01 | 0.096 | 0.073 | 0.118 | 0.080 | 0.961 |
| 18. | 0.102 | 1.54 | 0.788 | 0.532 | 0.347 | 0.290 | 0.187 | 0.144 | 0.588 | 0.090 | 0.070 | 0.106 | 0.085 | 0.699 |
| 19. | 0.100 | 1.03 | 2.00 | 0.812 | 0.317 | 0.275 | 0.173 | 0.134 | 0.421 | 0.085 | 0.072 | 0.103 | 0.077 | 0.525 |
| 20. | 0.099 | 0.868 | 2.25 | 0.508 | 0.292 | 0.261 | 0.185 | 0.177 | 0.324 | 0.082 | 0.069 | 0.103 | 0.076 | 0.426 |
| 21. | 0.098 | 1.72 | 1.94 | 0.442 | 0.287 | 0.306 | 0.178 | 0.159 | 0.247 | 0.085 | 0.068 | 0.101 | 0.077 | 0.372 |
| 22. | 0.098 | 1.80 | 3.17 | 0.455 | 0.286 | 0.291 | 0.205 | 0.149 | 0.206 | 0.085 | 0.070 | 0.099 | 0.084 | 0.437 |
| 23. | 0.097 | 2.05 | 3.32 | 0.559 | 0.285 | 0.273 | 0.172 | 0.144 | 0.180 | 0.082 | 0.069 | 0.102 | 0.096 | 3.45 |
| 24. | 0.095 | 2.41 | 2.49 | 0.857 | 0.282 | 0.260 | 0.167 | 0.173 | 0.165 | 0.100 | 0.088 | 0.105 | 0.107 | 2.35 |
| 25. | 0.093 | 1.82 | 2.30 | 1.11 | 0.259 | 0.257 | 0.165 | 0.181 | 0.150 | 0.117 | 0.079 | 0.106 | 0.104 | 1.42 |
| 26. | 0.098 | 1.25 | 1.71 | 0.858 | 0.256 | 0.252 | 0.162 | 0.158 | 0.143 | 0.090 | 0.079 | 0.104 | 0.108 | 1.20 |
| 27. | 0.101 | 0.983 | 1.35 | 0.739 | 0.252 | 0.221 | 0.157 | 0.149 | 0.175 | 0.097 | 0.080 | 0.106 | 0.122 | 1.56 |
| 28. | 0.091 | 0.823 | 1.12 | 0.816 | 0.234 | 0.218 | 0.155 | 0.149 | 0.166 | 0.083 | 0.079 | 0.100 | 0.108 | 1.29 |
| 29. | 0.090 | 0.799 | 0.945 | 0.870 | 0.229 | 0.219 | 0.154 | 0.320 | 0.141 | 0.082 | 0.075 | 0.092 | 0.115 | 0.924 |
| 30. | 0.091 | 2.89 | 0.811 | | 0.277 | 0.203 | 0.150 | 0.225 | 0.127 | 0.083 | 0.072 | 0.120 | 0.110 | 0.762 |
| 31. | | 1.86 | 0.766 | | 0.279 | | 0.252 | | 0.117 | 0.082 | | 0.090 | | 0.676 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 13.+ | 29. | 30. | 30. | 19. | 31. | 20.+ | 21. | 1. | 20. | 1. |
| NQ | 0.090 | 0.091 | 0.766 | 0.326 | 0.229 | 0.203 | 0.150 | 0.134 | 0.117 | 0.082 | 0.068 | 0.072 | 0.076 | 0.110 |
| MQ | 0.110 | 1.16 | 2.05 | 0.599 | 0.399 | 0.285 | 0.205 | 0.216 | 0.239 | 0.098 | 0.078 | 0.111 | 0.094 | 0.694 |
| HQ | 0.146 | 6.10 | 14.6 | 1.36 | 0.838 | 1.43 | 1.28 | 2.32 | 1.49 | 2.04 | 0.913 | 1.11 | 0.221 | 5.92 |
| Tag | 7. | 16. | 5. | 25. | 1. | 13. | 10. | 29. | 17. | 6. | 11. | 4. | 3. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 48 | 84 | 23 | 16 | 11 | 8 | 9 | 10 | 4 | 3 | 5 | 4 | 29 |
| | 1961/2011 | | 1962/2012 51 Jahre | | | | | | | | | | | |
| Jahr | 2011 | 2011 | 1972 | 1996 | 2011 | 1974 | 2011 | 2011 | 2010 | 2004 | 2012 | 2012 | 2012 | 2011 |
| NQ | 0.090 | 0.091 | 0.160 | 0.179 | 0.223 | 0.160 | 0.142 | 0.117 | 0.107 | 0.060 | 0.068 | 0.072 | 0.076 | 0.091 |
| MNQ | 0.326 | 0.469 | 0.606 | 0.616 | 0.613 | 0.548 | 0.374 | 0.262 | 0.221 | 0.195 | 0.198 | 0.247 | 0.318 | 0.454 |
| MQ | 0.759 | 1.29 | 1.47 | 1.32 | 1.45 | 1.00 | 0.640 | 0.485 | 0.400 | 0.347 | 0.376 | 0.476 | 0.740 | 1.26 |
| MHQ | 4.66 | 7.51 | 7.56 | 5.86 | 6.60 | 3.42 | 3.41 | 3.12 | 2.90 | 2.78 | 2.71 | 2.94 | 4.54 | 7.33 |
| HQ | 32.4 | 30.3 | 22.3 | 21.3 | 17.7 | 24.8 | 17.6 | 22.8 | 24.0 | 34.1 | 31.9 | 42.8 | 32.4 | 30.3 |
| Jahr | 1998 | 1988 | 1968 | 1970 | 1970+ | 1994 | 2004 | 1981 | 2002 | 2007 | 2007 | 1998 | 1998 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 30 | 53 | 60 | 51 | 60 | 40 | 26 | 19 | 16 | 14 | 15 | 20 | 29 | 52 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.068 | am 21.09.2012 | 0.090 | 0.068 | 0.068 | am 21.09.2012 |
| MQ $m^3/s$ | 0.465 | | 0.775 | 0.158 | 0.424 | |
| HQ $m^3/s$ | 14.6 | am 05.01.2012 bei W= 176 cm | 14.6 | 2.32 | 14.6 | am 05.01.2012 bei W= 176 cm |
| Nq $l/(s km^2)$ | 1.04 | | 1.38 | 1.04 | 1.04 | |
| Mq $l/(s km^2)$ | 7.14 | | 11.9 | 2.43 | 6.51 | |
| Hq $l/(s km^2)$ | 224 | | 224 | 35.7 | 224 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 226 | | 187 | 39 | 206 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| NQ $m^3/s$ | 0.060 | am 21.08.2004 | 0.090 | 0.060 | 0.060 | am 21.08.2004 |
| MNQ $m^3/s$ | 0.143 | | 0.262 | 0.158 | 0.154 | |
| MQ $m^3/s$ | 0.831 | | 1.21 | 0.454 | 0.827 | |
| MHQ $m^3/s$ | 15.1 | | 13.3 | 7.81 | 14.8 | |
| HQ $m^3/s$ | 42.8 | am 28.10.1998 bei W= 299 cm | 32.4 | 42.8 | 42.8 | am 28.10.1998 bei W= 299 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.20 | | 4.02 | 2.43 | 2.37 | |
| Mq $l/(s km^2)$ | 12.8 | | 18.6 | 6.97 | 12.7 | |
| MHq $l/(s km^2)$ | 232 | | 204 | 120 | 227 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 404 | | 292 | 111 | 402 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.060 | 0.922 | 21.08.2004 | 42.8 | 657 | 299 | 28.10.1998 |
| 2 | 0.068 | 1.04 | 21.09.2012 | 34.1 | 524 | 262 | 21.08.2007 |
| 3 | 0.077 | 1.18 | 14.09.2003 | 32.4 | 498 | 258 | 01.11.1998 |
| 4 | 0.080 | 1.23 | 15.09.1976 | 31.9 | 490 | 253 | 29.09.2007 |
| 5 | 0.080 | 1.23 | 27.08.1973 | 30.3 | 465 | 243 | 19.12.1988 |
| 6 | 0.090 | 1.38 | 29.11.2011 | 26.3 | 403 | 233 | 13.11.2010 |
| 7 | 0.090 | 1.38 | 21.08.1975 | 24.8 | 381 | 219 | 13.04.1994 |
| 8 | 0.092 | 1.41 | 01.09.2009 | 24.0 | 369 | 218 | 18.07.2002 |
| 9 | 0.094 | 1.44 | 24.08.2001 | 22.8 | 350 | 195 | 04.06.1981 |
| 10 | 0.098 | 1.51 | 28.08.1991 | 22.3 | 343 | 231 | 15.01.1968 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1962/2012 51 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 6.64 | 6.64 | | | |
| 364 | 3.55 | 3.55 | 18.4 | 7.78 | 2.12 |
| 363 | 3.53 | 3.53 | 13.7 | 6.28 | 1.85 |
| 362 | 3.32 | 3.45 | 11.2 | 5.41 | 1.81 |
| 361 | 3.17 | 3.32 | 10.0 | 4.88 | 1.80 |
| 360 | 2.96 | 3.17 | 9.29 | 4.45 | 1.80 |
| 359 | 2.89 | 2.75 | 8.94 | 4.17 | 1.80 |
| 358 | 2.75 | 2.63 | 8.13 | 3.95 | 1.72 |
| 357 | 2.74 | 2.49 | 8.03 | 3.74 | 1.71 |
| 356 | 2.63 | 2.46 | 6.83 | 3.54 | 1.51 |
| 350 | 2.13 | 2.00 | 5.75 | 2.85 | 1.18 |
| 340 | 1.71 | 1.42 | 3.85 | 2.23 | 0.980 |
| 330 | 1.21 | 0.961 | 3.05 | 1.87 | 0.850 |
| 320 | 0.916 | 0.812 | 2.76 | 1.59 | 0.760 |
| 300 | 0.682 | 0.582 | 2.08 | 1.25 | 0.582 |
| 270 | 0.436 | 0.381 | 1.56 | 0.922 | 0.381 |
| 240 | 0.292 | 0.277 | 1.29 | 0.731 | 0.277 |
| 210 | 0.241 | 0.229 | 1.12 | 0.591 | 0.229 |
| 183 | 0.205 | 0.187 | 1.00 | 0.498 | 0.187 |
| 150 | 0.166 | 0.159 | 0.890 | 0.400 | 0.159 |
| 130 | 0.148 | 0.142 | 0.840 | 0.341 | 0.142 |
| 120 | 0.133 | 0.131 | 0.800 | 0.317 | 0.131 |
| 110 | 0.125 | 0.118 | 0.790 | 0.299 | 0.118 |
| 100 | 0.118 | 0.107 | 0.750 | 0.281 | 0.107 |
| 90 | 0.109 | 0.103 | 0.720 | 0.261 | 0.103 |
| 80 | 0.102 | 0.101 | 0.680 | 0.241 | 0.101 |
| 70 | 0.100 | 0.098 | 0.650 | 0.221 | 0.098 |
| 60 | 0.098 | 0.092 | 0.630 | 0.207 | 0.092 |
| 50 | 0.092 | 0.086 | 0.590 | 0.191 | 0.086 |
| 40 | 0.087 | 0.083 | 0.580 | 0.180 | 0.083 |
| 30 | 0.083 | 0.081 | 0.560 | 0.162 | 0.081 |
| 25 | 0.080 | 0.080 | 0.540 | 0.155 | 0.080 |
| 20 | 0.079 | 0.078 | 0.530 | 0.147 | 0.078 |
| 15 | 0.076 | 0.076 | 0.500 | 0.136 | 0.076 |
| 10 | 0.073 | 0.073 | 0.500 | 0.122 | 0.073 |
| 9 | 0.073 | 0.073 | 0.490 | 0.121 | 0.073 |
| 8 | 0.073 | 0.073 | 0.490 | 0.118 | 0.073 |
| 7 | 0.073 | 0.073 | 0.480 | 0.111 | 0.073 |
| 6 | 0.072 | 0.072 | 0.480 | 0.111 | 0.072 |
| 5 | 0.072 | 0.072 | 0.450 | 0.108 | 0.072 |
| 4 | 0.072 | 0.072 | 0.440 | 0.101 | 0.072 |
| 3 | 0.070 | 0.070 | 0.430 | 0.099 | 0.070 |
| 2 | 0.070 | 0.070 | 0.430 | 0.091 | 0.070 |
| 1 | 0.070 | 0.070 | 0.430 | 0.081 | 0.062 |
| 0 | 0.068 | 0.068 | 0.420 | 0.060 | 0.060 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Weserberge

NLWKN

$A_{Eo}$ : 267.22 km²
PNP : NHN+ 118.00 m
Lage : 35.03 km oberhalb der Mündung links

# Q
m³/s

Pegel : Schieder−Ness. Nr. 4567000000100
Gewässer : Emmer, 456
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.975 | 0.845 | 8.23 | 3.57 | 4.40 | 1.84 | 1.50 | 1.96 | 1.09 | 1.21 | 0.757 | 0.576 | 0.865 | 1.12 |
| 2. | 0.938 | 1.14 | 15.3 | 3.26 | 3.89 | 1.86 | 1.42 | 1.36 | 1.00 | 1.13 | 0.739 | 0.581 | 0.921 | 1.16 |
| 3. | 0.916 | 1.97 | 10.3 | 3.08 | 3.51 | 1.86 | 1.68 | 1.50 | 0.969 | 1.05 | 0.710 | 0.611 | 1.17 | 1.23 |
| 4. | 0.949 | 2.44 | 9.53 | 2.95 | 3.34 | 1.88 | 1.20 | 1.91 | 0.932 | 1.01 | 0.687 | 2.55 | 1.14 | 1.75 |
| 5. | 0.954 | 2.35 | 27.5 | 2.80 | 3.23 | 1.82 | 1.48 | 3.73 | 0.809 | 1.09 | 0.705 | 1.54 | 1.09 | 2.40 |
| 6. | 0.897 | 3.05 | 16.3 | 2.63 | 2.97 | 1.81 | 1.52 | 1.78 | 0.732 | 1.32 | 0.683 | 2.06 | 1.11 | 1.64 |
| 7. | 0.893 | 5.64 | 14.9 | 2.48 | 2.88 | 1.81 | 1.53 | 1.56 | 0.901 | 1.04 | 0.683 | 1.49 | 2.66 | 1.34 |
| 8. | 0.860 | 4.98 | 22.3 | 2.54 | 4.77 | 1.77 | 1.49 | 1.37 | 1.03 | 0.929 | 0.664 | 0.944 | 2.00 | 1.17 |
| 9. | 0.880 | 5.77 | 16.2 | 2.46 | 3.73 | 1.77 | 1.40 | 1.30 | 1.02 | 0.905 | 0.668 | 0.856 | 1.39 | 1.26 |
| 10. | 0.857 | 3.54 | 12.0 | 2.42 | 3.23 | 1.89 | 1.41 | 1.20 | 1.06 | 0.890 | 0.621 | 0.777 | 1.32 | 5.71 |
| 11. | 0.839 | 2.46 | 8.75 | 2.35 | 3.05 | 1.84 | 1.80 | 0.991 | 1.17 | 0.909 | 0.798 | 0.751 | 1.95 | 3.05 |
| 12. | 0.816 | 2.83 | 9.30 | 2.31 | 2.84 | 1.77 | 1.48 | 0.979 | 1.23 | 0.846 | 0.738 | 0.881 | 1.39 | 2.12 |
| 13. | 0.844 | 4.83 | 12.5 | 2.36 | 2.72 | 1.81 | 1.37 | 1.10 | 1.84 | 0.843 | 0.632 | 0.978 | 1.16 | 1.81 |
| 14. | 0.791 | 8.03 | 8.66 | 2.46 | 2.61 | 1.74 | 1.31 | 1.05 | 2.32 | 0.830 | 0.627 | 0.909 | 1.07 | 1.73 |
| 15. | 0.824 | 8.34 | 6.72 | 4.33 | 2.53 | 1.70 | 1.44 | 1.04 | 2.45 | 0.818 | 0.612 | 1.27 | 1.01 | 9.74 |
| 16. | 0.814 | 15.0 | 5.57 | 2.98 | 2.50 | 1.58 | 1.46 | 1.09 | 1.78 | 1.19 | 0.607 | 1.09 | 0.973 | 8.51 |
| 17. | 0.800 | 18.2 | 4.59 | 4.30 | 2.44 | 1.50 | 1.41 | 1.08 | 8.76 | 0.930 | 0.602 | 0.962 | 0.944 | 6.93 |
| 18. | 0.800 | 11.3 | 4.23 | 3.39 | 2.41 | 1.60 | 1.32 | 0.986 | 3.10 | 0.856 | 0.603 | 0.872 | 0.943 | 5.80 |
| 19. | 0.938 | 6.83 | 11.2 | 5.06 | 2.38 | 1.64 | 1.26 | 0.928 | 2.27 | 0.821 | 0.615 | 0.801 | 0.939 | 7.97 |
| 20. | 0.871 | 5.31 | 13.3 | 3.44 | 2.29 | 1.59 | 1.25 | 1.06 | 2.13 | 0.791 | 0.575 | 0.765 | 0.909 | 4.22 |
| 21. | 0.734 | 10.2 | 13.6 | 2.95 | 2.14 | 1.62 | 1.20 | 1.17 | 1.58 | 0.789 | 0.573 | 0.733 | 0.885 | 3.38 |
| 22. | 0.629 | 8.61 | 20.7 | 2.99 | 2.07 | 1.70 | 1.14 | 1.06 | 1.44 | 0.795 | 0.574 | 0.739 | 0.872 | 5.66 |
| 23. | 0.677 | 9.96 | 20.4 | 4.95 | 2.09 | 1.76 | 1.10 | 0.759 | 0.980 | 0.780 | 0.575 | 0.705 | 0.901 | 26.8 |
| 24. | 0.709 | 9.32 | 12.8 | 6.37 | 2.07 | 1.76 | 1.06 | 1.05 | 1.13 | 0.783 | 0.670 | 0.744 | 1.18 | 22.1 |
| 25. | 0.757 | 6.97 | 9.54 | 8.79 | 2.01 | 1.66 | 1.03 | 1.36 | 1.05 | 0.988 | 0.608 | 0.743 | 1.09 | 11.0 |
| 26. | 0.802 | 5.63 | 7.60 | 5.41 | 1.95 | 1.71 | 1.01 | 1.12 | 0.827 | 0.917 | 0.642 | 0.734 | 1.17 | 10.2 |
| 27. | 0.798 | 4.91 | 6.50 | 4.55 | 1.93 | 1.62 | 1.01 | 0.890 | 3.49 | 0.929 | 0.610 | 0.747 | 2.00 | 12.7 |
| 28. | 0.817 | 4.09 | 5.69 | 4.74 | 1.89 | 1.57 | 1.01 | 1.10 | 6.75 | 0.834 | 0.627 | 0.721 | 1.55 | 10.8 |
| 29. | 0.782 | 3.79 | 5.10 | 5.35 | 1.89 | 1.54 | 1.01 | 1.62 | 2.23 | 0.787 | 0.597 | 0.713 | 1.32 | 7.03 |
| 30. | 0.707 | 11.3 | 4.47 | | 2.17 | 1.52 | 0.904 | 1.60 | 1.73 | 0.787 | 0.591 | 1.21 | 1.24 | 5.71 |
| 31. | | 7.24 | 4.05 | | 2.06 | | 1.12 | | 1.13 | 0.751 | | 1.06 | | 4.92 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 22. | 1. | 31. | 12. | 28.+ | 17. | 30. | 23. | 6. | 31. | 21. | 1. | 1. | 1. |
| NQ | 0.629 | 0.845 | 4.05 | 2.31 | 1.89 | 1.50 | 0.904 | 0.759 | 0.732 | 0.751 | 0.573 | 0.576 | 0.865 | 1.12 |
| MQ | 0.829 | 6.35 | 11.2 | 3.70 | 2.71 | 1.72 | 1.30 | 1.32 | 1.90 | 0.921 | 0.646 | 0.971 | 1.24 | 6.16 |
| HQ | 1.41 | 36.9 | 49.4 | 12.5 | 7.31 | 2.11 | 2.61 | 7.25 | 18.9 | 1.97 | 2.28 | 6.12 | 4.14 | 48.8 |
| Tag | 19. | 16. | 5. | 25. | 8. | 19. | 11. | 5. | 17. | 16. | 11. | 4. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 64 | 112 | 35 | 27 | 17 | 13 | 13 | 19 | 9 | 6 | 10 | 12 | 62 |

| | 1980/2011 | | 1981/2012 32 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 1997 | 2009 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1990 | 1991 | 1991 | 2011 | 1997 |
| NQ | 0.629 | 0.844 | 1.15 | 1.09 | 1.76 | 1.09 | 0.855 | 0.509 | 0.408 | 0.433 | 0.385 | 0.445 | 0.629 | 0.844 |
| MNQ | 1.58 | 2.16 | 3.00 | 3.32 | 3.29 | 2.70 | 1.74 | 1.27 | 1.04 | 0.976 | 0.961 | 1.16 | 1.55 | 2.10 |
| MQ | 4.45 | 6.43 | 8.35 | 7.00 | 7.35 | 4.27 | 2.81 | 2.01 | 1.73 | 1.70 | 1.97 | 2.58 | 4.32 | 6.42 |
| MHQ | 28.6 | 43.2 | 45.9 | 32.7 | 38.3 | 12.6 | 12.2 | 10.6 | 10.5 | 11.8 | 13.8 | 18.1 | 27.7 | 43.7 |
| HQ | 120 | 132 | 107 | 66.6 | 102 | 45.7 | 44.6 | 45.3 | 60.2 | 92.4 | 109 | 174 | 120 | 132 |
| Jahr | 1998 | 1986 | 1987 | 2002 | 1994 | 1994 | 1984 | 1981 | 2002 | 2007 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 43 | 64 | 84 | 64 | 74 | 41 | 28 | 20 | 17 | 17 | 19 | 26 | 42 | 64 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.573 | am 21.09.2012 | 0.629 | 0.573 | 0.573 | am 21.09.2012 |
| MQ | m³/s | 2.81 | | 4.46 | 1.18 | 2.83 | |
| HQ | m³/s | 49.4 | am 05.01.2012 bei W = 249 cm | 49.4 | 18.9 | 49.4 | am 05.01.2012 bei W = 249 cm |
| Nq | l/(skm²) | 2.14 | | 2.35 | 2.14 | 2.14 | |
| Mq | l/(skm²) | 10.5 | | 16.7 | 4.41 | 10.6 | |
| Hq | l/(skm²) | 185 | | 185 | 70.6 | 185 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 333 | | 263 | 70 | 335 | |

| | | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.385 | am 03.09.1991 | 0.629 | 0.385 | 0.385 | am 03.09.1991 |
| MNQ | m³/s | 0.811 | | 1.42 | 0.843 | 0.841 | |
| MQ | m³/s | 4.21 | | 6.32 | 2.14 | 4.20 | |
| MHQ | m³/s | 73.4 | | 69.3 | 29.5 | 71.7 | |
| HQ | m³/s | 174 | am 28.10.1998 bei W = 400 cm | 132 | 174 | 174 | am 28.10.1998 bei W = 400 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.04 | | 5.32 | 3.15 | 3.15 | |
| Mq | l/(skm²) | 15.8 | | 23.6 | 7.99 | 15.7 | |
| MHq | l/(skm²) | 275 | | 259 | 110 | 268 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 497 | | 370 | 127 | 496 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.385 | 1.44 | 03.09.1991 | 174 | 650 | 400 | 28.10.1998 |
| 2 | 0.408 | 1.53 | 15.07.1996 | 132 | 495 | 339 | 30.12.1986 |
| 3 | 0.433 | 1.62 | 27.08.1990 | 120 | 450 | 352 | 01.11.1998 |
| 4 | 0.530 | 1.98 | 25.09.2009 | 113 | 424 | 327 | 19.12.1988 |
| 5 | 0.568 | 2.12 | 10.09.1989 | 109 | 409 | 349 | 29.09.2007 |
| 6 | 0.573 | 2.14 | 21.09.2012 | 107 | 401 | 314 | 02.01.1987 |
| 7 | 0.579 | 2.17 | 06.10.1997 | 102 | 383 | 318 | 30.01.2000 |
| 8 | 0.598 | 2.24 | 10.08.1992 | 102 | 382 | 310 | 19.03.1994 |
| 9 | 0.629 | 2.35 | 22.11.2011 | 99.4 | 372 | 307 | 13.03.1992 |
| 10 | 0.655 | 2.45 | 27.08.2003 | 98.8 | 370 | 333 | 13.11.2010 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1981/2012 32 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 27.5 | 27.5 | 102 | 40.3 | 15.0 |
| 363 | 22.3 | 26.8 | 72.7 | 32.3 | 15.0 |
| 362 | 20.7 | 22.3 | 72.1 | 29.0 | 14.5 |
| 361 | 20.4 | 22.1 | 47.1 | 25.4 | 14.3 |
| 360 | 18.2 | 20.7 | 43.5 | 23.4 | 14.2 |
| 359 | 16.3 | 20.4 | 38.3 | 21.6 | 12.8 |
| 358 | 16.2 | 16.3 | 34.4 | 20.5 | 12.1 |
| 357 | 15.3 | 16.2 | 33.6 | 19.3 | 12.0 |
| 356 | 15.0 | 15.3 | 30.8 | 18.4 | 11.2 |
| 350 | 12.0 | 12.5 | 22.1 | 14.7 | 8.41 |
| 340 | 9.30 | 9.30 | 17.7 | 11.2 | 6.64 |
| 330 | 7.24 | 6.94 | 14.9 | 9.33 | 5.62 |
| 320 | 5.63 | 5.57 | 12.8 | 8.00 | 4.63 |
| 300 | 4.09 | 3.73 | 9.64 | 6.26 | 3.27 |
| 270 | 2.63 | 2.50 | 7.63 | 4.60 | 2.38 |
| 240 | 2.06 | 1.95 | 6.07 | 3.63 | 1.90 |
| 210 | 1.73 | 1.72 | 5.00 | 2.94 | 1.60 |
| 183 | 1.48 | 1.49 | 4.44 | 2.45 | 1.31 |
| 150 | 1.13 | 1.20 | 4.03 | 1.99 | 1.09 |
| 130 | 1.05 | 1.10 | 3.69 | 1.75 | 0.991 |
| 120 | 1.00 | 1.07 | 3.55 | 1.64 | 0.944 |
| 110 | 0.954 | 1.05 | 3.40 | 1.52 | 0.903 |
| 100 | 0.917 | 1.01 | 3.22 | 1.42 | 0.860 |
| 90 | 0.890 | 0.962 | 3.11 | 1.33 | 0.813 |
| 80 | 0.845 | 0.921 | 2.97 | 1.25 | 0.775 |
| 70 | 0.817 | 0.890 | 2.75 | 1.18 | 0.742 |
| 60 | 0.795 | 0.834 | 2.60 | 1.11 | 0.705 |
| 50 | 0.765 | 0.789 | 2.43 | 1.05 | 0.667 |
| 40 | 0.739 | 0.751 | 2.24 | 0.972 | 0.608 |
| 30 | 0.707 | 0.721 | 2.19 | 0.906 | 0.585 |
| 25 | 0.683 | 0.687 | 2.15 | 0.874 | 0.572 |
| 20 | 0.642 | 0.664 | 2.11 | 0.839 | 0.550 |
| 15 | 0.621 | 0.621 | 2.06 | 0.796 | 0.534 |
| 10 | 0.608 | 0.608 | 1.96 | 0.737 | 0.518 |
| 9 | 0.607 | 0.607 | 1.96 | 0.723 | 0.509 |
| 8 | 0.603 | 0.603 | 1.95 | 0.710 | 0.508 |
| 7 | 0.602 | 0.602 | 1.94 | 0.697 | 0.502 |
| 6 | 0.597 | 0.597 | 1.94 | 0.681 | 0.498 |
| 5 | 0.591 | 0.591 | 1.93 | 0.656 | 0.497 |
| 4 | 0.581 | 0.581 | 1.93 | 0.633 | 0.489 |
| 3 | 0.576 | 0.576 | 1.92 | 0.608 | 0.475 |
| 2 | 0.575 | 0.575 | 1.92 | 0.590 | 0.445 |
| 1 | 0.575 | 0.575 | 1.91 | 0.542 | 0.445 |
| 0 | 0.573 | 0.573 | 1.91 | 0.385 | 0.385 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Oberwasserpegel für den Emmer−Stausee

LANUV NRW

$A_{Eo}$ : 69.34 km²
PNP : NHN+ 119.24 m
Lage : 0.56 km oberhalb der Mündung links

# Q
m³/s

Pegel : Schieder Nr. 4568900000100
Gewässer : Niese
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.172 | 0.141 | 1.37 | 0.739 | 0.821 | 0.374 | 0.326 | 0.402 | 0.257 | 0.233 | 0.207 | 0.192 | 0.235 | 0.178 |
| 2. | 0.181 | 0.173 | 1.91 | 0.672 | 0.729 | 0.377 | 0.319 | 0.282 | 0.265 | 0.236 | 0.183 | 0.186 | 0.264 | 0.187 |
| 3. | 0.177 | 0.205 | 1.66 | 0.628 | 0.641 | 0.382 | 0.404 | 0.305 | 0.267 | 0.226 | 0.202 | 0.181 | 0.315 | 0.181 |
| 4. | 0.170 | 0.241 | 1.61 | 0.597 | 0.574 | 0.383 | 0.336 | 0.372 | 0.268 | 0.228 | 0.199 | 0.356 | 0.246 | 0.189 |
| 5. | 0.193 | 0.239 | 3.61 | 0.561 | 0.553 | 0.363 | 0.339 | 0.757 | 0.259 | 0.248 | 0.197 | 0.315 | 0.272 | 0.204 |
| 6. | 0.167 | 0.316 | 3.67 | 0.521 | 0.485 | 0.355 | 0.347 | 0.346 | 0.260 | 0.429 | 0.198 | 0.283 | 0.245 | 0.176 |
| 7. | 0.173 | 0.768 | 2.67 | 0.481 | 0.460 | 0.363 | 0.325 | 0.318 | 0.266 | 0.271 | 0.187 | 0.247 | 0.211 | 0.166 |
| 8. | 0.164 | 0.854 | 3.85 | 0.486 | 0.786 | 0.337 | 0.323 | 0.293 | 0.308 | 0.244 | 0.217 | 0.212 | 0.208 | 0.343 |
| 9. | 0.162 | 0.818 | 3.22 | 0.462 | 0.623 | 0.341 | 0.388 | 0.268 | 0.259 | 0.241 | 0.161 | 0.198 | 0.204 | 0.309 |
| 10. | 0.160 | 0.581 | 2.52 | 0.447 | 0.546 | 0.367 | 0.333 | 0.253 | 0.288 | 0.230 | 0.196 | 0.193 | 0.212 | 0.268 |
| 11. | 0.154 | 0.372 | 1.94 | 0.426 | 0.526 | 0.360 | 0.400 | 0.246 | 0.269 | 0.233 | 0.195 | 0.192 | 0.236 | 0.225 |
| 12. | 0.152 | 0.372 | 1.74 | 0.412 | 0.491 | 0.348 | 0.328 | 0.248 | 0.279 | 0.222 | 0.222 | 0.201 | 0.200 | 0.187 |
| 13. | 0.160 | 0.672 | 2.24 | 0.411 | 0.461 | 0.378 | 0.318 | 0.259 | 0.444 | 0.222 | 0.197 | 0.206 | 0.188 | 0.180 |
| 14. | 0.159 | 1.23 | 1.86 | 0.419 | 0.432 | 0.352 | 0.306 | 0.254 | 0.420 | 0.213 | 0.198 | 0.211 | 0.183 | 0.170 |
| 15. | 0.156 | 1.35 | 1.47 | 0.684 | 0.422 | 0.336 | 0.338 | 0.253 | 0.385 | 0.210 | 0.191 | 0.268 | 0.207 | 1.24 |
| 16. | 0.156 | 2.34 | 1.19 | 0.496 | 0.417 | 0.333 | 0.341 | 0.264 | 0.400 | 0.241 | 0.193 | 0.232 | 0.162 | 1.21 |
| 17. | 0.150 | 3.00 | 1.02 | 0.776 | 0.401 | 0.330 | 0.324 | 0.262 | 0.742 | 0.218 | 0.192 | 0.215 | 0.177 | 0.828 |
| 18. | 0.158 | 1.80 | 0.881 | 0.581 | 0.403 | 0.339 | 0.316 | 0.241 | 0.477 | 0.200 | 0.194 | 0.209 | 0.191 | 0.608 |
| 19. | 0.145 | 1.23 | 2.09 | 0.822 | 0.381 | 0.335 | 0.332 | 0.241 | 0.356 | 0.203 | 0.187 | 0.202 | 0.191 | 0.670 |
| 20. | 0.143 | 0.893 | 2.56 | 0.554 | 0.349 | 0.333 | 0.341 | 0.286 | 0.344 | 0.195 | 0.183 | 0.240 | 0.181 | 0.433 |
| 21. | 0.150 | 1.31 | 2.19 | 0.466 | 0.385 | 0.337 | 0.321 | 0.297 | 0.297 | 0.202 | 0.186 | 0.179 | 0.184 | 0.351 |
| 22. | 0.140 | 1.52 | 3.06 | 0.442 | 0.414 | 0.348 | 0.334 | 0.276 | 0.270 | 0.199 | 0.188 | 0.220 | 0.178 | 0.605 |
| 23. | 0.137 | 1.92 | 3.22 | 0.525 | 0.414 | 0.375 | 0.323 | 0.255 | 0.256 | 0.191 | 0.181 | 0.208 | 0.186 | 3.62 |
| 24. | 0.138 | 1.73 | 2.38 | 0.687 | 0.400 | 0.357 | 0.280 | 0.267 | 0.249 | 0.192 | 0.208 | 0.210 | 0.215 | 3.04 |
| 25. | 0.134 | 1.53 | 1.93 | 0.852 | 0.391 | 0.350 | 0.246 | 0.302 | 0.251 | 0.226 | 0.193 | 0.212 | 0.201 | 1.83 |
| 26. | 0.141 | 1.07 | 1.61 | 0.724 | 0.374 | 0.363 | 0.247 | 0.264 | 0.244 | 0.209 | 0.198 | 0.211 | 0.194 | 1.28 |
| 27. | 0.150 | 0.847 | 1.38 | 0.627 | 0.367 | 0.333 | 0.256 | 0.262 | 0.378 | 0.204 | 0.197 | 0.209 | 0.239 | 1.45 |
| 28. | 0.139 | 0.715 | 1.21 | 0.660 | 0.373 | 0.340 | 0.269 | 0.324 | 0.419 | 0.200 | 0.200 | 0.199 | 0.212 | 1.64 |
| 29. | 0.133 | 0.623 | 1.06 | 0.817 | 0.370 | 0.334 | 0.278 | 0.300 | 0.271 | 0.200 | 0.185 | 0.202 | 0.202 | 1.08 |
| 30. | 0.135 | 1.65 | 0.913 | | 0.452 | 0.331 | 0.227 | 0.291 | 0.252 | 0.194 | 0.189 | 0.284 | 0.204 | 0.833 |
| 31. | | 1.49 | 0.832 | | 0.438 | | 0.272 | | 0.242 | 0.204 | | 0.263 | | 0.665 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 13. | 20. | 17. | 30. | 19.+ | 31. | 23. | 9. | 21. | 16. | 7. |
| NQ | 0.133 | 0.141 | 0.832 | 0.411 | 0.349 | 0.330 | 0.227 | 0.241 | 0.242 | 0.191 | 0.161 | 0.179 | 0.162 | 0.166 |
| MQ | 0.155 | 1.03 | 2.03 | 0.585 | 0.480 | 0.352 | 0.317 | 0.300 | 0.321 | 0.225 | 0.194 | 0.224 | 0.212 | 0.785 |
| HQ | 0.439 | 5.09 | 6.33 | 1.22 | 1.02 | 0.802 | 0.854 | 1.35 | 2.03 | 0.901 | 0.393 | 0.769 | 0.833 | 6.02 |
| Tag | 5. | 16. | 5. | 19. | 8. | 28. | 9. | 29. | 27. | 6. | 8. | 4. | 3. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 40 | 78 | 21 | 19 | 13 | 12 | 11 | 12 | 9 | 7 | 9 | 8 | 30 |

| | 1980/2011 | | 1981/2012 32 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2001 | 2006 | 1984 | 1996 | 2011 | 2011 | 1996 | 1996 | 1997 | 1997 | 2011 | 2011 |
| NQ | 0.133 | 0.141 | 0.240 | 0.311 | 0.344 | 0.205 | 0.112 | 0.102 | 0.080 | 0.086 | 0.101 | 0.108 | 0.133 | 0.141 |
| MNQ | 0.358 | 0.455 | 0.618 | 0.654 | 0.674 | 0.557 | 0.380 | 0.289 | 0.233 | 0.221 | 0.232 | 0.284 | 0.351 | 0.443 |
| MQ | 0.770 | 1.15 | 1.45 | 1.30 | 1.35 | 0.824 | 0.589 | 0.431 | 0.366 | 0.365 | 0.418 | 0.495 | 0.752 | 1.14 |
| MHQ | 4.09 | 6.35 | 6.87 | 4.89 | 5.29 | 1.90 | 2.32 | 1.57 | 2.09 | 2.46 | 2.33 | 2.80 | 3.98 | 6.41 |
| HQ | 23.0 | 27.5 | 19.7 | 10.7 | 12.3 | 5.43 | 12.6 | 5.62 | 17.5 | 30.4 | 27.5 | 31.5 | 23.0 | 27.5 |
| Jahr | 1998 | 1986 | 1987 | 1981 | 1992 | 1994 | 2002 | 1986 | 2002 | 2007 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 29 | 44 | 56 | 46 | 52 | 31 | 23 | 16 | 14 | 14 | 16 | 19 | 28 | 44 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.133 | am 29.11.2011 | 0.133 | 0.161 | 0.161 | am 09.09.2012 |
| MQ | m³/s | 0.520 | | 0.780 | 0.264 | 0.504 | |
| HQ | m³/s | 6.33 | am 05.01.2012 bei W = 78.9 cm | 6.33 | 2.03 | 6.33 | am 05.01.2012 bei W = 78.9 cm |
| Nq | l/(skm²) | 1.91 | | 1.91 | 2.32 | 2.32 | |
| Mq | l/(skm²) | 7.50 | | 11.2 | 3.80 | 7.27 | |
| Hq | l/(skm²) | 91.3 | | 91.3 | 29.3 | 91.3 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 237 | | 177 | 60 | 230 | |

| | | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.080 | am 23.07.1996 | 0.133 | 0.080 | 0.080 | am 23.07.1996 |
| MNQ | m³/s | 0.183 | | 0.310 | 0.190 | 0.189 | |
| MQ | m³/s | 0.791 | | 1.14 | 0.444 | 0.789 | |
| MHQ | m³/s | 12.6 | | 10.7 | 5.79 | 12.2 | |
| HQ | m³/s | 31.5 | am 28.10.1998 bei W = 210 cm | 27.5 | 31.5 | 31.5 | am 28.10.1998 bei W = 210 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.64 | | 4.47 | 2.74 | 2.72 | |
| Mq | l/(skm²) | 11.4 | | 16.5 | 6.41 | 11.4 | |
| MHq | l/(skm²) | 181 | | 155 | 83.4 | 176 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 360 | | 258 | 102 | 359 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.080 | 1.15 | 23.07.1996 | 31.5 | 454 | 210 | 28.10.1998 |
| 2 | 0.101 | 1.46 | 26.09.1997 | 30.4 | 439 | 211 | 21.08.2007 |
| 3 | 0.102 | 1.48 | 04.06.2011 | 27.5 | 396 | 204 | 30.12.1986 |
| 4 | 0.105 | 1.51 | 29.09.1990 | 27.5 | 396 | 196 | 29.09.2007 |
| 5 | 0.115 | 1.65 | 08.08.2009 | 23.4 | 338 | 187 | 19.12.1988 |
| 6 | 0.117 | 1.68 | 30.09.1992 | 23.0 | 332 | 167 | 01.11.1998 |
| 7 | 0.118 | 1.70 | 12.09.2005 | 22.0 | 317 | 181 | 29.12.1986 |
| 8 | 0.130 | 1.88 | 15.09.1991 | 20.9 | 302 | 176 | 13.11.2010 |
| 9 | 0.134 | 1.93 | 01.10.2006 | 19.7 | 284 | 167 | 02.01.1987 |
| 10 | 0.143 | 2.06 | 30.09.2008 | 17.5 | 252 | 142 | 18.07.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender-jahr 2012 | 1981/2012 32 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 3.85 | 3.85 | 18.9 | 7.07 | 3.24 |
| 363 | 3.67 | 3.67 | 15.5 | 5.70 | 2.75 |
| 362 | 3.61 | 3.62 | 12.7 | 4.73 | 2.52 |
| 361 | 3.22 | 3.61 | 9.57 | 4.29 | 2.39 |
| 360 | 3.22 | 3.22 | 7.42 | 3.92 | 2.24 |
| 359 | 3.06 | 3.22 | 6.91 | 3.62 | 1.93 |
| 358 | 3.01 | 3.06 | 6.62 | 3.42 | 1.91 |
| 357 | 2.67 | 3.04 | 6.41 | 3.20 | 1.88 |
| 356 | 2.56 | 2.67 | 6.32 | 3.06 | 1.60 |
| 350 | 2.09 | 2.09 | 4.68 | 2.46 | 1.44 |
| 340 | 1.65 | 1.61 | 3.14 | 1.94 | 1.14 |
| 330 | 1.31 | 1.08 | 2.69 | 1.64 | 0.967 |
| 320 | 0.881 | 0.821 | 2.36 | 1.44 | 0.821 |
| 300 | 0.672 | 0.605 | 1.88 | 1.14 | 0.605 |
| 270 | 0.447 | 0.422 | 1.42 | 0.883 | 0.422 |
| 240 | 0.378 | 0.372 | 1.12 | 0.716 | 0.372 |
| 210 | 0.341 | 0.337 | 0.948 | 0.598 | 0.279 |
| 183 | 0.321 | 0.309 | 0.842 | 0.513 | 0.241 |
| 150 | 0.268 | 0.265 | 0.770 | 0.429 | 0.200 |
| 130 | 0.253 | 0.249 | 0.705 | 0.380 | 0.187 |
| 120 | 0.244 | 0.244 | 0.681 | 0.356 | 0.177 |
| 110 | 0.236 | 0.235 | 0.659 | 0.336 | 0.170 |
| 100 | 0.222 | 0.222 | 0.632 | 0.315 | 0.159 |
| 90 | 0.211 | 0.212 | 0.611 | 0.299 | 0.152 |
| 80 | 0.205 | 0.209 | 0.578 | 0.281 | 0.145 |
| 70 | 0.200 | 0.204 | 0.555 | 0.265 | 0.140 |
| 60 | 0.197 | 0.200 | 0.540 | 0.249 | 0.132 |
| 50 | 0.193 | 0.198 | 0.522 | 0.233 | 0.126 |
| 40 | 0.187 | 0.194 | 0.511 | 0.214 | 0.120 |
| 30 | 0.179 | 0.191 | 0.499 | 0.198 | 0.117 |
| 25 | 0.170 | 0.188 | 0.488 | 0.189 | 0.115 |
| 20 | 0.160 | 0.186 | 0.475 | 0.180 | 0.098 |
| 15 | 0.156 | 0.183 | 0.468 | 0.168 | 0.094 |
| 10 | 0.150 | 0.181 | 0.461 | 0.151 | 0.089 |
| 9 | 0.145 | 0.181 | 0.460 | 0.148 | 0.087 |
| 8 | 0.143 | 0.180 | 0.458 | 0.144 | 0.087 |
| 7 | 0.141 | 0.179 | 0.455 | 0.140 | 0.086 |
| 6 | 0.141 | 0.178 | 0.452 | 0.134 | 0.086 |
| 5 | 0.140 | 0.178 | 0.450 | 0.127 | 0.085 |
| 4 | 0.139 | 0.177 | 0.448 | 0.120 | 0.084 |
| 3 | 0.138 | 0.176 | 0.442 | 0.117 | 0.083 |
| 2 | 0.137 | 0.170 | 0.430 | 0.115 | 0.082 |
| 1 | 0.135 | 0.166 | 0.427 | 0.105 | 0.082 |
| 0 | 0.133 | 0.161 | 0.423 | 0.080 | 0.080 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Oberwasserpegel für den Emmer−Stausee

LANUV NRW

$A_{Eo}$ : 99.6 $km^2$

PNP : NN + 70.41 m

Lage: 4.6 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Uchtdorf Nr. 4589101

Gewässer : Exter

Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.250 | 0.260 | 2.73 | 1.23 | 1.11 | 0.421 | 0.232 | 0.311 | 0.249 | 0.249 | 0.164 | 0.263 | 0.332 | 0.356 |
| 2. | 0.237 | 0.388 | 5.08 | 1.52 | 1.00 | 0.421 | 0.236 | 0.235 | 0.244 | 0.232 | 0.162 | 0.259 | 0.347 | 0.380 |
| 3. | 0.247 | 0.527 | 3.42 | 1.21 | 0.918 | 0.397 | 0.188 | 0.368 | 0.258 | 0.211 | 0.163 | 0.321 | 0.409 | 0.394 |
| 4. | 0.237 | 0.475 | 3.72 | 1.07 | 0.898 | 0.520 | 0.227 | 0.419 | 0.236 | 0.214 | 0.163 | 1.11 | 0.403 | 0.697 |
| 5. | 0.247 | 0.465 | 12.1 | 0.960 | 0.915 | 0.422 | 0.344 | 0.496 | 0.224 | 0.242 | 0.167 | 0.453 | 0.425 | 0.938 |
| 6. | 0.244 | 0.419 | 7.68 | 0.815 | 0.831 | 0.399 | 0.309 | 0.330 | 0.229 | 0.269 | 0.158 | 0.571 | 0.399 | 0.541 |
| 7. | 0.249 | 1.37 | 6.27 | 0.864 | 0.819 | 0.415 | 0.318 | 0.300 | 0.235 | 0.226 | 0.155 | 0.385 | 0.547 | 0.527 |
| 8. | 0.255 | 1.67 | 9.14 | 1.06 | 1.78 | 0.371 | 0.400 | 0.265 | 0.263 | 0.227 | 0.158 | 0.264 | 0.451 | 0.375 |
| 9. | 0.269 | 1.83 | 5.86 | 0.707 | 1.17 | 0.401 | 0.226 | 0.248 | 0.248 | 0.257 | 0.159 | 0.243 | 0.391 | 0.460 |
| 10. | 0.243 | 1.01 | 4.40 | 0.627 | 1.01 | 0.416 | 0.352 | 0.250 | 0.225 | 0.266 | 0.166 | 0.229 | 0.390 | 1.06 |
| 11. | 0.233 | 0.691 | 3.14 | 0.593 | 0.970 | 0.378 | 0.618 | 0.248 | 0.338 | 0.263 | 0.204 | 0.209 | 0.456 | 0.665 |
| 12. | 0.250 | 0.737 | 3.44 | 0.515 | 0.897 | 0.358 | 0.340 | 0.221 | 0.553 | 0.262 | 0.208 | 0.252 | 0.359 | 0.515 |
| 13. | 0.250 | 1.55 | 3.42 | 0.518 | 0.823 | 0.356 | 0.296 | 0.264 | 0.489 | 0.243 | 0.189 | 0.256 | 0.329 | 0.455 |
| 14. | 0.252 | 1.57 | 2.48 | 0.637 | 0.803 | 0.346 | 0.306 | 0.270 | 0.443 | 0.232 | 0.200 | 0.264 | 0.320 | 0.500 |
| 15. | 0.240 | 1.54 | 2.09 | 1.41 | 0.798 | 0.314 | 0.383 | 0.285 | 0.443 | 0.232 | 0.200 | 0.260 | 0.335 | 3.40 |
| 16. | 0.269 | 5.98 | 1.77 | 0.952 | 0.755 | 0.299 | 0.449 | 0.307 | 0.275 | 0.314 | 0.189 | 0.233 | 0.308 | 3.77 |
| 17. | 0.304 | 5.06 | 1.55 | 1.28 | 0.699 | 0.291 | 0.334 | 0.286 | 0.719 | 0.236 | 0.191 | 0.225 | 0.311 | 2.95 |
| 18. | 0.294 | 2.89 | 1.41 | 1.00 | 0.714 | 0.294 | 0.307 | 0.272 | 0.596 | 0.229 | 0.194 | 0.216 | 0.335 | 2.40 |
| 19. | 0.250 | 2.00 | 3.40 | 2.03 | 0.634 | 0.285 | 0.272 | 0.274 | 0.604 | 0.246 | 0.184 | 0.196 | 0.325 | 1.71 |
| 20. | 0.235 | 1.75 | 3.32 | 0.985 | 0.578 | 0.276 | 0.271 | 0.274 | 0.480 | 0.213 | 0.196 | 0.202 | 0.289 | 1.35 |
| 21. | 0.264 | 2.79 | 4.32 | 0.808 | 0.556 | 0.357 | 0.260 | 0.266 | 0.338 | 0.212 | 0.229 | 0.199 | 0.268 | 1.20 |
| 22. | 0.242 | 2.84 | 7.08 | 0.747 | 0.532 | 0.334 | 0.259 | 0.251 | 0.303 | 0.210 | 0.242 | 0.203 | 0.268 | 1.38 |
| 23. | 0.240 | 2.62 | 6.68 | 0.923 | 0.519 | 0.292 | 0.236 | 0.241 | 0.271 | 0.198 | 0.247 | 0.210 | 0.283 | 7.96 |
| 24. | 0.236 | 3.44 | 4.60 | 1.31 | 0.486 | 0.329 | 0.241 | 0.326 | 0.260 | 0.184 | 0.354 | 0.206 | 0.388 | 4.54 |
| 25. | 0.235 | 2.64 | 3.46 | 1.66 | 0.465 | 0.288 | 0.214 | 0.373 | 0.271 | 0.188 | 0.285 | 0.229 | 0.331 | 2.95 |
| 26. | 0.242 | 2.10 | 2.72 | 1.22 | 0.455 | 0.298 | 0.215 | 0.242 | 0.226 | 0.207 | 0.447 | 0.251 | 0.325 | 3.27 |
| 27. | 0.245 | 1.83 | 2.37 | 1.04 | 0.440 | 0.257 | 0.213 | 0.230 | 0.388 | 0.183 | 0.277 | 0.271 | 0.533 | 3.72 |
| 28. | 0.241 | 1.59 | 2.04 | 1.08 | 0.431 | 0.263 | 0.212 | 0.251 | 0.537 | 0.157 | 0.218 | 0.247 | 0.405 | 2.39 |
| 29. | 0.235 | 1.41 | 1.77 | 1.18 | 0.418 | 0.261 | 0.217 | 0.342 | 0.325 | 0.150 | 0.263 | 0.277 | 0.383 | 1.86 |
| 30. | 0.249 | 3.78 | 1.56 | | 0.492 | 0.237 | 0.223 | 0.313 | 0.316 | 0.175 | 0.268 | 0.480 | 0.398 | 1.71 |
| 31. | | 2.51 | 1.38 | | 0.462 | | 0.281 | | 0.328 | 0.165 | | 0.340 | | 1.60 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 1. | 31. | 12. | 29. | 30. | 3. | 12. | 5. | 29. | 7. | 19. | 21.+ | 1. |
| NQ | 0.233 | 0.260 | 1.38 | 0.515 | 0.418 | 0.237 | 0.188 | 0.221 | 0.224 | 0.150 | 0.155 | 0.196 | 0.268 | 0.356 |
| MQ | 0.249 | 1.93 | 4.01 | 1.03 | 0.755 | 0.343 | 0.290 | 0.292 | 0.352 | 0.222 | 0.213 | 0.301 | 0.368 | 1.81 |
| HQ | 0.677 | 14.8 | 24.6 | 4.99 | 2.38 | 0.649 | 1.18 | 0.753 | 1.75 | 0.456 | 0.575 | 2.35 | 0.847 | 14.5 |
| Tag | 14. | 16. | 5. | 19. | 8. | 4. | 11. | 5. | 27. | 6. | 26. | 4. | 12. | 23. |
| $h_N$ mm / $h_A$ mm | 6 | 52 | 108 | 26 | 20 | 9 | 8 | 8 | 9 | 6 | 6 | 8 | 10 | 49 |

| | 1960/2011 | | 1961/2012 52 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1975 | 1976 | 1977 | 1963 | 1986 | 2012 | 2012 | 1976 | 2010 | 2010 | 1964 | 1964 | 1975 | 1976 |
| NQ | 0.200 | 0.120 | 0.300 | 0.250 | 0.378 | 0.237 | 0.188 | 0.200 | 0.157 | 0.133 | 0.090 | 0.090 | 0.200 | 0.120 |
| MNQ | 0.552 | 0.750 | 0.917 | 0.943 | 0.902 | 0.804 | 0.575 | 0.458 | 0.395 | 0.373 | 0.379 | 0.423 | 0.534 | 0.721 |
| MQ | 1.45 | 2.33 | 2.62 | 2.28 | 2.21 | 1.51 | 1.05 | 0.746 | 0.701 | 0.641 | 0.688 | 0.861 | 1.41 | 2.30 |
| MHQ | 9.77 | 15.7 | 16.0 | 12.5 | 12.6 | 5.84 | 6.46 | 5.64 | 5.38 | 5.67 | 4.53 | 6.06 | 9.62 | 15.7 |
| HQ | 33.4 | 37.8 | 39.4 | 31.6 | 38.8 | 29.2 | 30.8 | 33.8 | 37.3 | 42.6 | 26.2 | 41.6 | 33.4 | 37.8 |
| Jahr | 1998 | 1988 | 1968 | 1966 | 1992 | 1969 | 2002 | 1981 | 2002 | 2007 | 2007 | 1993 | 1998 | 1988 |
| $Mh_N$ mm / $Mh_A$ mm | 38 | 63 | 70 | 57 | 59 | 39 | 28 | 19 | 19 | 17 | 18 | 23 | 37 | 62 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.150 | am 29.08.2012 | 0.233 | 0.150 | 0.150 | am 29.08.2012 |
| MQ $m^3/s$ | 0.837 | | 1.40 | 0.279 | 0.837 | |
| HQ $m^3/s$ | 24.6 | am 05.01.2012 bei W= 172 cm | 24.6 | 2.35 | 24.6 | am 05.01.2012 bei W= 172 cm |
| Nq $l/(s km^2)$ | 1.51 | | 2.34 | 1.51 | 1.51 | |
| Mq $l/(s km^2)$ | 8.40 | | 14.1 | 2.80 | 8.40 | |
| Hq $l/(s km^2)$ | 247 | | 247 | 23.6 | 247 | |
| $h_N$ mm / $h_A$ mm | 266 | | 221 | 45 | 266 | |
| | 1961/2012 (*) 52 Jahre | | | | 1961/2012 | |
| NQ $m^3/s$ | 0.090 | am 29.09.1964 | 0.120 | 0.090 | 0.090 | am 29.09.1964 |
| MNQ $m^3/s$ | 0.276 | | 0.438 | 0.296 | 0.284 | |
| MQ $m^3/s$ | 1.42 | | 2.07 | 0.782 | 1.41 | |
| MHQ $m^3/s$ | 25.7 | | 24.0 | 13.9 | 25.9 | |
| HQ $m^3/s$ | 42.6 | am 21.08.2007 bei W= 204 cm | 39.4 | 42.6 | 42.6 | am 21.08.2007 bei W= 204 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.77 | | 4.40 | 2.97 | 2.85 | |
| Mq $l/(s km^2)$ | 14.3 | | 20.8 | 7.85 | 14.2 | |
| MHq $l/(s km^2)$ | 258 | | 241 | 140 | 260 | |
| $Mh_N$ mm / $Mh_A$ mm | 451 | | 327 | 125 | 448 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.090 | 0.904 | 29.09.1964 | 42.6 | 428 | 204 | 21.08.2007 |
| 2 | 0.120 | 1.20 | 17.12.1976 | 41.6 | 418 | 346 | 03.10.1993 |
| 3 | 0.133 | 1.34 | 03.09.2011 | 39.4 | 396 | 339 | 15.01.1968 |
| 4 | 0.133 | 1.34 | 06.08.2010 | 38.8 | 390 | 338 | 13.03.1992 |
| 5 | 0.140 | 1.41 | 13.12.1963 | 37.8 | 380 | 335 | 19.12.1988 |
| 6 | 0.150 | 1.51 | 29.08.2012 | 37.3 | 374 | 188 | 17.07.2002 |
| 7 | 0.150 | 1.51 | 30.09.1977 | 37.3 | 374 | 334 | 30.12.1993 |
| 8 | 0.150 | 1.51 | 17.12.1975 | 36.7 | 368 | 183 | 18.01.2007 |
| 9 | 0.180 | 1.81 | 11.10.1961 | 36.6 | 367 | 330 | 31.12.1986 |
| 10 | 0.188 | 1.89 | 23.10.1990 | 34.9 | 350 | 325 | 27.01.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1961/2012 Obere Hüllwerte | 52 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 12.1 | 12.1 | | | |
| 364 | 9.14 | 9.14 | 34.1 | 14.3 | 5.70 |
| 363 | 7.68 | 7.96 | 29.6 | 11.5 | 3.64 |
| 362 | 7.08 | 7.68 | 28.6 | 9.89 | 3.01 |
| 361 | 6.68 | 7.08 | 18.0 | 9.00 | 2.88 |
| 360 | 6.27 | 6.68 | 15.1 | 8.25 | 2.43 |
| 359 | 5.98 | 6.27 | 14.6 | 7.63 | 2.38 |
| 358 | 5.86 | 5.86 | 14.2 | 7.16 | 2.04 |
| 357 | 5.08 | 5.08 | 13.5 | 6.61 | 1.76 |
| 356 | 5.06 | 4.60 | 11.7 | 6.28 | 1.75 |
| 350 | 3.46 | 3.77 | 9.34 | 4.90 | 1.50 |
| 340 | 2.79 | 3.14 | 6.91 | 3.68 | 1.20 |
| 330 | 2.04 | 2.03 | 5.96 | 3.07 | 1.15 |
| 320 | 1.66 | 1.55 | 4.77 | 2.64 | 1.08 |
| 300 | 1.17 | 1.07 | 3.55 | 2.08 | 0.880 |
| 270 | 0.719 | 0.665 | 2.98 | 1.53 | 0.665 |
| 240 | 0.475 | 0.465 | 2.54 | 1.20 | 0.465 |
| 210 | 0.368 | 0.397 | 2.22 | 0.976 | 0.397 |
| 183 | 0.309 | 0.342 | 2.00 | 0.821 | 0.342 |
| 150 | 0.270 | 0.299 | 1.78 | 0.675 | 0.299 |
| 130 | 0.261 | 0.274 | 1.71 | 0.601 | 0.274 |
| 120 | 0.255 | 0.269 | 1.68 | 0.565 | 0.269 |
| 110 | 0.250 | 0.264 | 1.63 | 0.531 | 0.264 |
| 100 | 0.246 | 0.258 | 1.60 | 0.501 | 0.258 |
| 90 | 0.243 | 0.249 | 1.57 | 0.470 | 0.249 |
| 80 | 0.237 | 0.243 | 1.50 | 0.441 | 0.243 |
| 70 | 0.235 | 0.236 | 1.42 | 0.415 | 0.236 |
| 60 | 0.230 | 0.230 | 1.39 | 0.391 | 0.210 |
| 50 | 0.223 | 0.223 | 1.34 | 0.365 | 0.210 |
| 40 | 0.213 | 0.213 | 1.31 | 0.340 | 0.190 |
| 30 | 0.203 | 0.203 | 1.26 | 0.311 | 0.180 |
| 25 | 0.198 | 0.198 | 1.22 | 0.292 | 0.170 |
| 20 | 0.191 | 0.191 | 1.17 | 0.280 | 0.160 |
| 15 | 0.188 | 0.188 | 1.14 | 0.263 | 0.150 |
| 10 | 0.165 | 0.165 | 1.12 | 0.248 | 0.110 |
| 9 | 0.164 | 0.164 | 1.11 | 0.241 | 0.110 |
| 8 | 0.164 | 0.164 | 1.10 | 0.236 | 0.110 |
| 7 | 0.164 | 0.164 | 1.09 | 0.231 | 0.110 |
| 6 | 0.162 | 0.162 | 1.09 | 0.227 | 0.110 |
| 5 | 0.159 | 0.159 | 1.09 | 0.221 | 0.110 |
| 4 | 0.159 | 0.159 | 1.09 | 0.211 | 0.110 |
| 3 | 0.159 | 0.159 | 1.06 | 0.201 | 0.100 |
| 2 | 0.157 | 0.157 | 1.04 | 0.189 | 0.100 |
| 1 | 0.155 | 0.155 | 1.03 | 0.162 | 0.100 |
| 0 | 0.150 | 0.150 | 1.01 | 0.090 | 0.090 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Weserberge

NLWKN

$A_{Eo}$ : 593.00 km²
PNP : NHN+ 64.28 m
Lage : 27.16 km oberhalb der Mündung rechts

# Q
m³/s

Pegel : Ahmsen Nr. 4639000000100
Gewässer : Werre
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.43 | 2.46 | 12.1 | 7.39 | 8.36 | 4.27 | 3.79 | 5.31 | 3.00 | 3.06 | 2.02 | 1.87 | 2.49 | 2.61 |
| 2. | 2.47 | 3.59 | 24.9 | 6.88 | 7.66 | 4.19 | 3.70 | 3.05 | 2.66 | 2.76 | 1.84 | 1.77 | 3.12 | 2.91 |
| 3. | 2.47 | 4.82 | 18.1 | 6.59 | 7.45 | 4.22 | 3.73 | 3.58 | 2.62 | 2.69 | 1.83 | 2.07 | 3.10 | 3.04 |
| 4. | 2.47 | 5.25 | 17.0 | 6.32 | 7.25 | 4.98 | 3.66 | 4.86 | 2.57 | 2.66 | 1.86 | 12.0 | 2.95 | 3.69 |
| 5. | 2.45 | 4.67 | 42.9 | 6.07 | 6.84 | 4.22 | 4.23 | 6.61 | 2.52 | 2.77 | 1.90 | 6.55 | 2.97 | 4.72 |
| 6. | 2.39 | 4.75 | 28.6 | 5.79 | 6.42 | 4.10 | 3.89 | 3.64 | 2.51 | 3.46 | 1.87 | 6.27 | 2.86 | 3.54 |
| 7. | 2.37 | 8.67 | 21.7 | 5.35 | 6.29 | 4.27 | 3.71 | 3.32 | 2.80 | 2.67 | 1.94 | 4.54 | 3.62 | 3.08 |
| 8. | 2.39 | 8.34 | 29.8 | 5.46 | 9.82 | 4.05 | 3.45 | 3.01 | 3.39 | 2.49 | 1.85 | 3.00 | 3.36 | 2.82 |
| 9. | 2.38 | 9.78 | 26.6 | 5.31 | 8.25 | 4.25 | 3.50 | 2.81 | 3.57 | 2.56 | 1.92 | 2.58 | 2.90 | 3.19 |
| 10. | 2.35 | 6.47 | 20.5 | 5.21 | 7.14 | 4.78 | 3.81 | 2.57 | 2.67 | 2.44 | 1.81 | 2.41 | 2.82 | 8.16 |
| 11. | 2.32 | 4.69 | 15.9 | 4.99 | 6.69 | 4.39 | 7.44 | 2.91 | 3.43 | 2.47 | 2.28 | 2.33 | 3.26 | 5.65 |
| 12. | 2.33 | 5.22 | 15.9 | 4.86 | 6.42 | 4.13 | 3.94 | 3.60 | 6.00 | 2.39 | 2.72 | 2.60 | 2.86 | 4.24 |
| 13. | 2.34 | 9.02 | 21.6 | 4.98 | 6.11 | 4.11 | 3.32 | 4.61 | 5.20 | 2.25 | 2.16 | 3.01 | 2.48 | 3.84 |
| 14. | 2.34 | 10.0 | 15.9 | 5.60 | 5.87 | 4.01 | 3.24 | 2.94 | 4.47 | 2.23 | 1.98 | 2.91 | 2.43 | 3.83 |
| 15. | 2.38 | 11.6 | 12.8 | 8.84 | 5.58 | 3.85 | 4.02 | 2.80 | 5.13 | 2.14 | 2.00 | 2.69 | 2.44 | 13.5 |
| 16. | 2.33 | 23.2 | 11.0 | 6.63 | 5.66 | 3.76 | 4.70 | 3.18 | 4.15 | 3.16 | 1.94 | 2.59 | 2.39 | 12.3 |
| 17. | 2.37 | 27.4 | 9.60 | 7.39 | 5.50 | 3.78 | 3.68 | 2.93 | 11.0 | 2.51 | 1.82 | 2.49 | 2.39 | 10.6 |
| 18. | 2.33 | 14.0 | 8.86 | 6.57 | 5.68 | 3.82 | 3.24 | 2.81 | 6.45 | 2.22 | 1.81 | 2.30 | 2.46 | 8.95 |
| 19. | 2.36 | 10.4 | 18.5 | 10.5 | 5.31 | 3.89 | 3.12 | 2.57 | 5.20 | 2.15 | 1.80 | 2.22 | 2.55 | 10.3 |
| 20. | 2.34 | 9.50 | 22.8 | 7.20 | 4.94 | 3.85 | 3.05 | 2.97 | 4.23 | 2.08 | 1.80 | 2.13 | 2.48 | 7.26 |
| 21. | 2.35 | 12.9 | 21.3 | 6.20 | 4.83 | 4.11 | 3.04 | 3.13 | 3.30 | 2.01 | 1.76 | 2.12 | 2.23 | 6.76 |
| 22. | 2.32 | 12.2 | 29.7 | 5.92 | 4.79 | 4.30 | 2.81 | 2.67 | 3.04 | 2.11 | 1.79 | 2.04 | 2.30 | 8.80 |
| 23. | 2.34 | 14.3 | 33.0 | 6.88 | 4.68 | 4.12 | 2.76 | 2.67 | 2.89 | 2.05 | 1.78 | 2.10 | 2.43 | 33.1 |
| 24. | 2.35 | 15.2 | 22.3 | 8.48 | 4.65 | 4.47 | 2.69 | 3.31 | 2.76 | 2.02 | 3.17 | 2.14 | 3.32 | 33.8 |
| 25. | 2.35 | 12.8 | 17.5 | 11.7 | 4.46 | 4.52 | 2.55 | 5.68 | 2.63 | 2.10 | 2.31 | 2.14 | 2.74 | 19.8 |
| 26. | 2.38 | 10.4 | 14.2 | 9.19 | 4.34 | 4.67 | 2.57 | 3.86 | 2.52 | 2.28 | 3.43 | 2.09 | 2.60 | 19.7 |
| 27. | 2.41 | 9.41 | 12.8 | 8.40 | 4.36 | 4.02 | 2.52 | 2.87 | 3.99 | 2.26 | 2.67 | 2.06 | 3.48 | 21.4 |
| 28. | 2.48 | 8.33 | 11.4 | 8.25 | 4.26 | 4.60 | 2.50 | 3.18 | 11.6 | 2.18 | 2.32 | 2.01 | 3.02 | 20.6 |
| 29. | 2.43 | 7.74 | 10.4 | 8.76 | 4.27 | 4.05 | 2.41 | 4.19 | 4.45 | 2.16 | 2.01 | 2.07 | 2.86 | 13.5 |
| 30. | 2.35 | 14.3 | 9.27 | | 4.85 | 3.91 | 2.41 | 4.38 | 3.66 | 2.26 | 1.93 | 3.27 | 2.81 | 12.6 |
| 31. | | 11.3 | 8.39 | | 4.63 | | 2.96 | | 3.57 | 2.13 | | 2.69 | | 11.4 |
| Tag | 11.+ | 1. | 31. | 12. | 28. | 16. | 30.+ | 19.+ | 6. | 21. | 21. | 2. | 21. | 1. |
| NQ | 2.32 | 2.46 | 8.39 | 4.86 | 4.26 | 3.76 | 2.41 | 2.57 | 2.51 | 2.01 | 1.76 | 1.77 | 2.23 | 2.61 |
| MQ | 2.38 | 10.1 | 18.9 | 6.95 | 5.91 | 4.19 | 3.43 | 3.53 | 4.13 | 2.41 | 2.08 | 3.00 | 2.79 | 10.3 |
| HQ | 2.65 | 48.0 | 64.9 | 14.7 | 10.8 | 5.49 | 11.8 | 9.88 | 24.5 | 4.27 | 5.41 | 23.4 | 4.27 | 55.2 |
| Tag | 1.+ | 16. | 5. | 19. | 8. | 4.+ | 11. | 24.+ | 28. | 6. | 26. | 4. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 46 | 85 | 29 | 27 | 18 | 16 | 15 | 19 | 11 | 9 | 14 | 12 | 47 |

## Hauptwerte

| | 1963/2011 | | 1964/2012 49 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1964 | 1964 | 1996 | 1996 | 1996 | 1996 | 1976 | 1996 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 |
| NQ | 1.42 | 1.87 | 2.12 | 2.02 | 2.01 | 2.18 | 1.90 | 1.61 | 1.49 | 1.35 | 1.21 | 1.50 | 1.42 | 1.87 |
| MNQ | 3.60 | 4.75 | 6.09 | 6.21 | 6.20 | 5.59 | 4.17 | 3.47 | 3.12 | 2.88 | 2.79 | 3.06 | 3.61 | 4.75 |
| MQ | 7.33 | 10.8 | 12.9 | 11.6 | 11.4 | 8.48 | 6.53 | 5.04 | 4.87 | 4.47 | 4.44 | 5.14 | 7.18 | 10.9 |
| MHQ | 28.5 | 45.0 | 50.8 | 40.4 | 40.6 | 21.0 | 22.4 | 21.7 | 22.0 | 21.0 | 18.7 | 20.6 | 27.5 | 45.9 |
| HQ | 107 | 144 | 155 | 151 | 112 | 58.8 | 88.0 | 77.9 | 95.6 | 108 | 96.7 | 112 | 107 | 144 |
| Jahr | 1998 | 1986 | 1968 | 1970 | 1992 | 1994 | 1978 | 1981 | 2002 | 2007 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 32 | 49 | 58 | 48 | 52 | 37 | 29 | 22 | 22 | 20 | 19 | 23 | 31 | 49 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.76 | am 21.09.2012 | 2.32 | 1.76 | 1.76 | am 21.09.2012 |
| MQ | m³/s | 5.60 | | 8.13 | 3.10 | 5.66 | |
| HQ | m³/s | 64.9 | am 05.01.2012 bei W = 196 cm | 64.9 | 24.5 | 64.9 | am 05.01.2012 bei W = 196 cm |
| Nq | l/(skm²) | 2.96 | | 3.91 | 2.96 | 2.96 | |
| Mq | l/(skm²) | 9.45 | | 13.7 | 5.23 | 9.54 | |
| Hq | l/(skm²) | 109 | | 109 | 41.3 | 109 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 299 | | 216 | 83 | 302 | |

| | | 1964/2012 (*) 49 Jahre | | | | 1964/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.21 | am 12.09.1964 | 1.42 | 1.21 | 1.21 | am 12.09.1964 |
| MNQ | m³/s | 2.30 | | 3.24 | 2.50 | 2.45 | |
| MQ | m³/s | 7.74 | | 10.4 | 5.09 | 7.74 | |
| MHQ | m³/s | 76.2 | | 72.8 | 42.3 | 76.5 | |
| HQ | m³/s | 155 | am 15.01.1968 bei W = 382 cm | 155 | 112 | 155 | am 15.01.1968 bei W = 382 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.88 | | 5.47 | 4.21 | 4.14 | |
| Mq | l/(skm²) | 13.1 | | 17.6 | 8.58 | 13.1 | |
| MHq | l/(skm²) | 129 | | 123 | 71.3 | 129 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 412 | | 276 | 136 | 412 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.21 | 2.04 | 12.09.1964 | 155 | 261 | 382 | 15.01.1968 |
| 2 | 1.39 | 2.34 | 10.08.1996 | 151 | 255 | 380 | 23.02.1970 |
| 3 | 1.49 | 2.51 | 14.09.1991 | 144 | 243 | 370 | 30.12.1986 |
| 4 | 1.61 | 2.71 | 24.08.2009 | 123 | 207 | 287 | 19.01.2007 |
| 5 | 1.66 | 2.80 | 17.08.2003 | 114 | 193 | 337 | 02.01.1987 |
| 6 | 1.69 | 2.85 | 23.08.1989 | 112 | 189 | 270 | 13.03.1992 |
| 7 | 1.73 | 2.92 | 31.10.1976 | 112 | 189 | 271 | 29.10.1998 |
| 8 | 1.76 | 2.96 | 21.09.2012 | 108 | 182 | 267 | 22.08.2007 |
| 9 | 1.79 | 3.02 | 02.09.1985 | 107 | 181 | 264 | 01.11.1998 |
| 10 | 1.81 | 3.05 | 08.08.1992 | 106 | 179 | 269 | 03.01.2003 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1964/2012 49 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 42.9 | 42.9 | 132 | 54.3 | 20.8 |
| 363 | 33.0 | 33.8 | 115 | 46.4 | 16.6 |
| 362 | 29.8 | 33.1 | 76.0 | 40.9 | 14.9 |
| 361 | 29.7 | 33.0 | 65.7 | 36.6 | 12.9 |
| 360 | 28.6 | 29.8 | 58.3 | 34.1 | 12.2 |
| 359 | 27.4 | 29.7 | 56.5 | 32.1 | 11.7 |
| 358 | 26.6 | 28.6 | 51.2 | 30.4 | 11.4 |
| 357 | 24.9 | 26.6 | 50.2 | 29.0 | 11.4 |
| 356 | 23.2 | 24.9 | 46.4 | 27.9 | 10.7 |
| 350 | 20.5 | 21.3 | 36.6 | 22.8 | 8.84 |
| 340 | 14.3 | 15.9 | 28.9 | 18.0 | 6.76 |
| 330 | 11.7 | 12.0 | 23.9 | 15.3 | 6.16 |
| 320 | 10.4 | 10.3 | 22.1 | 13.5 | 5.66 |
| 300 | 8.25 | 7.39 | 17.5 | 11.1 | 4.50 |
| 270 | 6.00 | 5.68 | 13.7 | 8.68 | 3.40 |
| 240 | 4.79 | 4.63 | 11.8 | 7.26 | 3.00 |
| 210 | 4.22 | 4.11 | 10.4 | 6.15 | 2.68 |
| 183 | 3.76 | 3.67 | 9.29 | 5.37 | 2.49 |
| 150 | 3.05 | 3.12 | 8.36 | 4.64 | 2.32 |
| 130 | 2.80 | 2.92 | 7.89 | 4.22 | 2.26 |
| 120 | 2.68 | 2.82 | 7.67 | 4.04 | 2.23 |
| 110 | 2.59 | 2.76 | 7.44 | 3.85 | 2.21 |
| 100 | 2.52 | 2.67 | 7.28 | 3.69 | 2.18 |
| 90 | 2.47 | 2.58 | 6.93 | 3.54 | 2.06 |
| 80 | 2.39 | 2.52 | 6.78 | 3.39 | 2.00 |
| 70 | 2.35 | 2.46 | 6.48 | 3.23 | 1.92 |
| 60 | 2.33 | 2.39 | 6.18 | 3.06 | 1.86 |
| 50 | 2.26 | 2.26 | 5.97 | 2.90 | 1.81 |
| 40 | 2.14 | 2.14 | 5.71 | 2.74 | 1.73 |
| 30 | 2.07 | 2.07 | 5.55 | 2.56 | 1.68 |
| 25 | 2.02 | 2.02 | 5.36 | 2.46 | 1.64 |
| 20 | 2.00 | 2.00 | 5.17 | 2.37 | 1.61 |
| 15 | 1.92 | 1.92 | 5.02 | 2.27 | 1.54 |
| 10 | 1.85 | 1.85 | 4.98 | 2.12 | 1.50 |
| 9 | 1.84 | 1.84 | 4.97 | 2.08 | 1.50 |
| 8 | 1.83 | 1.83 | 4.94 | 2.05 | 1.49 |
| 7 | 1.82 | 1.82 | 4.93 | 2.00 | 1.45 |
| 6 | 1.81 | 1.81 | 4.92 | 1.94 | 1.42 |
| 5 | 1.81 | 1.81 | 4.91 | 1.89 | 1.35 |
| 4 | 1.80 | 1.80 | 4.90 | 1.85 | 1.32 |
| 3 | 1.80 | 1.80 | 4.85 | 1.78 | 1.28 |
| 2 | 1.79 | 1.79 | 4.84 | 1.72 | 1.28 |
| 1 | 1.78 | 1.78 | 4.68 | 1.61 | 1.25 |
| 0 | 1.76 | 1.76 | 4.65 | 1.21 | 1.21 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 871.09 km²
PNP : NHN+ 56.27 m
Lage : 21.28 km oberhalb der Mündung links

# Q

m³/s

Pegel : Herford Nr. 4651000000100
Gewässer : Werre
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.89 | 3.34 | 19.1 | 12.4 | 11.9 | 6.42 | 4.86 | 7.95 | 4.82 | 3.90 | 2.75 | 2.49 | 3.54 | 3.71 |
| 2. | 2.89 | 5.51 | 37.3 | 11.6 | 11.3 | 6.35 | 4.84 | 4.64 | 4.58 | 3.85 | 2.50 | 2.38 | 4.32 | 4.76 |
| 3. | 2.88 | 7.57 | 26.2 | 11.0 | 10.7 | 6.32 | 5.07 | 6.23 | 4.37 | 3.56 | 2.46 | 3.09 | 4.37 | 4.56 |
| 4. | 2.89 | 7.13 | 26.2 | 10.5 | 10.4 | 8.11 | 4.86 | 7.20 | 4.28 | 3.87 | 2.41 | 19.0 | 4.35 | 6.00 |
| 5. | 2.96 | 6.72 | 66.5 | 9.97 | 10.7 | 6.33 | 6.40 | 8.85 | 4.19 | 4.07 | 2.39 | 8.67 | 4.59 | 6.71 |
| 6. | 2.88 | 6.48 | 41.6 | 9.51 | 9.87 | 6.07 | 5.40 | 5.69 | 4.19 | 5.70 | 2.60 | 10.1 | 4.28 | 5.06 |
| 7. | 2.97 | 14.8 | 33.2 | 8.89 | 9.91 | 6.28 | 5.24 | 5.19 | 4.92 | 3.80 | 2.41 | 5.32 | 5.55 | 4.75 |
| 8. | 3.05 | 12.2 | 39.8 | 8.86 | 14.1 | 5.81 | 4.78 | 4.58 | 5.20 | 3.61 | 2.34 | 3.45 | 4.53 | 4.51 |
| 9. | 3.04 | 14.5 | 34.9 | 8.53 | 11.5 | 6.31 | 4.77 | 4.29 | 5.27 | 3.40 | 2.31 | 3.09 | 4.05 | 6.27 |
| 10. | 3.08 | 9.07 | 28.0 | 8.40 | 10.5 | 7.09 | 5.82 | 4.12 | 4.52 | 3.12 | 2.31 | 2.95 | 3.95 | 15.0 |
| 11. | 3.12 | 7.28 | 22.9 | 7.96 | 10.1 | 6.31 | 13.4 | 4.70 | 6.85 | 3.14 | 3.74 | 2.89 | 4.37 | 8.07 |
| 12. | 3.14 | 8.89 | 24.4 | 7.72 | 9.87 | 5.88 | 5.70 | 5.66 | 12.0 | 3.15 | 4.16 | 3.36 | 3.88 | 6.55 |
| 13. | 3.11 | 15.4 | 30.8 | 7.75 | 9.43 | 5.94 | 4.79 | 6.18 | 8.75 | 3.35 | 2.67 | 3.62 | 3.42 | 6.34 |
| 14. | 3.16 | 15.8 | 23.3 | 8.70 | 9.12 | 5.62 | 4.64 | 4.56 | 6.76 | 3.01 | 2.57 | 3.88 | 3.44 | 6.54 |
| 15. | 3.26 | 17.4 | 19.6 | 12.4 | 8.83 | 5.48 | 5.50 | 4.55 | 7.92 | 2.80 | 2.70 | 3.26 | 3.32 | 20.5 |
| 16. | 3.13 | 40.1 | 17.4 | 9.28 | 8.77 | 5.35 | 6.07 | 6.63 | 6.16 | 4.62 | 2.42 | 3.21 | 3.42 | 17.5 |
| 17. | 3.10 | 40.2 | 16.1 | 10.4 | 8.56 | 5.30 | 4.81 | 5.01 | 20.6 | 3.34 | 2.39 | 3.21 | 3.38 | 17.0 |
| 18. | 3.09 | 21.2 | 15.4 | 9.53 | 8.88 | 5.28 | 4.34 | 4.57 | 9.54 | 2.91 | 2.38 | 2.97 | 3.40 | 14.0 |
| 19. | 3.14 | 17.6 | 31.0 | 15.2 | 8.32 | 6.00 | 4.37 | 4.25 | 9.79 | 2.91 | 2.39 | 2.91 | 3.66 | 13.9 |
| 20. | 3.11 | 17.8 | 34.7 | 10.2 | 7.83 | 5.60 | 4.66 | 4.62 | 6.77 | 3.00 | 2.39 | 2.87 | 3.41 | 11.0 |
| 21. | 3.11 | 22.5 | 36.1 | 9.01 | 7.57 | 5.99 | 4.93 | 4.82 | 4.93 | 2.90 | 2.36 | 2.73 | 3.22 | 10.8 |
| 22. | 3.11 | 20.0 | 46.9 | 8.80 | 7.57 | 5.97 | 4.32 | 4.55 | 4.45 | 3.29 | 2.42 | 2.78 | 3.21 | 13.3 |
| 23. | 3.08 | 21.4 | 51.6 | 10.7 | 7.44 | 5.84 | 3.97 | 4.45 | 4.27 | 2.83 | 2.38 | 2.83 | 3.51 | 48.9 |
| 24. | 3.08 | 25.4 | 33.1 | 12.7 | 7.30 | 5.80 | 3.91 | 5.29 | 3.97 | 2.95 | 7.17 | 2.90 | 4.78 | 44.6 |
| 25. | 3.05 | 20.6 | 26.3 | 16.3 | 7.04 | 6.02 | 3.76 | 8.90 | 3.80 | 3.23 | 3.67 | 3.00 | 3.76 | 25.8 |
| 26. | 3.14 | 17.2 | 22.2 | 12.8 | 6.89 | 6.13 | 3.74 | 5.90 | 3.61 | 3.47 | 5.23 | 2.90 | 3.66 | 26.9 |
| 27. | 3.19 | 16.1 | 20.4 | 11.8 | 6.74 | 5.18 | 3.68 | 4.74 | 5.04 | 3.62 | 4.05 | 2.98 | 4.44 | 31.1 |
| 28. | 3.17 | 14.5 | 18.4 | 11.8 | 6.64 | 6.58 | 3.66 | 4.97 | 14.4 | 2.90 | 3.41 | 2.84 | 3.94 | 28.5 |
| 29. | 3.08 | 13.9 | 16.8 | 12.4 | 6.63 | 5.26 | 3.82 | 14.4 | 6.17 | 2.85 | 2.72 | 2.96 | 3.79 | 19.2 |
| 30. | 3.13 | 22.3 | 15.4 | | 7.19 | 5.02 | 3.77 | 6.76 | 4.75 | 3.27 | 2.55 | 5.79 | 3.90 | 17.7 |
| 31. | | 17.3 | 14.1 | | 6.87 | | 4.75 | | 4.53 | 2.83 | | 3.74 | | 16.6 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 6.+ | 1. | 31. | 12. | 29. | 30. | 28. | 10. | 26. | 15. | 10.+ | 2. | 22. | 1. |
| NQ | 2.88 | 3.34 | 14.1 | 7.72 | 6.63 | 5.02 | 3.66 | 4.12 | 3.61 | 2.80 | 2.31 | 2.38 | 3.21 | 3.71 |
| MQ | 3.07 | 16.1 | 28.7 | 10.5 | 8.98 | 5.99 | 4.99 | 5.81 | 6.50 | 3.39 | 2.94 | 4.13 | 3.91 | 15.0 |
| HQ | 3.87 | 80.2 | 101 | 21.6 | 17.0 | 10.6 | 28.0 | 36.1 | 28.2 | 7.88 | 13.3 | 36.1 | 7.31 | 79.3 |
| Tag | 11. | 16. | 5. | 15. | 9. | 4. | 11. | 29. | 17. | 6. | 24. | 4. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 50 | 88 | 30 | 28 | 18 | 15 | 17 | 20 | 10 | 9 | 13 | 12 | 46 |

| | 1955/2011 | | 1956/2012 57 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1960 | 1960 | 1960 | 1960 | 1960 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 |
| NQ | 1.76 | 1.92 | 3.09 | 3.57 | 3.19 | 2.71 | 2.51 | 2.01 | 1.47 | 1.60 | 1.27 | 1.21 | 1.76 | 1.92 |
| MNQ | 5.46 | 7.31 | 9.13 | 9.59 | 9.31 | 7.85 | 5.84 | 5.02 | 4.55 | 4.25 | 4.08 | 4.50 | 5.44 | 7.28 |
| MQ | 10.7 | 16.4 | 19.0 | 17.5 | 16.7 | 12.3 | 9.02 | 7.38 | 7.40 | 6.65 | 6.69 | 7.67 | 10.7 | 16.3 |
| MHQ | 42.8 | 75.0 | 78.0 | 64.8 | 64.6 | 32.7 | 34.9 | 32.2 | 33.7 | 30.7 | 28.9 | 33.0 | 42.8 | 75.5 |
| HQ | 160 | 246 | 214 | 229 | 194 | 101 | 149 | 133 | 174 | 134 | 128 | 175 | 160 | 246 |
| Jahr | 1998 | 1960 | 1968 | 1970 | 1992 | 1994 | 1984 | 1981 | 1956 | 2007 | 2007 | 1998 | 1998 | 1960 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 32 | 50 | 59 | 49 | 51 | 37 | 28 | 22 | 23 | 20 | 20 | 24 | 32 | 50 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 2.31 | am 10.09.2012 | 2.88 | 2.31 | 2.31 | am 10.09.2012 |
| MQ | m³/s | 8.46 | | 12.3 | 4.63 | 8.44 | |
| HQ | m³/s | 101 | am 05.01.2012 bei W = 359 cm | 101 | 36.1 | 101 | am 05.01.2012 bei W = 359 cm |
| Nq | l/(skm²) | 2.65 | | 3.31 | 2.65 | 2.65 | |
| Mq | l/(skm²) | 9.71 | | 14.2 | 5.31 | 9.69 | |
| Hq | l/(skm²) | 116 | | 116 | 41.5 | 116 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 307 | | 223 | 84 | 306 | |

| | | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.21 | am 11.10.1959 | 1.76 | 1.21 | 1.21 | am 11.10.1959 |
| MNQ | m³/s | 3.43 | | 5.03 | 3.64 | 3.61 | |
| MQ | m³/s | 11.4 | | 15.5 | 7.47 | 11.4 | |
| MHQ | m³/s | 126 | | 119 | 67.8 | 127 | |
| HQ | m³/s | 246 | am 04.12.1960 bei W = 534 cm | 246 | 175 | 246 | am 04.12.1960 bei W = 534 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.93 | | 5.77 | 4.18 | 4.15 | |
| Mq | l/(skm²) | 13.1 | | 17.7 | 8.58 | 13.1 | |
| MHq | l/(skm²) | 144 | | 137 | 77.8 | 146 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 414 | | 278 | 136 | 414 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.21 | 1.38 | 11.10.1959 | 246 | 282 | 534 | 04.12.1960 |
| 2 | 1.68 | 1.92 | 30.09.1964 | 229 | 263 | 522 | 23.02.1970 |
| 3 | 1.84 | 2.11 | 21.07.1960 | 222 | 255 | 470 | 30.12.1986 |
| 4 | 2.04 | 2.34 | 31.10.1971 | 214 | 246 | 510 | 15.01.1968 |
| 5 | 2.12 | 2.44 | 22.09.1976 | 194 | 223 | 451 | 13.03.1992 |
| 6 | 2.20 | 2.53 | 03.08.1996 | 179 | 205 | 434 | 02.01.1987 |
| 7 | 2.24 | 2.57 | 11.09.2009 | 175 | 201 | 441 | 29.10.1998 |
| 8 | 2.31 | 2.65 | 10.09.2012 | 174 | 199 | 518 | 15.07.1956 |
| 9 | 2.40 | 2.76 | 21.09.1963 | 161 | 185 | 448 | 19.01.2007 |
| 10 | 2.43 | 2.79 | 15.09.1991 | 160 | 184 | 426 | 01.11.1998 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender-jahr 2012 | 1956/2012 57 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 66.5 | 66.5 | 189 | 88.5 | 26.7 |
| 363 | 51.6 | 51.6 | 170 | 72.8 | 26.6 |
| 362 | 47.0 | 48.9 | 114 | 63.4 | 21.6 |
| 361 | 41.6 | 47.0 | 107 | 57.8 | 15.3 |
| 360 | 40.2 | 44.6 | 107 | 52.8 | 14.6 |
| 359 | 40.1 | 41.6 | 95.7 | 48.3 | 14.6 |
| 358 | 39.8 | 39.8 | 80.1 | 45.0 | 14.5 |
| 357 | 37.3 | 37.3 | 78.7 | 42.8 | 13.3 |
| 356 | 36.1 | 36.1 | 71.1 | 41.0 | 12.9 |
| 350 | 30.8 | 31.0 | 53.3 | 33.1 | 10.9 |
| 340 | 22.3 | 23.3 | 43.3 | 26.2 | 8.83 |
| 330 | 19.0 | 18.4 | 38.2 | 22.5 | 7.98 |
| 320 | 16.1 | 15.4 | 33.8 | 19.8 | 7.24 |
| 300 | 12.4 | 11.6 | 26.1 | 16.2 | 6.33 |
| 270 | 9.12 | 8.88 | 20.9 | 12.8 | 5.44 |
| 240 | 7.30 | 6.89 | 17.4 | 10.6 | 4.47 |
| 210 | 6.18 | 6.07 | 14.9 | 9.03 | 3.44 |
| 183 | 5.40 | 5.29 | 13.7 | 7.93 | 2.76 |
| 150 | 4.70 | 4.70 | 12.4 | 6.79 | 2.28 |
| 130 | 4.29 | 4.44 | 11.3 | 6.20 | 2.21 |
| 120 | 3.97 | 4.28 | 11.0 | 5.94 | 2.16 |
| 110 | 3.77 | 4.05 | 10.7 | 5.70 | 2.10 |
| 100 | 3.61 | 3.87 | 10.5 | 5.46 | 2.05 |
| 90 | 3.34 | 3.74 | 10.3 | 5.23 | 2.00 |
| 80 | 3.16 | 3.61 | 10.1 | 5.00 | 1.92 |
| 70 | 3.11 | 3.42 | 9.78 | 4.77 | 1.90 |
| 60 | 3.08 | 3.27 | 9.41 | 4.54 | 1.86 |
| 50 | 2.97 | 3.09 | 9.30 | 4.28 | 1.81 |
| 40 | 2.90 | 2.91 | 9.07 | 4.02 | 1.76 |
| 30 | 2.84 | 2.84 | 8.92 | 3.75 | 1.72 |
| 25 | 2.78 | 2.78 | 8.50 | 3.58 | 1.68 |
| 20 | 2.67 | 2.67 | 8.39 | 3.38 | 1.64 |
| 15 | 2.49 | 2.49 | 7.79 | 3.14 | 1.60 |
| 10 | 2.41 | 2.41 | 7.36 | 2.89 | 1.52 |
| 9 | 2.39 | 2.39 | 7.36 | 2.82 | 1.49 |
| 8 | 2.39 | 2.39 | 7.27 | 2.74 | 1.48 |
| 7 | 2.39 | 2.39 | 7.18 | 2.65 | 1.47 |
| 6 | 2.39 | 2.39 | 7.10 | 2.53 | 1.47 |
| 5 | 2.38 | 2.38 | 6.85 | 2.41 | 1.45 |
| 4 | 2.38 | 2.38 | 6.85 | 2.29 | 1.38 |
| 3 | 2.38 | 2.38 | 6.79 | 2.17 | 1.37 |
| 2 | 2.36 | 2.36 | 6.75 | 2.01 | 1.35 |
| 1 | 2.34 | 2.34 | 6.71 | 1.84 | 1.27 |
| 0 | 2.31 | 2.31 | 6.60 | 1.21 | 1.21 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 1335.11 km²
PNP : NHN+ 46.99 m
Lage : 10.29 km oberhalb der Mündung rechts

# Q
m³/s

Pegel : Löhne Nr. 4670000000100
Gewässer : Werre
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.47 | 5.26 | 24.6 | 15.9 | 16.9 | 8.95 | 7.16 | 10.1 | 5.97 | 5.51 | 3.63 | 3.91 | 5.70 | 5.92 |
| 2. | 4.47 | 7.38 | 50.2 | 14.9 | 15.3 | 8.87 | 7.08 | 6.09 | 5.66 | 5.45 | 3.44 | 3.80 | 6.53 | 6.87 |
| 3. | 4.52 | 9.48 | 40.3 | 14.3 | 14.4 | 8.94 | 7.16 | 7.70 | 5.27 | 5.22 | 3.27 | 4.16 | 6.43 | 6.98 |
| 4. | 4.46 | 11.5 | 42.0 | 13.5 | 13.9 | 11.5 | 6.74 | 10.1 | 5.19 | 5.40 | 3.41 | 23.3 | 6.59 | 7.96 |
| 5. | 4.41 | 10.0 | 92.8 | 12.9 | 14.2 | 9.37 | 8.52 | 13.6 | 5.05 | 5.40 | 3.58 | 15.6 | 7.02 | 9.92 |
| 6. | 4.34 | 9.14 | 80.4 | 12.4 | 13.3 | 8.72 | 7.83 | 7.72 | 4.99 | 6.38 | 3.64 | 19.5 | 6.71 | 7.78 |
| 7. | 4.35 | 19.0 | 59.3 | 11.7 | 12.6 | 8.83 | 7.41 | 7.16 | 5.58 | 5.25 | 3.48 | 12.2 | 7.56 | 7.29 |
| 8. | 4.44 | 21.1 | 66.8 | 11.6 | 19.0 | 8.45 | 7.10 | 6.17 | 5.75 | 4.99 | 3.10 | 6.40 | 6.94 | 7.10 |
| 9. | 4.38 | 20.3 | 57.6 | 11.2 | 15.5 | 8.66 | 7.02 | 6.00 | 6.11 | 5.04 | 3.15 | 5.54 | 6.34 | 8.23 |
| 10. | 4.45 | 13.5 | 46.0 | 11.1 | 13.6 | 10.2 | 7.52 | 5.64 | 5.45 | 4.71 | 3.19 | 5.16 | 6.16 | 21.3 |
| 11. | 4.47 | 9.87 | 36.6 | 10.5 | 13.2 | 9.13 | 29.5 | 5.93 | 7.94 | 4.62 | 3.81 | 5.01 | 6.67 | 13.5 |
| 12. | 4.46 | 10.6 | 36.4 | 10.3 | 12.7 | 8.57 | 10.1 | 6.77 | 13.2 | 4.56 | 4.56 | 5.23 | 6.23 | 10.4 |
| 13. | 4.49 | 18.1 | 50.0 | 10.8 | 12.2 | 8.58 | 7.95 | 8.08 | 10.9 | 4.55 | 3.45 | 5.88 | 5.86 | 10.1 |
| 14. | 4.54 | 19.9 | 37.0 | 12.2 | 11.8 | 8.13 | 7.51 | 5.78 | 9.54 | 4.28 | 3.21 | 6.08 | 5.84 | 9.65 |
| 15. | 4.75 | 20.0 | 29.4 | 17.3 | 11.5 | 7.96 | 8.39 | 5.65 | 10.4 | 4.10 | 3.36 | 5.37 | 5.83 | 29.7 |
| 16. | 4.73 | 42.3 | 25.0 | 13.2 | 11.4 | 7.69 | 9.03 | 8.08 | 7.25 | 4.89 | 3.06 | 5.27 | 5.95 | 25.4 |
| 17. | 4.70 | 60.4 | 22.2 | 14.3 | 11.2 | 7.66 | 7.68 | 6.75 | 23.7 | 4.32 | 3.16 | 5.30 | 5.93 | 27.3 |
| 18. | 4.73 | 28.0 | 20.5 | 13.5 | 11.4 | 7.63 | 7.02 | 5.67 | 14.5 | 3.82 | 3.27 | 5.09 | 6.13 | 21.7 |
| 19. | 4.74 | 21.7 | 42.0 | 21.8 | 11.1 | 8.35 | 6.98 | 5.40 | 15.1 | 3.70 | 3.21 | 4.94 | 6.57 | 19.8 |
| 20. | 4.75 | 22.5 | 57.3 | 15.1 | 10.3 | 8.23 | 6.96 | 5.57 | 13.2 | 3.57 | 3.23 | 4.91 | 6.11 | 15.6 |
| 21. | 4.76 | 32.1 | 52.0 | 12.5 | 10.1 | 8.37 | 6.57 | 5.80 | 7.70 | 3.54 | 3.20 | 4.78 | 5.98 | 15.2 |
| 22. | 4.82 | 26.1 | 70.1 | 12.2 | 10.0 | 9.03 | 6.16 | 5.35 | 6.57 | 3.59 | 3.31 | 4.77 | 5.87 | 19.7 |
| 23. | 4.90 | 28.0 | 81.6 | 14.5 | 9.87 | 8.64 | 5.84 | 5.32 | 6.37 | 3.50 | 3.46 | 4.80 | 5.97 | 65.8 |
| 24. | 4.89 | 34.2 | 52.2 | 17.4 | 9.60 | 8.48 | 5.63 | 5.57 | 6.06 | 3.70 | 7.89 | 4.78 | 7.27 | 71.5 |
| 25. | 4.89 | 31.0 | 40.1 | 25.0 | 9.33 | 8.92 | 5.50 | 10.5 | 5.82 | 3.85 | 5.59 | 4.84 | 6.33 | 41.1 |
| 26. | 4.94 | 23.7 | 32.5 | 18.8 | 9.17 | 8.83 | 5.38 | 7.69 | 5.57 | 3.91 | 5.70 | 4.84 | 6.09 | 40.8 |
| 27. | 4.86 | 21.8 | 28.9 | 17.1 | 9.04 | 7.81 | 5.29 | 5.78 | 5.46 | 4.28 | 5.47 | 4.88 | 6.84 | 49.5 |
| 28. | 5.12 | 19.2 | 25.2 | 16.7 | 8.86 | 9.33 | 5.19 | 6.01 | 13.8 | 3.94 | 4.98 | 4.79 | 6.30 | 42.9 |
| 29. | 4.92 | 18.0 | 22.8 | 17.5 | 9.07 | 7.93 | 5.17 | 16.4 | 7.15 | 3.89 | 4.05 | 4.96 | 6.04 | 28.8 |
| 30. | 4.80 | 30.5 | 20.3 | | 9.74 | 7.47 | 4.95 | 9.85 | 6.06 | 4.10 | 3.94 | 7.77 | 6.08 | 25.7 |
| 31. | | 25.2 | 18.2 | | 9.56 | | 5.81 | | 5.86 | 3.83 | | 6.19 | | 24.1 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 6. | 1. | 31. | 12. | 28. | 30. | 30. | 23. | 6. | 23. | 16. | 2. | 1. | 1. |
| NQ | 4.34 | 5.26 | 18.2 | 10.3 | 8.86 | 7.47 | 4.95 | 5.32 | 4.99 | 3.50 | 3.06 | 3.80 | 5.70 | 5.92 |
| MQ | 4.65 | 21.6 | 43.9 | 14.5 | 11.9 | 8.64 | 7.62 | 7.41 | 8.29 | 4.45 | 3.86 | 6.77 | 6.33 | 22.5 |
| HQ | 5.44 | 99.3 | 134 | 29.2 | 20.7 | 13.9 | 47.0 | 36.0 | 31.3 | 7.68 | 13.7 | 43.2 | 9.90 | 105 |
| Tag | 29. | 16. | 5. | 19. | 8. | 4. | 11. | 29. | 17. | 6. | 24. | 4. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 43 | 88 | 27 | 24 | 17 | 15 | 14 | 17 | 9 | 7 | 14 | 12 | 45 |

| | 1982/2011 | | 1983/2012 30 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1990 | 2000 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 2010 | 2009 | 2009 | 1997 | 1990 | 2000 |
| NQ | 3.84 | 5.22 | 4.82 | 4.42 | 4.92 | 3.84 | 3.51 | 3.42 | 3.28 | 2.92 | 2.90 | 3.69 | 3.84 | 5.22 |
| MNQ | 8.09 | 10.5 | 14.8 | 15.3 | 15.0 | 11.6 | 8.29 | 6.91 | 5.94 | 5.37 | 5.43 | 6.55 | 8.10 | 10.4 |
| MQ | 17.6 | 24.9 | 34.1 | 28.8 | 28.1 | 18.5 | 13.3 | 10.3 | 8.86 | 8.61 | 9.38 | 11.7 | 17.5 | 25.1 |
| MHQ | 68.3 | 110 | 128 | 95.6 | 99.2 | 45.2 | 44.0 | 39.8 | 36.8 | 38.3 | 41.1 | 53.8 | 67.3 | 110 |
| HQ | 227 | 340 | 272 | 218 | 282 | 119 | 182 | 83.6 | 159 | 157 | 148 | 254 | 227 | 340 |
| Jahr | 1998 | 1986 | 2007 | 2002 | 1992 | 1994 | 1984 | 2003 | 2002 | 2007 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 34 | 50 | 68 | 53 | 56 | 36 | 27 | 20 | 18 | 17 | 18 | 24 | 34 | 50 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 3.06 | am 16.09.2012 | 4.34 | 3.06 | 3.06 | am 16.09.2012 |
| MQ | m³/s | 12.0 | | 17.7 | 6.41 | 12.2 | |
| HQ | m³/s | 134 | am 05.01.2012 bei W = 354 cm | 134 | 47.0 | 134 | am 05.01.2012 bei W = 354 cm |
| Nq | l/(skm²) | 2.29 | | 3.25 | 2.29 | 2.29 | |
| Mq | l/(skm²) | 9.00 | | 13.2 | 4.80 | 9.16 | |
| Hq | l/(skm²) | 101 | | 101 | 35.2 | 101 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 285 | | 208 | 76 | 290 | |

| | | 1983/2012 (*) 30 Jahre | | | | 1983/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 2.90 | am 01.09.2009 | 3.84 | 2.90 | 2.90 | am 01.09.2009 |
| MNQ | m³/s | 4.48 | | 7.10 | 4.71 | 4.69 | |
| MQ | m³/s | 17.8 | | 25.4 | 10.4 | 17.8 | |
| MHQ | m³/s | 183 | | 178 | 85.4 | 181 | |
| HQ | m³/s | 340 | am 31.12.1986 bei W = 537 cm | 340 | 254 | 340 | am 31.12.1986 bei W = 537 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.36 | | 5.32 | 3.53 | 3.51 | |
| Mq | l/(skm²) | 13.3 | | 19.0 | 7.76 | 13.3 | |
| MHq | l/(skm²) | 137 | | 134 | 63.9 | 136 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 421 | | 298 | 123 | 421 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.90 | 2.17 | 01.09.2009 | 340 | 254 | 537 | 31.12.1986 |
| 2 | 3.02 | 2.26 | 15.09.1991 | 282 | 212 | 505 | 14.03.1992 |
| 3 | 3.06 | 2.29 | 16.09.2012 | 272 | 203 | 518 | 19.01.2007 |
| 4 | 3.28 | 2.45 | 24.07.2010 | 254 | 191 | 491 | 29.10.1998 |
| 5 | 3.42 | 2.56 | 07.06.1996 | 245 | 183 | 472 | 29.01.1993 |
| 6 | 3.48 | 2.61 | 06.08.1992 | 240 | 180 | 491 | 03.01.2003 |
| 7 | 3.66 | 2.74 | 13.08.1990 | 228 | 171 | 456 | 28.01.1994 |
| 8 | 3.69 | 2.76 | 05.10.1997 | 227 | 170 | 465 | 01.11.1998 |
| 9 | 3.71 | 2.78 | 28.09.2011 | 226 | 169 | 450 | 20.12.1988 |
| 10 | 3.72 | 2.79 | 22.08.2003 | 220 | 165 | 452 | 31.12.1993 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender-jahr 2012 | 1983/2012 30 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 92.8 | 92.8 | 292 | 142 | 58.0 |
| 363 | 81.6 | 81.6 | 257 | 111 | 54.7 |
| 362 | 80.4 | 80.4 | 175 | 100 | 53.8 |
| 361 | 70.1 | 71.5 | 158 | 94.4 | 45.9 |
| 360 | 66.8 | 70.1 | 147 | 86.3 | 43.4 |
| 359 | 60.4 | 66.8 | 142 | 81.6 | 43.4 |
| 358 | 59.3 | 65.8 | 130 | 76.8 | 40.9 |
| 357 | 57.6 | 59.3 | 109 | 72.5 | 40.7 |
| 356 | 57.3 | 57.6 | 104 | 68.9 | 34.6 |
| 350 | 42.3 | 49.5 | 86.1 | 55.2 | 30.2 |
| 340 | 32.1 | 36.6 | 73.5 | 43.4 | 22.5 |
| 330 | 25.2 | 25.4 | 60.6 | 36.7 | 20.7 |
| 320 | 21.8 | 21.8 | 52.9 | 32.2 | 18.7 |
| 300 | 17.1 | 15.6 | 38.2 | 26.0 | 14.6 |
| 270 | 12.7 | 12.2 | 30.2 | 20.1 | 9.12 |
| 240 | 10.1 | 9.92 | 26.3 | 16.3 | 7.68 |
| 210 | 8.72 | 8.48 | 21.6 | 13.6 | 7.04 |
| 183 | 7.69 | 7.63 | 18.7 | 11.7 | 6.57 |
| 150 | 6.08 | 6.57 | 16.4 | 9.93 | 5.96 |
| 130 | 5.64 | 6.08 | 15.4 | 8.95 | 5.48 |
| 120 | 5.47 | 5.94 | 15.0 | 8.48 | 5.30 |
| 110 | 5.32 | 5.82 | 14.8 | 8.09 | 5.14 |
| 100 | 5.19 | 5.65 | 14.5 | 7.70 | 4.99 |
| 90 | 4.98 | 5.50 | 13.9 | 7.30 | 4.86 |
| 80 | 4.89 | 5.35 | 13.4 | 6.97 | 4.68 |
| 70 | 4.78 | 5.19 | 12.9 | 6.60 | 4.42 |
| 60 | 4.62 | 4.96 | 11.9 | 6.31 | 4.19 |
| 50 | 4.46 | 4.78 | 11.6 | 5.95 | 4.03 |
| 40 | 4.28 | 4.28 | 11.1 | 5.61 | 3.86 |
| 30 | 3.85 | 3.85 | 10.7 | 5.21 | 3.57 |
| 25 | 3.71 | 3.71 | 10.3 | 5.02 | 3.50 |
| 20 | 3.58 | 3.58 | 10.0 | 4.85 | 3.44 |
| 15 | 3.46 | 3.46 | 9.90 | 4.64 | 3.27 |
| 10 | 3.31 | 3.31 | 9.82 | 4.39 | 3.19 |
| 9 | 3.28 | 3.28 | 9.80 | 4.31 | 3.12 |
| 8 | 3.27 | 3.27 | 9.77 | 4.23 | 3.12 |
| 7 | 3.23 | 3.23 | 9.73 | 4.14 | 3.11 |
| 6 | 3.21 | 3.21 | 9.71 | 4.04 | 3.11 |
| 5 | 3.21 | 3.21 | 9.54 | 3.94 | 3.09 |
| 4 | 3.20 | 3.20 | 9.50 | 3.84 | 3.09 |
| 3 | 3.19 | 3.19 | 9.50 | 3.71 | 3.04 |
| 2 | 3.17 | 3.17 | 9.48 | 3.52 | 3.02 |
| 1 | 3.15 | 3.15 | 9.37 | 3.27 | 2.92 |
| 0 | 3.06 | 3.06 | 9.23 | 2.90 | 2.90 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Erfasst 90% des Werre−Einzugsgebietes, Unterwasserpegel des HRB−Werre, Durch Sielwehrbetrieb unterhalb beeinflußt,

LANUV NRW

$A_{Eo}$ : 294.19 km²
PNP : NHN+ 72.56 m
Lage : 4.68 km oberhalb der Mündung links

# Q
m³/s

Pegel : Lindemannsheide neu 4627100000200
Gewässer : Bega
Gebiet : Oberweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.01 | 0.877 | 5.50 | 3.89 | 3.95 | 2.17 | 1.70 | 2.28 | 1.37 | 1.29 | 0.941 | 0.796 | 0.928 | 1.14 |
| 2. | 1.05 | 1.23 | 10.5 | 3.69 | 3.62 | 2.13 | 1.68 | 1.55 | 1.21 | 1.14 | 0.773 | 0.716 | 1.10 | 1.17 |
| 3. | 1.05 | 1.52 | 8.04 | 3.59 | 3.42 | 2.13 | 1.69 | 1.60 | 1.22 | 1.13 | 0.782 | 0.855 | 1.04 | 1.27 |
| 4. | 1.04 | 2.01 | 8.05 | 3.42 | 3.30 | 2.29 | 1.66 | 2.10 | 1.23 | 1.17 | 0.827 | 4.39 | 1.03 | 1.29 |
| 5. | 1.04 | 1.65 | 20.5 | 3.26 | 3.35 | 2.11 | 1.75 | 2.57 | 1.22 | 1.22 | 0.843 | 2.33 | 1.03 | 1.60 |
| 6. | 1.02 | 1.59 | 14.4 | 3.13 | 3.11 | 2.03 | 1.81 | 1.63 | 1.21 | 1.59 | 0.842 | 1.97 | 1.02 | 1.40 |
| 7. | 1.01 | 2.93 | 10.4 | 3.04 | 2.97 | 2.11 | 1.71 | 1.65 | 1.40 | 1.09 | 0.812 | 1.59 | 1.08 | 1.29 |
| 8. | 1.02 | 3.58 | 16.1 | 2.83 | 4.26 | 2.02 | 1.55 | 1.46 | 1.48 | 1.07 | 0.797 | 1.08 | 1.10 | 1.21 |
| 9. | 1.01 | 4.06 | 13.9 | 2.72 | 3.88 | 2.00 | 1.61 | 1.30 | 1.73 | 1.14 | 0.796 | 0.927 | 1.01 | 1.25 |
| 10. | 1.02 | 2.59 | 10.5 | 2.65 | 3.40 | 2.17 | 1.63 | 1.24 | 1.21 | 1.07 | 0.779 | 0.939 | 1.05 | 2.56 |
| 11. | 1.01 | 1.77 | 8.10 | 2.52 | 3.27 | 2.10 | 2.81 | 1.27 | 1.48 | 1.08 | 0.850 | 0.896 | 1.15 | 2.15 |
| 12. | 1.00 | 1.80 | 7.53 | 2.46 | 3.11 | 2.00 | 1.77 | 1.48 | 2.30 | 1.06 | 1.08 | 0.937 | 1.10 | 1.66 |
| 13. | 0.988 | 3.64 | 10.6 | 2.49 | 3.00 | 1.96 | 1.54 | 2.13 | 2.42 | 0.967 | 0.953 | 1.19 | 0.933 | 1.59 |
| 14. | 0.992 | 4.20 | 7.98 | 2.68 | 2.87 | 1.93 | 1.57 | 1.35 | 1.89 | 1.00 | 0.807 | 1.04 | 0.942 | 1.57 |
| 15. | 0.965 | 4.64 | 6.58 | 4.73 | 2.80 | 1.87 | 1.72 | 1.34 | 1.91 | 0.929 | 0.838 | 0.992 | 0.979 | 4.91 |
| 16. | 0.946 | 9.78 | 5.71 | 3.35 | 2.78 | 1.84 | 2.24 | 1.43 | 1.60 | 1.12 | 0.824 | 1.01 | 0.952 | 4.32 |
| 17. | 0.952 | 12.1 | 5.00 | 3.93 | 2.68 | 1.82 | 1.68 | 1.38 | 3.18 | 1.11 | 0.772 | 0.935 | 0.953 | 3.83 |
| 18. | 0.965 | 5.59 | 4.77 | 3.26 | 2.66 | 1.82 | 1.55 | 1.33 | 2.38 | 0.996 | 0.780 | 0.894 | 0.963 | 3.32 |
| 19. | 0.953 | 4.06 | 9.48 | 4.80 | 2.56 | 1.82 | 1.51 | 1.17 | 1.81 | 0.963 | 0.784 | 0.873 | 1.02 | 3.08 |
| 20. | 0.952 | 3.88 | 10.8 | 3.36 | 2.45 | 1.80 | 1.48 | 1.32 | 1.71 | 0.910 | 0.786 | 0.831 | 0.980 | 2.53 |
| 21. | 0.932 | 5.29 | 8.92 | 2.98 | 2.37 | 1.81 | 1.48 | 1.42 | 1.41 | 0.871 | 0.782 | 0.849 | 0.929 | 2.48 |
| 22. | 0.920 | 5.62 | 11.9 | 2.83 | 2.35 | 1.92 | 1.36 | 1.22 | 1.34 | 0.900 | 0.788 | 0.800 | 0.923 | 3.21 |
| 23. | 0.908 | 6.82 | 15.3 | 3.08 | 2.36 | 1.87 | 1.36 | 1.24 | 1.28 | 0.899 | 0.780 | 0.844 | 1.00 | 14.2 |
| 24. | 0.907 | 6.43 | 10.2 | 3.50 | 2.30 | 1.93 | 1.34 | 1.32 | 1.19 | 0.885 | 1.18 | 0.852 | 1.21 | 13.9 |
| 25. | 0.894 | 5.77 | 8.14 | 4.76 | 2.25 | 1.96 | 1.30 | 2.54 | 1.17 | 0.986 | 0.954 | 0.854 | 1.13 | 7.68 |
| 26. | 0.881 | 4.68 | 6.70 | 3.99 | 2.22 | 1.87 | 1.30 | 2.02 | 1.15 | 0.984 | 1.27 | 0.860 | 1.05 | 7.85 |
| 27. | 0.857 | 4.31 | 6.16 | 3.77 | 2.20 | 1.81 | 1.28 | 1.32 | 1.99 | 1.02 | 0.985 | 0.857 | 1.33 | 8.02 |
| 28. | 0.891 | 4.11 | 5.62 | 3.78 | 2.15 | 1.87 | 1.28 | 1.39 | 4.00 | 0.965 | 0.893 | 0.825 | 1.20 | 8.02 |
| 29. | 0.904 | 3.90 | 5.18 | 4.10 | 2.14 | 1.82 | 1.23 | 1.46 | 1.74 | 0.921 | 0.856 | 0.836 | 1.16 | 5.01 |
| 30. | 0.854 | 6.13 | 4.61 | | 2.36 | 1.75 | 1.25 | 1.70 | 1.30 | 0.928 | 0.838 | 1.10 | 1.18 | 4.70 |
| 31. | | 5.45 | 4.31 | | 2.34 | | 1.39 | | 1.58 | 0.952 | | 1.08 | | 4.28 |
| Tag | 30. | 1. | 31. | 12. | 29. | 30. | 29. | 19. | 26. | 21. | 17. | 2. | 22. | 1. |
| NQ | 0.854 | 0.877 | 4.31 | 2.46 | 2.14 | 1.75 | 1.23 | 1.17 | 1.15 | 0.871 | 0.772 | 0.716 | 0.923 | 1.14 |
| MQ | 0.964 | 4.26 | 9.08 | 3.40 | 2.85 | 1.96 | 1.59 | 1.57 | 1.68 | 1.04 | 0.866 | 1.13 | 1.05 | 3.95 |
| HQ | 1.13 | 20.5 | 32.0 | 7.61 | 4.88 | 2.43 | 3.62 | 3.12 | 8.03 | 2.29 | 1.97 | 8.12 | 1.67 | 23.3 |
| Tag | 5. | 16. | 5. | 19. | 8. | 4. | 11. | 5. | 28. | 6. | 26. | 4. | 5. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 39 | 83 | 29 | 26 | 17 | 14 | 14 | 15 | 9 | 8 | 10 | 9 | 36 |

## Hauptwerte

| | 1987/2011 | | 1988/2012 25 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1997 | 2012 | 2012 | 2011 | 2011 |
| NQ | 0.854 | 0.877 | 1.23 | 1.13 | 1.44 | 1.06 | 0.997 | 0.943 | 0.762 | 0.758 | 0.773 | 0.716 | 0.854 | 0.877 |
| MNQ | 1.72 | 2.18 | 2.97 | 3.20 | 3.28 | 2.52 | 1.79 | 1.51 | 1.32 | 1.21 | 1.25 | 1.45 | 1.69 | 2.13 |
| MQ | 3.60 | 4.76 | 6.22 | 5.61 | 5.75 | 3.53 | 2.53 | 2.02 | 1.90 | 1.89 | 1.98 | 2.33 | 3.39 | 4.71 |
| MHQ | 14.0 | 21.1 | 22.4 | 18.2 | 19.8 | 8.70 | 7.53 | 9.01 | 7.72 | 9.20 | 8.17 | 10.0 | 13.1 | 20.8 |
| HQ | 42.8 | 44.3 | 42.6 | 41.8 | 52.6 | 31.1 | 38.3 | 48.3 | 29.0 | 42.8 | 35.3 | 49.2 | 42.8 | 44.3 |
| Jahr | 1998 | 1988 | 2003 | 2002 | 1992 | 1994 | 2002 | 2003 | 2001 | 2007 | 2007 | 1998 | 1998 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 32 | 43 | 57 | 47 | 52 | 31 | 23 | 18 | 17 | 17 | 17 | 21 | 30 | 43 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.716 | am 02.10.2012 | 0.854 | 0.716 | 0.716 | am 02.10.2012 |
| MQ | m³/s | 2.54 | | 3.78 | 1.31 | 2.52 | |
| HQ | m³/s | 32.0 | am 05.01.2012 bei W = 316 cm | 32.0 | 8.12 | 32.0 | am 05.01.2012 bei W = 316 cm |
| Nq | l/(skm²) | 2.43 | | 2.90 | 2.43 | 2.43 | |
| Mq | l/(skm²) | 8.64 | | 12.9 | 4.47 | 8.57 | |
| Hq | l/(skm²) | 109 | | 109 | 27.6 | 109 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 273 | | 202 | 71 | 271 | |

| | | 1988/2012 (*) 25 Jahre | | | | 1988/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.716 | am 02.10.2012 | 0.854 | 0.716 | 0.716 | am 02.10.2012 |
| MNQ | m³/s | 1.04 | | 1.54 | 1.12 | 1.10 | |
| MQ | m³/s | 3.50 | | 4.92 | 2.11 | 3.48 | |
| MHQ | m³/s | 33.8 | | 32.1 | 17.9 | 33.1 | |
| HQ | m³/s | 52.6 | am 13.03.1992 bei W = 354 cm | 52.6 | 49.2 | 52.6 | am 13.03.1992 bei W = 354 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.53 | | 5.23 | 3.81 | 3.74 | |
| Mq | l/(skm²) | 11.9 | | 16.7 | 7.17 | 11.8 | |
| MHq | l/(skm²) | 115 | | 109 | 61.0 | 112 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 376 | | 262 | 114 | 373 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.716 | 2.43 | 02.10.2012 | 52.6 | 179 | 354 | 13.03.1992 |
| 2 | 0.758 | 2.58 | 15.08.1997 | 49.2 | 167 | 361 | 28.10.1998 |
| 3 | 0.762 | 2.59 | 21.07.1996 | 48.3 | 164 | 370 | 09.06.2003 |
| 4 | 0.785 | 2.67 | 24.08.2009 | 44.3 | 151 | 348 | 19.12.1988 |
| 5 | 0.854 | 2.90 | 30.11.2011 | 42.8 | 146 | 367 | 22.08.2007 |
| 6 | 0.866 | 2.94 | 14.09.1999 | 42.8 | 145 | 351 | 02.11.1998 |
| 7 | 0.916 | 3.12 | 05.08.1990 | 42.6 | 145 | 352 | 03.01.2003 |
| 8 | 0.918 | 3.12 | 07.08.2010 | 42.5 | 145 | 347 | 19.01.2007 |
| 9 | 0.935 | 3.18 | 26.08.2003 | 42.5 | 144 | 338 | 27.01.2002 |
| 10 | 0.936 | 3.18 | 14.09.1991 | 41.8 | 142 | 340 | 26.02.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender-jahr 2012 | 1988/2012 25 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 20.5 | 20.5 | 40.2 | 25.9 | 13.6 |
| 363 | 16.1 | 16.1 | 35.3 | 21.0 | 12.2 |
| 362 | 15.3 | 15.3 | 30.7 | 18.9 | 8.73 |
| 361 | 14.4 | 14.4 | 29.3 | 17.2 | 8.61 |
| 360 | 13.9 | 14.2 | 27.9 | 15.7 | 8.57 |
| 359 | 12.1 | 13.9 | 26.5 | 14.9 | 8.40 |
| 358 | 11.9 | 13.9 | 24.4 | 14.3 | 7.81 |
| 357 | 10.8 | 11.9 | 22.0 | 13.6 | 7.50 |
| 356 | 10.6 | 10.8 | 20.4 | 13.0 | 7.28 |
| 350 | 9.48 | 9.48 | 16.1 | 10.5 | 6.26 |
| 340 | 6.58 | 7.68 | 12.9 | 8.18 | 4.36 |
| 330 | 5.45 | 5.00 | 11.6 | 6.94 | 3.84 |
| 320 | 4.61 | 4.31 | 9.59 | 6.03 | 3.53 |
| 300 | 3.69 | 3.36 | 7.20 | 4.96 | 3.04 |
| 270 | 2.80 | 2.57 | 6.14 | 3.94 | 2.11 |
| 240 | 2.20 | 2.14 | 5.32 | 3.28 | 1.71 |
| 210 | 1.87 | 1.82 | 4.60 | 2.78 | 1.52 |
| 183 | 1.65 | 1.60 | 4.22 | 2.39 | 1.40 |
| 150 | 1.36 | 1.34 | 3.87 | 2.02 | 1.30 |
| 130 | 1.25 | 1.25 | 3.65 | 1.82 | 1.25 |
| 120 | 1.22 | 1.22 | 3.55 | 1.72 | 1.22 |
| 110 | 1.14 | 1.17 | 3.43 | 1.64 | 1.17 |
| 100 | 1.08 | 1.13 | 3.35 | 1.57 | 1.13 |
| 90 | 1.02 | 1.08 | 3.22 | 1.50 | 1.08 |
| 80 | 0.996 | 1.03 | 3.12 | 1.45 | 1.03 |
| 70 | 0.965 | 0.992 | 3.06 | 1.39 | 0.992 |
| 60 | 0.939 | 0.954 | 2.94 | 1.34 | 0.954 |
| 50 | 0.908 | 0.933 | 2.84 | 1.29 | 0.933 |
| 40 | 0.885 | 0.899 | 2.75 | 1.23 | 0.899 |
| 30 | 0.854 | 0.855 | 2.59 | 1.17 | 0.855 |
| 25 | 0.844 | 0.844 | 2.50 | 1.12 | 0.844 |
| 20 | 0.836 | 0.836 | 2.44 | 1.08 | 0.836 |
| 15 | 0.812 | 0.812 | 2.36 | 1.03 | 0.812 |
| 10 | 0.796 | 0.796 | 2.29 | 0.982 | 0.796 |
| 9 | 0.788 | 0.788 | 2.29 | 0.971 | 0.788 |
| 8 | 0.786 | 0.786 | 2.28 | 0.960 | 0.786 |
| 7 | 0.784 | 0.784 | 2.25 | 0.952 | 0.784 |
| 6 | 0.782 | 0.782 | 2.22 | 0.941 | 0.782 |
| 5 | 0.782 | 0.782 | 2.18 | 0.928 | 0.782 |
| 4 | 0.780 | 0.780 | 2.12 | 0.910 | 0.780 |
| 3 | 0.780 | 0.780 | 2.09 | 0.877 | 0.778 |
| 2 | 0.779 | 0.779 | 2.04 | 0.852 | 0.777 |
| 1 | 0.773 | 0.773 | 1.98 | 0.812 | 0.770 |
| 0 | 0.716 | 0.716 | 1.95 | 0.716 | 0.716 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
Unterwasserpegel des HRB−Bega

LANUV NRW

$A_{Eo}$ : 121.00 km²
PNP : NHN+ 39.45 m
Lage : 11.16 km oberhalb der Mündung rechts

# Q
m³/s

Pegel : Bierde Nr. 4745000000100
Gewässer : Gehle
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.160 | 0.172 | 1.29 | 0.569 | 0.993 | 0.398 | 0.293 | 0.301 | 0.157 | 0.140 | 0.107 | 0.120 | 0.154 | 0.193 |
| 2. | 0.160 | 0.194 | 1.94 | 0.533 | 0.873 | 0.380 | 0.287 | 0.196 | 0.162 | 0.139 | 0.105 | 0.119 | 0.158 | 0.203 |
| 3. | 0.158 | 0.202 | 1.73 | 0.459 | 0.777 | 0.378 | 0.304 | 0.198 | 0.155 | 0.142 | 0.110 | 0.118 | 0.157 | 0.211 |
| 4. | 0.155 | 0.216 | 1.49 | 0.440 | 0.713 | 0.558 | 0.306 | 0.216 | 0.151 | 0.142 | 0.111 | 0.528 | 0.160 | 0.217 |
| 5. | 0.155 | 0.223 | 4.69 | 0.414 | 0.746 | 0.521 | 0.299 | 0.247 | 0.139 | 0.138 | 0.110 | 0.628 | 0.178 | 0.252 |
| 6. | 0.158 | 0.271 | 4.05 | 0.440 | 0.656 | 0.456 | 0.289 | 0.207 | 0.139 | 0.155 | 0.110 | 1.39 | 0.172 | 0.241 |
| 7. | 0.156 | 0.372 | 3.35 | 0.439 | 0.610 | 0.444 | 0.278 | 0.205 | 0.139 | 0.137 | 0.109 | 0.883 | 0.176 | 0.229 |
| 8. | 0.153 | 0.465 | 3.79 | 0.362 | 1.59 | 0.405 | 0.266 | 0.188 | 0.139 | 0.137 | 0.109 | 0.319 | 0.180 | 0.224 |
| 9. | 0.151 | 0.508 | 3.09 | 0.353 | 1.30 | 0.399 | 0.257 | 0.176 | 0.148 | 0.162 | 0.108 | 0.222 | 0.178 | 0.238 |
| 10. | 0.150 | 0.408 | 2.60 | 0.354 | 0.973 | 0.425 | 0.244 | 0.169 | 0.135 | 0.136 | 0.108 | 0.187 | 0.178 | 0.632 |
| 11. | 0.147 | 0.355 | 1.92 | 0.353 | 0.847 | 0.425 | 0.758 | 0.164 | 0.148 | 0.134 | 0.128 | 0.171 | 0.185 | 0.491 |
| 12. | 0.143 | 0.339 | 1.57 | 0.346 | 0.743 | 0.389 | 0.402 | 0.163 | 0.159 | 0.133 | 0.161 | 0.170 | 0.182 | 0.370 |
| 13. | 0.142 | 0.434 | 1.46 | 0.347 | 0.685 | 0.365 | 0.310 | 0.163 | 0.170 | 0.131 | 0.118 | 0.183 | 0.174 | 0.339 |
| 14. | 0.145 | 0.518 | 1.19 | 0.373 | 0.643 | 0.353 | 0.280 | 0.163 | 0.170 | 0.125 | 0.111 | 0.170 | 0.175 | 0.334 |
| 15. | 0.146 | 0.452 | 0.971 | 0.497 | 0.610 | 0.335 | 0.291 | 0.158 | 0.176 | 0.124 | 0.121 | 0.165 | 0.175 | 2.07 |
| 16. | 0.140 | 1.09 | 0.816 | 0.427 | 0.583 | 0.314 | 0.300 | 0.176 | 0.157 | 0.136 | 0.114 | 0.156 | 0.174 | 1.43 |
| 17. | 0.143 | 2.37 | 0.724 | 0.488 | 0.553 | 0.302 | 0.265 | 0.174 | 0.194 | 0.129 | 0.109 | 0.143 | 0.175 | 1.14 |
| 18. | 0.139 | 1.18 | 0.661 | 0.513 | 0.538 | 0.313 | 0.238 | 0.161 | 0.323 | 0.121 | 0.107 | 0.139 | 0.179 | 1.02 |
| 19. | 0.136 | 0.880 | 1.93 | 0.653 | 0.526 | 0.306 | 0.229 | 0.151 | 0.689 | 0.119 | 0.107 | 0.131 | 0.194 | 0.842 |
| 20. | 0.135 | 0.851 | 5.05 | 0.526 | 0.470 | 0.297 | 0.217 | 0.146 | 0.538 | 0.119 | 0.107 | 0.126 | 0.184 | 0.654 |
| 21. | 0.141 | 0.814 | 5.60 | 0.504 | 0.456 | 0.307 | 0.208 | 0.156 | 0.226 | 0.117 | 0.107 | 0.126 | 0.185 | 0.556 |
| 22. | 0.138 | 0.891 | 5.76 | 0.521 | 0.454 | 0.330 | 0.199 | 0.155 | 0.184 | 0.117 | 0.106 | 0.129 | 0.182 | 0.659 |
| 23. | 0.129 | 1.23 | 7.04 | 0.674 | 0.435 | 0.318 | 0.185 | 0.149 | 0.166 | 0.116 | 0.108 | 0.130 | 0.182 | 4.86 |
| 24. | 0.137 | 1.41 | 4.03 | 1.07 | 0.418 | 0.317 | 0.174 | 0.145 | 0.156 | 0.116 | 0.150 | 0.128 | 0.199 | 4.14 |
| 25. | 0.143 | 1.28 | 3.04 | 1.59 | 0.401 | 0.304 | 0.170 | 0.189 | 0.149 | 0.117 | 0.135 | 0.130 | 0.202 | 2.36 |
| 26. | 0.143 | 0.898 | 2.16 | 1.32 | 0.391 | 0.299 | 0.170 | 0.163 | 0.142 | 0.114 | 0.166 | 0.131 | 0.203 | 1.86 |
| 27. | 0.152 | 0.728 | 1.80 | 1.09 | 0.389 | 0.282 | 0.170 | 0.154 | 0.138 | 0.131 | 0.149 | 0.133 | 0.223 | 1.97 |
| 28. | 0.154 | 0.648 | 1.52 | 1.12 | 0.379 | 0.310 | 0.169 | 0.151 | 0.169 | 0.112 | 0.160 | 0.134 | 0.208 | 1.41 |
| 29. | 0.161 | 0.587 | 1.24 | 1.06 | 0.381 | 0.302 | 0.169 | 0.188 | 0.157 | 0.105 | 0.129 | 0.136 | 0.209 | 1.14 |
| 30. | 0.165 | 1.88 | 0.903 | | 0.424 | 0.282 | 0.168 | 0.173 | 0.150 | 0.109 | 0.127 | 0.179 | 0.201 | 0.947 |
| 31. | | 1.67 | 0.705 | | 0.425 | | 0.176 | | 0.147 | 0.104 | | 0.161 | | 0.870 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23. | 1. | 18. | 12. | 28. | 30.+ | 30. | 24. | 10. | 31. | 2. | 3. | 1. | 1. |
| NQ | 0.129 | 0.172 | 0.661 | 0.346 | 0.379 | 0.282 | 0.168 | 0.145 | 0.135 | 0.104 | 0.105 | 0.118 | 0.154 | 0.193 |
| MQ | 0.148 | 0.760 | 2.52 | 0.614 | 0.645 | 0.361 | 0.260 | 0.178 | 0.193 | 0.128 | 0.120 | 0.245 | 0.183 | 1.04 |
| HQ | 0.176 | 3.15 | 9.17 | 1.66 | 1.88 | 0.654 | 1.40 | 0.543 | 1.34 | 0.195 | 0.330 | 2.30 | 0.278 | 8.23 |
| Tag | 2. | 17. | 23. | 25. | 8. | 4. | 11. | 1. | 19. | 9. | 11.+ | 6. | 27. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 3 | 17 | 56 | 13 | 14 | 8 | 6 | 4 | 4 | 3 | 3 | 5 | 4 | 23 |

| | 1973/2011 | | 1974/2012 39 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1976 | 1996 | 1998 | 1998 | 1998 | 1996 | 1989 | 1996 | 1996 | 1997 | 1997 | 1991 | 1976 |
| NQ | 0.086 | 0.127 | 0.119 | 0.155 | 0.131 | 0.145 | 0.139 | 0.115 | 0.086 | 0.067 | 0.064 | 0.076 | 0.086 | 0.127 |
| MNQ | 0.289 | 0.408 | 0.556 | 0.601 | 0.585 | 0.392 | 0.268 | 0.211 | 0.177 | 0.162 | 0.166 | 0.209 | 0.285 | 0.398 |
| MQ | 0.873 | 1.42 | 1.95 | 1.63 | 1.60 | 0.916 | 0.660 | 0.430 | 0.381 | 0.331 | 0.338 | 0.467 | 0.866 | 1.41 |
| MHQ | 4.02 | 7.32 | 8.28 | 6.22 | 7.08 | 3.47 | 4.23 | 2.59 | 2.56 | 2.11 | 1.78 | 2.66 | 3.99 | 7.41 |
| HQ | 17.1 | 25.2 | 22.6 | 13.5 | 28.2 | 15.1 | 20.2 | 26.8 | 22.7 | 17.4 | 9.65 | 26.8 | 17.1 | 25.2 |
| Jahr | 2002 | 1986 | 2003 | 1987 | 1979 | 1983 | 1975 | 1981 | 1981 | 2010 | 2007 | 1998 | 2002 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 19 | 32 | 43 | 33 | 35 | 20 | 15 | 9 | 8 | 7 | 7 | 10 | 19 | 31 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.104 | am 31.08.2012 | 0.129 | 0.104 | 0.104 | am 31.08.2012 |
| MQ m³/s | 0.517 | | 0.850 | 0.188 | 0.543 | |
| HQ m³/s | 9.17 | am 23.01.2012 bei W = 232 cm | 9.17 | 2.30 | 9.17 | am 23.01.2012 bei W = 232 cm |
| Nq l/(skm²) | 0.858 | | 1.06 | 0.858 | 0.858 | |
| Mq l/(skm²) | 4.27 | | 7.03 | 1.55 | 4.49 | |
| Hq l/(skm²) | 75.7 | | 75.7 | 19.0 | 75.7 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 135 | | 110 | 25 | 142 | |

| | 1974/2012 (*) 39 Jahre | | | | 1974/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.064 | am 19.09.1997 | 0.086 | 0.064 | 0.064 | am 19.09.1997 |
| MNQ m³/s | 0.132 | | 0.227 | 0.138 | 0.137 | |
| MQ m³/s | 0.915 | | 1.40 | 0.435 | 0.913 | |
| MHQ m³/s | 14.2 | | 12.2 | 7.36 | 14.3 | |
| HQ m³/s | 28.2 | am 04.03.1979 bei W = 312 cm | 28.2 | 26.8 | 28.2 | am 04.03.1979 bei W = 312 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(skm²) | 1.09 | | 1.88 | 1.14 | 1.13 | |
| Mq l/(skm²) | 7.56 | | 11.6 | 3.60 | 7.54 | |
| MHq l/(skm²) | 118 | | 100 | 60.8 | 118 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 239 | | 181 | 57 | 238 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.064 | 0.527 | 19.09.1997 | 28.2 | 233 | 312 | 04.03.1979 |
| 2 | 0.067 | 0.552 | 27.08.1996 | 27.4 | 227 | 310 | 12.03.1981 |
| 3 | 0.069 | 0.567 | 26.08.2009 | 26.8 | 222 | 332 | 30.06.1981 |
| 4 | 0.080 | 0.658 | 17.10.2003 | 26.8 | 221 | 333 | 28.10.1998 |
| 5 | 0.086 | 0.709 | 02.11.1991 | 25.2 | 208 | 302 | 31.12.1986 |
| 6 | 0.092 | 0.764 | 05.08.1989 | 24.4 | 202 | 334 | 03.06.1981 |
| 7 | 0.093 | 0.769 | 22.10.1999 | 22.6 | 187 | 312 | 03.01.2003 |
| 8 | 0.094 | 0.778 | 30.10.1976 | 20.2 | 167 | 286 | 09.05.1975 |
| 9 | 0.098 | 0.806 | 06.08.1992 | 19.6 | 162 | 302 | 30.12.2002 |
| 10 | 0.098 | 0.808 | 08.08.1990 | 19.5 | 161 | 305 | 12.05.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1974/2012 39 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 7.04 | 7.04 | 26.4 | 10.5 | 3.01 |
| 363 | 5.76 | 5.76 | 23.8 | 8.66 | 2.92 |
| 362 | 5.60 | 5.60 | 21.0 | 7.64 | 2.64 |
| 361 | 5.05 | 5.05 | 16.1 | 6.70 | 2.55 |
| 360 | 4.69 | 4.86 | 15.5 | 6.13 | 2.49 |
| 359 | 4.05 | 4.69 | 15.0 | 5.73 | 2.48 |
| 358 | 4.03 | 4.14 | 14.8 | 5.35 | 2.25 |
| 357 | 3.79 | 4.05 | 12.0 | 5.09 | 2.21 |
| 356 | 3.35 | 4.03 | 9.42 | 4.87 | 1.93 |
| 350 | 1.94 | 2.36 | 7.94 | 3.81 | 1.66 |
| 340 | 1.52 | 1.59 | 4.84 | 2.78 | 1.24 |
| 330 | 1.23 | 1.30 | 3.90 | 2.26 | 0.964 |
| 320 | 0.971 | 1.02 | 3.43 | 1.89 | 0.809 |
| 300 | 0.685 | 0.685 | 2.40 | 1.35 | 0.557 |
| 270 | 0.465 | 0.470 | 1.82 | 0.914 | 0.427 |
| 240 | 0.379 | 0.370 | 1.36 | 0.649 | 0.284 |
| 210 | 0.302 | 0.299 | 1.05 | 0.496 | 0.227 |
| 183 | 0.216 | 0.217 | 0.893 | 0.408 | 0.192 |
| 150 | 0.170 | 0.179 | 0.614 | 0.318 | 0.167 |
| 130 | 0.161 | 0.170 | 0.518 | 0.278 | 0.145 |
| 120 | 0.157 | 0.169 | 0.472 | 0.258 | 0.140 |
| 110 | 0.154 | 0.162 | 0.452 | 0.239 | 0.129 |
| 100 | 0.150 | 0.157 | 0.442 | 0.220 | 0.124 |
| 90 | 0.145 | 0.154 | 0.435 | 0.205 | 0.121 |
| 80 | 0.142 | 0.148 | 0.428 | 0.191 | 0.119 |
| 70 | 0.139 | 0.139 | 0.420 | 0.178 | 0.110 |
| 60 | 0.136 | 0.136 | 0.412 | 0.169 | 0.102 |
| 50 | 0.131 | 0.131 | 0.405 | 0.158 | 0.096 |
| 40 | 0.127 | 0.127 | 0.403 | 0.147 | 0.093 |
| 30 | 0.119 | 0.119 | 0.398 | 0.136 | 0.086 |
| 25 | 0.117 | 0.117 | 0.390 | 0.130 | 0.084 |
| 20 | 0.112 | 0.112 | 0.386 | 0.124 | 0.080 |
| 15 | 0.110 | 0.110 | 0.372 | 0.118 | 0.076 |
| 10 | 0.108 | 0.108 | 0.366 | 0.108 | 0.073 |
| 9 | 0.108 | 0.108 | 0.366 | 0.107 | 0.072 |
| 8 | 0.108 | 0.108 | 0.363 | 0.105 | 0.072 |
| 7 | 0.107 | 0.107 | 0.362 | 0.103 | 0.071 |
| 6 | 0.107 | 0.107 | 0.362 | 0.101 | 0.070 |
| 5 | 0.107 | 0.107 | 0.362 | 0.098 | 0.070 |
| 4 | 0.107 | 0.107 | 0.362 | 0.095 | 0.068 |
| 3 | 0.107 | 0.107 | 0.361 | 0.091 | 0.067 |
| 2 | 0.106 | 0.106 | 0.361 | 0.086 | 0.067 |
| 1 | 0.105 | 0.105 | 0.361 | 0.079 | 0.065 |
| 0 | 0.104 | 0.104 | 0.360 | 0.064 | 0.064 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 102.24 km²
PNP : NHN+ 43.89 m
Lage : 72.75 km oberhalb der Mündung links

# Q

m³/s

Pegel : Fiestel Nr. 4761500000100
Gewässer : Große Aue, 476
Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.143 | 0.315 | 0.716 | 0.772 | 0.753 | 0.330 | 0.274 | 0.338 | 0.175 | 0.199 | 0.152 | 0.137 | 0.205 | 0.203 |
| 2. | 0.137 | 0.382 | 1.31 | 0.690 | 0.707 | 0.343 | 0.268 | 0.168 | 0.160 | 0.258 | 0.136 | 0.147 | 0.247 | 0.246 |
| 3. | 0.146 | 0.334 | 1.08 | 0.660 | 0.676 | 0.351 | 0.351 | 0.286 | 0.171 | 0.256 | 0.124 | 0.224 | 0.226 | 0.227 |
| 4. | 0.143 | 0.271 | 1.28 | 0.616 | 0.626 | 0.554 | 0.273 | 0.368 | 0.161 | 0.296 | 0.142 | 0.948 | 0.233 | 0.299 |
| 5. | 0.140 | 0.319 | 4.24 | 0.562 | 0.642 | 0.358 | 0.332 | 0.498 | 0.154 | 0.197 | 0.167 | 0.722 | 0.259 | 0.303 |
| 6. | 0.137 | 0.568 | 2.48 | 0.504 | 0.585 | 0.341 | 0.273 | 0.245 | 0.150 | 0.456 | 0.179 | 1.25 | 0.213 | 0.228 |
| 7. | 0.135 | 0.707 | 1.98 | 0.446 | 0.625 | 0.355 | 0.342 | 0.237 | 0.156 | 0.300 | 0.174 | 0.538 | 0.238 | 0.218 |
| 8. | 0.136 | 0.996 | 3.27 | 0.466 | 0.891 | 0.297 | 0.268 | 0.227 | 0.191 | 0.267 | 0.142 | 0.237 | 0.209 | 0.208 |
| 9. | 0.144 | 0.941 | 2.45 | 0.451 | 0.650 | 0.371 | 0.368 | 0.252 | 0.222 | 0.410 | 0.136 | 0.201 | 0.221 | 0.387 |
| 10. | 0.150 | 0.447 | 1.84 | 0.424 | 0.620 | 0.398 | 0.273 | 0.154 | 0.219 | 0.202 | 0.139 | 0.185 | 0.206 | 0.693 |
| 11. | 0.158 | 0.341 | 1.53 | 0.385 | 0.591 | 0.365 | 0.302 | 0.140 | 0.769 | 0.192 | 0.189 | 0.178 | 0.232 | 0.356 |
| 12. | 0.163 | 0.438 | 1.47 | 0.374 | 0.566 | 0.402 | 0.232 | 0.192 | 0.436 | 0.181 | 0.329 | 0.195 | 0.197 | 0.299 |
| 13. | 0.160 | 0.651 | 1.60 | 0.430 | 0.552 | 0.344 | 0.206 | 0.188 | 0.537 | 0.178 | 0.132 | 0.193 | 0.193 | 0.280 |
| 14. | 0.161 | 0.650 | 1.33 | 0.489 | 0.545 | 0.331 | 0.218 | 0.143 | 0.425 | 0.175 | 0.133 | 0.222 | 0.191 | 0.307 |
| 15. | 0.172 | 0.507 | 1.16 | 0.665 | 0.525 | 0.289 | 0.248 | 0.151 | 0.514 | 0.168 | 0.249 | 0.178 | 0.195 | 0.800 |
| 16. | 0.172 | 1.60 | 1.06 | 0.462 | 0.511 | 0.290 | 0.240 | 0.360 | 0.262 | 0.330 | 0.124 | 0.178 | 0.201 | 0.474 |
| 17. | 0.171 | 1.88 | 0.996 | 0.532 | 0.489 | 0.289 | 0.215 | 0.231 | 0.790 | 0.183 | 0.120 | 0.179 | 0.203 | 0.390 |
| 18. | 0.168 | 0.943 | 0.942 | 0.534 | 0.477 | 0.293 | 0.204 | 0.174 | 0.941 | 0.169 | 0.125 | 0.180 | 0.255 | 0.488 |
| 19. | 0.170 | 0.761 | 1.81 | 0.929 | 0.448 | 0.412 | 0.204 | 0.164 | 1.42 | 0.157 | 0.127 | 0.174 | 0.228 | 0.472 |
| 20. | 0.152 | 0.836 | 2.12 | 0.636 | 0.421 | 0.330 | 0.206 | 0.166 | 0.830 | 0.143 | 0.127 | 0.172 | 0.204 | 0.439 |
| 21. | 0.153 | 0.833 | 2.03 | 0.589 | 0.416 | 0.583 | 0.209 | 0.171 | 0.305 | 0.190 | 0.126 | 0.174 | 0.189 | 0.408 |
| 22. | 0.158 | 0.833 | 2.13 | 0.598 | 0.417 | 0.395 | 0.201 | 0.166 | 0.243 | 0.131 | 0.137 | 0.179 | 0.200 | 0.667 |
| 23. | 0.161 | 0.763 | 2.43 | 0.682 | 0.409 | 0.347 | 0.184 | 0.166 | 0.242 | 0.127 | 0.165 | 0.190 | 0.222 | 2.20 |
| 24. | 0.167 | 1.05 | 1.95 | 0.837 | 0.386 | 0.414 | 0.175 | 0.192 | 0.222 | 0.139 | 0.580 | 0.196 | 0.224 | 1.41 |
| 25. | 0.173 | 0.786 | 1.63 | 1.03 | 0.362 | 0.614 | 0.170 | 0.404 | 0.212 | 0.228 | 0.283 | 0.204 | 0.239 | 0.961 |
| 26. | 0.181 | 0.643 | 1.44 | 0.870 | 0.363 | 0.429 | 0.166 | 0.221 | 0.209 | 0.180 | 0.252 | 0.203 | 0.228 | 0.940 |
| 27. | 0.189 | 0.601 | 1.40 | 0.788 | 0.371 | 0.312 | 0.151 | 0.168 | 0.204 | 0.189 | 0.225 | 0.201 | 0.225 | 1.23 |
| 28. | 0.200 | 0.560 | 1.23 | 0.782 | 0.360 | 0.437 | 0.150 | 0.191 | 0.208 | 0.161 | 0.189 | 0.203 | 0.210 | 0.815 |
| 29. | 0.214 | 0.528 | 1.12 | 0.767 | 0.359 | 0.291 | 0.149 | 0.683 | 0.195 | 0.149 | 0.174 | 0.209 | 0.208 | 0.706 |
| 30. | 0.261 | 1.17 | 1.02 | | 0.466 | 0.293 | 0.150 | 0.464 | 0.226 | 0.145 | 0.176 | 0.340 | 0.206 | 0.656 |
| 31. | | 0.822 | 0.904 | | 0.381 | | 0.202 | | 0.247 | 0.146 | | 0.226 | | 0.696 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 7. | 4. | 1. | 12. | 29. | 15.+ | 29. | 11. | 6. | 23. | 17. | 1. | 21. | 1. |
| NQ | 0.135 | 0.271 | 0.716 | 0.374 | 0.359 | 0.289 | 0.149 | 0.140 | 0.150 | 0.127 | 0.120 | 0.137 | 0.189 | 0.203 |
| MQ | 0.164 | 0.725 | 1.67 | 0.620 | 0.522 | 0.372 | 0.233 | 0.250 | 0.361 | 0.210 | 0.182 | 0.283 | 0.217 | 0.581 |
| HQ | 0.346 | 3.16 | 6.76 | 1.33 | 1.15 | 1.14 | 0.658 | 1.37 | 2.69 | 0.913 | 0.916 | 1.93 | 0.398 | 3.10 |
| Tag | 30. | 16. | 5. | 19. | 8. | 25. | 9. | 29. | 19. | 6. | 24. | 6. | 18. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 19 | 44 | 15 | 14 | 9 | 6 | 6 | 9 | 5 | 5 | 7 | 5 | 15 |

| | 1968/2011 | | 1969/2012 44 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1997 | 1996 | 1996 | 1996 | 1996 | 2012 | 1996 | 1976 | 1996 | 1997 | 2009 | 1983 | 1997 |
| NQ | 0.112 | 0.184 | 0.153 | 0.196 | 0.233 | 0.169 | 0.149 | 0.131 | 0.075 | 0.059 | 0.073 | 0.111 | 0.112 | 0.184 |
| MNQ | 0.384 | 0.511 | 0.729 | 0.820 | 0.834 | 0.628 | 0.383 | 0.295 | 0.235 | 0.211 | 0.230 | 0.274 | 0.371 | 0.501 |
| MQ | 0.746 | 1.04 | 1.53 | 1.40 | 1.42 | 0.971 | 0.633 | 0.453 | 0.416 | 0.410 | 0.409 | 0.494 | 0.730 | 1.04 |
| MHQ | 2.97 | 4.29 | 5.67 | 4.46 | 4.95 | 2.42 | 2.39 | 1.88 | 2.01 | 2.34 | 1.96 | 2.38 | 2.95 | 4.33 |
| HQ | 12.2 | 15.8 | 17.7 | 10.7 | 15.6 | 9.46 | 9.76 | 12.5 | 10.2 | 17.5 | 9.09 | 19.4 | 12.2 | 15.8 |
| Jahr | 2002 | 1986 | 1994 | 2002 | 1979 | 1994 | 1984 | 1981 | 2002 | 2010 | 2002 | 1998 | 2002 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 19 | 27 | 40 | 33 | 37 | 25 | 17 | 11 | 11 | 11 | 10 | 13 | 18 | 27 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.120 | am 17.09.2012 | 0.135 | 0.120 | 0.120 | am 17.09.2012 |
| MQ | m³/s | 0.468 | | 0.685 | 0.253 | 0.460 | |
| HQ | m³/s | 6.76 | am 05.01.2012 bei W = 200 cm | 6.76 | 2.69 | 6.76 | am 05.01.2012 bei W = 200 cm |
| Nq | l/(skm²) | 1.17 | | 1.32 | 1.17 | 1.17 | |
| Mq | l/(skm²) | 4.58 | | 6.70 | 2.48 | 4.50 | |
| Hq | l/(skm²) | 66.1 | | 66.1 | 26.4 | 66.1 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 145 | | 105 | 39 | 142 | |

| | | 1969/2012 (*) 44 Jahre | | | | 1969/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.060 | am 04.08.1996 | 0.112 | 0.060 | 0.060 | am 04.08.1996 |
| MNQ | m³/s | 0.161 | | 0.339 | 0.169 | 0.168 | |
| MQ | m³/s | 0.825 | | 1.19 | 0.469 | 0.823 | |
| MHQ | m³/s | 9.29 | | 8.30 | 5.01 | 9.38 | |
| HQ | m³/s | 19.4 | am 28.10.1998 bei W = 306 cm | 17.7 | 19.4 | 19.4 | am 28.10.1998 bei W = 306 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 1.58 | | 3.32 | 1.65 | 1.64 | |
| Mq | l/(skm²) | 8.07 | | 11.6 | 4.59 | 8.05 | |
| MHq | l/(skm²) | 90.9 | | 81.2 | 49.0 | 91.8 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 255 | | 182 | 73 | 254 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.060 | 0.582 | 04.08.1996 | 19.4 | 189 | 306 | 28.10.1998 |
| 2 | 0.073 | 0.711 | 18.09.1997 | 17.7 | 173 | 279 | 28.01.1994 |
| 3 | 0.075 | 0.733 | 30.07.1976 | 17.5 | 171 | 309 | 27.08.2010 |
| 4 | 0.080 | 0.785 | 05.09.1983 | 16.3 | 160 | 263 | 02.01.1987 |
| 5 | 0.086 | 0.845 | 25.07.2010 | 15.8 | 154 | 272 | 31.12.1986 |
| 6 | 0.097 | 0.949 | 10.08.1998 | 15.6 | 153 | 264 | 31.12.1993 |
| 7 | 0.100 | 0.978 | 22.08.2003 | 15.6 | 153 | 253 | 04.03.1979 |
| 8 | 0.100 | 0.981 | 20.09.2009 | 15.5 | 152 | 285 | 04.10.1993 |
| 9 | 0.103 | 1.01 | 10.08.2011 | 14.8 | 145 | 241 | 18.03.1987 |
| 10 | 0.106 | 1.04 | 12.08.1990 | 14.3 | 140 | 245 | 19.03.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1969/2012 44 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 4.24 | 4.24 | 16.4 | 6.85 | 1.95 |
| 363 | 3.27 | 3.27 | 12.6 | 5.47 | 1.73 |
| 362 | 2.48 | 2.48 | 10.1 | 4.71 | 1.49 |
| 361 | 2.45 | 2.45 | 9.53 | 4.26 | 1.44 |
| 360 | 2.43 | 2.43 | 8.57 | 4.03 | 1.13 |
| 359 | 2.13 | 2.20 | 7.82 | 3.75 | 1.13 |
| 358 | 2.13 | 2.13 | 7.51 | 3.54 | 1.04 |
| 357 | 2.03 | 2.13 | 6.77 | 3.37 | 1.02 |
| 356 | 1.98 | 2.03 | 6.64 | 3.19 | 0.904 |
| 350 | 1.60 | 1.60 | 4.98 | 2.56 | 0.793 |
| 340 | 1.25 | 1.25 | 4.08 | 2.00 | 0.701 |
| 330 | 0.996 | 0.961 | 3.46 | 1.71 | 0.622 |
| 320 | 0.870 | 0.830 | 2.94 | 1.50 | 0.538 |
| 300 | 0.707 | 0.667 | 2.23 | 1.22 | 0.471 |
| 270 | 0.552 | 0.504 | 1.67 | 0.961 | 0.399 |
| 240 | 0.425 | 0.408 | 1.40 | 0.788 | 0.310 |
| 210 | 0.351 | 0.341 | 1.20 | 0.651 | 0.242 |
| 183 | 0.291 | 0.280 | 1.02 | 0.541 | 0.217 |
| 150 | 0.226 | 0.228 | 0.831 | 0.440 | 0.195 |
| 130 | 0.204 | 0.218 | 0.742 | 0.390 | 0.178 |
| 120 | 0.200 | 0.208 | 0.730 | 0.366 | 0.172 |
| 110 | 0.191 | 0.204 | 0.709 | 0.344 | 0.169 |
| 100 | 0.184 | 0.201 | 0.685 | 0.323 | 0.161 |
| 90 | 0.178 | 0.193 | 0.662 | 0.305 | 0.157 |
| 80 | 0.174 | 0.189 | 0.635 | 0.288 | 0.151 |
| 70 | 0.170 | 0.180 | 0.595 | 0.270 | 0.142 |
| 60 | 0.166 | 0.175 | 0.579 | 0.250 | 0.134 |
| 50 | 0.160 | 0.170 | 0.537 | 0.232 | 0.119 |
| 40 | 0.151 | 0.165 | 0.509 | 0.213 | 0.109 |
| 30 | 0.146 | 0.151 | 0.470 | 0.197 | 0.097 |
| 25 | 0.143 | 0.149 | 0.468 | 0.186 | 0.094 |
| 20 | 0.140 | 0.143 | 0.458 | 0.173 | 0.087 |
| 15 | 0.137 | 0.139 | 0.453 | 0.160 | 0.074 |
| 10 | 0.135 | 0.136 | 0.433 | 0.143 | 0.071 |
| 9 | 0.133 | 0.133 | 0.430 | 0.139 | 0.071 |
| 8 | 0.132 | 0.132 | 0.422 | 0.136 | 0.071 |
| 7 | 0.131 | 0.131 | 0.414 | 0.132 | 0.070 |
| 6 | 0.127 | 0.127 | 0.414 | 0.125 | 0.069 |
| 5 | 0.127 | 0.127 | 0.414 | 0.120 | 0.068 |
| 4 | 0.127 | 0.127 | 0.411 | 0.115 | 0.066 |
| 3 | 0.126 | 0.126 | 0.404 | 0.111 | 0.066 |
| 2 | 0.125 | 0.125 | 0.402 | 0.100 | 0.063 |
| 1 | 0.124 | 0.124 | 0.394 | 0.090 | 0.062 |
| 0 | 0.120 | 0.120 | 0.394 | 0.060 | 0.060 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

LANUV NRW

$A_{Eo}$ : 1014 $km^2$

PNP : NN + 27.18 m

Lage: 22.7 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Heide OP Nr. 4767109

Gewässer : Große Aue

Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.70 | 1.34 | 11.7 | 8.19 | 8.73 | 3.32 | 1.99 | 1.33 | 1.08 | 1.82 | 2.07 | 1.33 | 0.879 | 1.10 |
| 2. | 1.68 | 1.37 | 13.4 | 5.81 | 8.03 | 3.13 | 1.96 | 1.26 | 1.04 | 1.71 | 1.88 | 1.23 | 0.883 | 1.10 |
| 3. | 1.67 | 1.60 | 14.5 | 5.20 | 7.43 | 2.98 | 2.75 | 1.23 | 0.877 | 1.65 | 1.72 | 1.23 | 0.866 | 1.13 |
| 4. | 1.64 | 1.81 | 15.5 | 4.82 | 7.05 | 2.88 | 2.60 | 1.27 | 0.775 | 1.66 | 1.57 | 1.65 | 0.885 | 1.28 |
| 5. | 1.57 | 2.00 | 25.1 | 4.45 | 6.93 | 2.96 | 1.97 | 1.44 | 0.755 | 1.62 | 1.45 | 3.02 | 0.963 | 1.42 |
| 6. | 1.54 | 2.37 | 29.7 | 4.01 | 6.41 | 2.91 | 1.96 | 1.46 | 0.729 | 1.81 | 1.39 | 4.41 | 0.949 | 1.33 |
| 7. | 1.50 | 3.08 | 23.7 | 3.71 | 6.04 | 2.82 | 1.90 | 1.44 | 0.688 | 1.96 | 1.28 | 5.45 | 1.03 | 1.22 |
| 8. | 1.49 | 7.39 | 28.6 | 3.64 | 8.52 | 2.75 | 1.82 | 1.42 | 0.699 | 2.19 | 1.19 | 3.44 | 1.00 | 1.12 |
| 9. | 1.47 | 10.7 | 30.4 | 3.58 | 7.72 | 2.76 | 1.80 | 1.29 | 0.771 | 2.20 | 1.18 | 2.50 | 0.986 | 1.26 |
| 10. | 1.46 | 8.15 | 23.6 | 3.43 | 6.72 | 2.98 | 1.94 | 1.09 | 0.828 | 2.07 | 1.14 | 2.07 | 1.07 | 3.52 |
| 11. | 1.44 | 5.69 | 19.2 | 3.31 | 6.34 | 2.95 | 2.41 | 0.996 | 0.857 | 2.07 | 1.16 | 1.74 | 1.06 | 4.18 |
| 12. | 1.43 | 4.79 | 15.4 | 3.18 | 5.99 | 2.89 | 1.98 | 0.957 | 0.947 | 2.05 | 1.15 | 1.43 | 0.996 | 4.19 |
| 13. | 1.42 | 4.74 | 14.9 | 3.25 | 5.73 | 2.92 | 1.78 | 1.01 | 1.14 | 1.92 | 1.14 | 1.53 | 0.952 | 3.21 |
| 14. | 1.40 | 6.80 | 13.3 | 3.61 | 5.54 | 2.64 | 1.63 | 0.943 | 1.46 | 1.78 | 1.08 | 1.49 | 1.31 | 2.56 |
| 15. | 1.38 | 8.52 | 11.3 | 4.40 | 5.42 | 2.48 | 1.78 | 0.911 | 1.78 | 1.72 | 1.09 | 1.49 | 0.982 | 5.73 |
| 16. | 1.37 | 9.36 | 9.76 | 4.40 | 5.32 | 2.20 | 2.21 | 0.943 | 2.32 | 1.85 | 1.06 | 1.68 | 1.03 | 6.19 |
| 17. | 1.36 | 19.3 | 8.97 | 4.77 | 5.00 | 2.05 | 2.02 | 0.966 | 3.35 | 1.86 | 1.05 | 1.55 | 0.972 | 5.68 |
| 18. | 1.34 | 13.8 | 8.35 | 5.28 | 4.88 | 2.04 | 2.00 | 0.954 | 3.24 | 1.76 | 1.06 | 1.40 | 0.952 | 6.24 |
| 19. | 1.33 | 10.1 | 11.4 | 7.50 | 4.60 | 2.04 | 1.93 | 0.780 | 4.97 | 1.76 | 1.03 | 1.30 | 1.03 | 6.01 |
| 20. | 1.31 | 9.24 | 24.4 | 7.15 | 4.28 | 2.23 | 1.88 | 0.695 | 5.30 | 1.69 | 0.967 | 1.22 | 1.36 | 5.58 |
| 21. | 1.30 | 9.46 | 28.1 | 6.62 | 3.75 | 2.11 | 1.88 | 0.678 | 4.80 | 1.64 | 0.964 | 1.09 | 1.19 | 5.38 |
| 22. | 1.28 | 10.3 | 33.4 | 6.82 | 3.78 | 2.37 | 1.78 | 0.646 | 4.08 | 1.61 | 0.964 | 1.00 | 0.966 | 5.56 |
| 23. | 1.27 | 11.2 | 40.8 | 7.48 | 3.93 | 2.62 | 1.54 | 0.610 | 3.38 | 1.50 | 0.964 | 0.911 | 1.10 | 16.4 |
| 24. | 1.26 | 11.0 | 29.2 | 9.57 | 3.61 | 2.39 | 1.37 | 0.636 | 2.77 | 1.50 | 1.26 | 0.829 | 1.12 | 22.5 |
| 25. | 1.26 | 11.2 | 21.7 | 12.6 | 3.54 | 2.58 | 1.26 | 0.870 | 2.55 | 1.50 | 1.53 | 0.772 | 1.21 | 12.6 |
| 26. | 1.27 | 9.55 | 16.9 | 11.1 | 3.54 | 2.55 | 1.12 | 1.05 | 2.15 | 1.61 | 1.52 | 0.774 | 1.16 | 11.8 |
| 27. | 1.27 | 8.56 | 14.9 | 9.57 | 3.63 | 2.08 | 1.12 | 1.05 | 1.98 | 1.71 | 1.56 | 0.778 | 1.31 | 11.8 |
| 28. | 1.26 | 7.87 | 13.3 | 9.24 | 3.34 | 2.12 | 1.11 | 1.04 | 1.97 | 1.70 | 1.48 | 0.782 | 1.21 | 10.8 |
| 29. | 1.29 | 7.50 | 11.4 | 8.91 | 3.21 | 2.16 | 1.08 | 1.02 | 1.95 | 1.69 | 1.47 | 0.786 | 1.21 | 8.95 |
| 30. | 1.84 | 11.7 | 9.68 | | 3.25 | 2.07 | 1.06 | 1.09 | 1.85 | 1.61 | 1.43 | 0.809 | 1.12 | 8.45 |
| 31. | | 14.5 | 7.78 | | 3.38 | | 1.16 | | 1.80 | 1.61 | | 0.853 | | 7.59 |
| Tag | 28. | 1. | 31. | 12. | 29. | 19. | 30. | 23. | 7. | 23.+ | 21.+ | 25. | 3. | 1.+ |
| NQ | 1.26 | 1.34 | 7.78 | 3.18 | 3.21 | 2.04 | 1.06 | 0.610 | 0.688 | 1.50 | 0.964 | 0.772 | 0.866 | 1.10 |
| MQ | 1.43 | 7.91 | 18.7 | 6.05 | 5.34 | 2.57 | 1.77 | 1.04 | 2.03 | 1.77 | 1.29 | 1.63 | 1.06 | 6.00 |
| HQ | 3.11 | 20.7 | 43.7 | 12.9 | 9.21 | 3.58 | 3.66 | 1.46 | 6.51 | 2.22 | 2.22 | 5.93 | 2.40 | 26.7 |
| Tag | 30. | 17. | 23. | 25. | 8. | 1. | 3. | 1. | 19. | 8. | 1. | 6. | 20. | 23. |
| $h_N$ mm / $h_A$ mm | 4 | 21 | 49 | 15 | 14 | 7 | 5 | 3 | 5 | 5 | 3 | 4 | 3 | 16 |

## Hauptwerte

| | 1964/2011 | | 1965/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 48 Jahre | | | | | | | | | | | |
| Jahr | 1997 | 1964 | 1996 | 1996 | 1972 | 1974 | 1971 | 1996 | 1996 | 1996 | 1991+ | 1969 | 1997 | 1995 |
| NQ | 0.113 | 0.730 | 0.479 | 0.808 | 0.880 | 0.880 | 0.100 | 0.150 | 0.076 | 0.039 | 0.039 | 0.100 | 0.113 | 0.995 |
| MNQ | 3.18 | 4.45 | 5.59 | 5.84 | 5.85 | 4.10 | 2.39 | 1.80 | 1.28 | 1.15 | 1.34 | 2.05 | 3.19 | 4.46 |
| MQ | 7.32 | 10.7 | 13.6 | 12.1 | 12.1 | 8.18 | 5.14 | 3.60 | 3.02 | 2.51 | 3.02 | 4.50 | 7.28 | 10.7 |
| MHQ | 20.1 | 29.6 | 37.2 | 31.1 | 33.1 | 19.9 | 15.9 | 11.9 | 10.0 | 7.55 | 8.85 | 13.2 | 20.0 | 30.0 |
| HQ | 87.6 | 86.4 | 96.7 | 81.4 | 106 | 68.4 | 55.4 | 66.0 | 64.8 | 30.4 | 36.8 | 106 | 87.6 | 86.4 |
| Jahr | 1998 | 1986 | 1968 | 1970 | 1981 | 1994 | 1967 | 1981 | 1981 | 2002 | 1993 | 1998 | 1998 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 19 | 28 | 36 | 30 | 32 | 21 | 14 | 9 | 8 | 7 | 8 | 12 | 19 | 28 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.610 | am 23.06.2012 | 1.26 | 0.610 | 0.610 | am 23.06.2012 |
| MQ $m^3/s$ | 4.31 | | 7.07 | 1.59 | 4.12 | |
| HQ $m^3/s$ | 43.7 | am 23.01.2012 bei W= 343 cm | 43.7 | 6.51 | 43.7 | am 23.01.2012 bei W= 343 cm |
| Nq $l/(s km^2)$ | 0.602 | | 1.24 | 0.602 | 0.602 | |
| Mq $l/(s km^2)$ | 4.25 | | 6.97 | 1.57 | 4.06 | |
| Hq $l/(s km^2)$ | 43.1 | | 43.1 | 6.42 | 43.1 | |
| $h_N$ mm / $h_A$ mm | 134 | | 110 | 25 | 128 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| NQ $m^3/s$ | 0.039 | am 15.09.1991 | 0.113 | 0.039 | 0.039 | am 15.09.1991 |
| MNQ $m^3/s$ | 0.716 | | 2.30 | 0.765 | 0.752 | |
| MQ $m^3/s$ | 7.12 | | 10.7 | 3.63 | 7.13 | |
| MHQ $m^3/s$ | 54.8 | | 51.8 | 25.0 | 55.7 | |
| HQ $m^3/s$ | 106 | am 13.03.1981 bei W= 444 cm | 106 | 106 | 106 | am 13.03.1981 bei W= 444 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 0.706 | | 2.27 | 0.754 | 0.742 | |
| Mq $l/(s km^2)$ | 7.02 | | 10.6 | 3.58 | 7.03 | |
| MHq $l/(s km^2)$ | 54.0 | | 51.1 | 24.7 | 54.9 | |
| $Mh_N$ mm / $Mh_A$ mm | 222 | | 166 | 57 | 222 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.039 | 0.038 | 06.08.1996 | 106 | 105 | 443 | 29.10.1998 |
| 2 | 0.039 | 0.038 | 15.09.1991 | 106 | 105 | 444 | 13.03.1981 |
| 3 | 0.050 | 0.049 | 04.09.1974 | 102 | 101 | 436 | 05.03.1979 |
| 4 | 0.050 | 0.049 | 18.08.1973 | 96.7 | 95.4 | 427 | 16.01.1968 |
| 5 | 0.070 | 0.069 | 01.08.1990 | 92.0 | 90.7 | 419 | 28.01.1994 |
| 6 | 0.076 | 0.075 | 11.08.1995 | 88.1 | 86.9 | 412 | 19.03.1994 |
| 7 | 0.100 | 0.099 | 10.08.1986 | 86.4 | 85.2 | 409 | 31.12.1986 |
| 8 | 0.100 | 0.099 | 11.07.1976 | 84.2 | 83.0 | 405 | 31.12.1993 |
| 9 | 0.100 | 0.099 | 19.05.1971 | 82.1 | 80.9 | 405 | 22.01.2008 |
| 10 | 0.100 | 0.099 | 08.07.1970 | 81.4 | 80.3 | 400 | 23.02.1970 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1965/2012 48 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 40.8 | 40.8 | | | |
| 364 | 33.4 | 33.4 | 105 | 56.0 | 22.1 |
| 363 | 30.4 | 30.4 | 103 | 46.1 | 16.2 |
| 362 | 29.7 | 29.7 | 95.0 | 40.8 | 16.2 |
| 361 | 29.2 | 29.2 | 82.0 | 37.4 | 16.2 |
| 360 | 28.6 | 28.6 | 76.8 | 35.4 | 15.7 |
| 359 | 28.1 | 28.1 | 70.8 | 33.4 | 13.6 |
| 358 | 25.1 | 25.1 | 70.8 | 31.9 | 13.3 |
| 357 | 24.4 | 24.4 | 70.0 | 30.6 | 12.8 |
| 356 | 23.7 | 23.7 | 61.9 | 29.3 | 12.2 |
| 350 | 15.5 | 16.4 | 44.5 | 24.2 | 10.8 |
| 340 | 12.6 | 13.3 | 34.6 | 19.3 | 9.22 |
| 330 | 10.7 | 9.68 | 30.4 | 16.5 | 7.60 |
| 320 | 9.36 | 8.35 | 27.6 | 14.5 | 7.01 |
| 300 | 7.15 | 6.01 | 21.4 | 11.5 | 5.22 |
| 270 | 4.45 | 4.08 | 17.6 | 8.51 | 4.08 |
| 240 | 3.18 | 3.02 | 14.6 | 6.76 | 2.98 |
| 210 | 2.23 | 2.19 | 12.2 | 5.30 | 2.12 |
| 183 | 1.97 | 1.93 | 10.8 | 4.45 | 1.80 |
| 150 | 1.71 | 1.64 | 9.47 | 3.53 | 1.47 |
| 130 | 1.60 | 1.47 | 8.65 | 3.16 | 1.14 |
| 120 | 1.52 | 1.40 | 7.52 | 2.90 | 1.14 |
| 110 | 1.47 | 1.29 | 7.17 | 2.72 | 1.14 |
| 100 | 1.42 | 1.26 | 6.84 | 2.46 | 0.808 |
| 90 | 1.34 | 1.18 | 6.84 | 2.32 | 0.808 |
| 80 | 1.28 | 1.13 | 6.20 | 2.13 | 0.808 |
| 70 | 1.26 | 1.09 | 6.20 | 1.93 | 0.479 |
| 60 | 1.15 | 1.06 | 6.12 | 1.80 | 0.479 |
| 50 | 1.09 | 1.01 | 5.67 | 1.48 | 0.430 |
| 40 | 1.03 | 0.966 | 5.67 | 1.31 | 0.150 |
| 30 | 0.957 | 0.947 | 5.22 | 1.07 | 0.113 |
| 25 | 0.943 | 0.879 | 5.22 | 0.809 | 0.113 |
| 20 | 0.853 | 0.853 | 4.78 | 0.738 | 0.113 |
| 15 | 0.782 | 0.782 | 4.78 | 0.485 | 0.113 |
| 10 | 0.772 | 0.772 | 4.78 | 0.479 | 0.113 |
| 9 | 0.771 | 0.771 | 4.78 | 0.430 | 0.076 |
| 8 | 0.755 | 0.755 | 4.78 | 0.320 | 0.076 |
| 7 | 0.729 | 0.729 | 4.33 | 0.280 | 0.076 |
| 6 | 0.699 | 0.699 | 4.33 | 0.152 | 0.076 |
| 5 | 0.695 | 0.695 | 4.33 | 0.152 | 0.076 |
| 4 | 0.688 | 0.688 | 4.33 | 0.152 | 0.076 |
| 3 | 0.678 | 0.678 | 4.33 | 0.150 | 0.076 |
| 2 | 0.646 | 0.646 | 4.33 | 0.113 | 0.076 |
| 1 | 0.636 | 0.636 | 4.33 | 0.100 | 0.076 |
| 0 | 0.610 | 0.610 | 3.45 | 0.039 | 0.039 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Große Aue

NLWKN

$A_{Eo}$ : 163 $km^2$

PNP : NN + 32.48 m

Lage: 8.4 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Sieden Nr. 4768111

Gewässer : Siede

Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.525 | 0.477 | 1.05 | 0.845 | 1.17 | 0.630 | 0.626 | 0.702 | 0.303 | 0.261 | 0.295 | 0.318 | 0.329 | 0.349 |
| 2. | 0.525 | 0.511 | 1.57 | 0.758 | 1.07 | 0.616 | 0.605 | 0.546 | 0.289 | 0.256 | 0.295 | 0.307 | 0.334 | 0.372 |
| 3. | 0.535 | 0.529 | 1.71 | 0.725 | 1.00 | 0.636 | 0.784 | 0.467 | 0.276 | 0.252 | 0.286 | 0.312 | 0.338 | 0.375 |
| 4. | 0.525 | 0.547 | 2.20 | 0.688 | 0.937 | 0.680 | 0.735 | 0.465 | 0.262 | 0.323 | 0.288 | 0.449 | 0.362 | 0.411 |
| 5. | 0.524 | 0.577 | 4.34 | 0.660 | 0.931 | 0.673 | 0.679 | 0.504 | 0.256 | 0.295 | 0.281 | 0.559 | 0.384 | 0.426 |
| 6. | 0.517 | 0.707 | 4.05 | 0.643 | 0.862 | 0.651 | 0.642 | 0.465 | 0.249 | 0.290 | 0.281 | 0.850 | 0.364 | 0.383 |
| 7. | 0.528 | 0.797 | 2.97 | 0.609 | 0.900 | 0.645 | 0.637 | 0.462 | 0.235 | 0.282 | 0.281 | 0.665 | 0.429 | 0.376 |
| 8. | 0.510 | 1.50 | 3.80 | 0.586 | 1.65 | 0.611 | 0.638 | 0.480 | 0.226 | 0.337 | 0.281 | 0.471 | 0.415 | 0.332 |
| 9. | 0.498 | 1.26 | 2.78 | 0.572 | 1.35 | 0.673 | 0.637 | 0.475 | 0.227 | 0.357 | 0.274 | 0.442 | 0.394 | 0.430 |
| 10. | 0.501 | 1.18 | 2.24 | 0.549 | 1.15 | 0.793 | 0.657 | 0.445 | 0.217 | 0.346 | 0.264 | 0.416 | 0.391 | 1.08 |
| 11. | 0.503 | 0.854 | 1.70 | 0.548 | 1.05 | 0.751 | 0.832 | 0.418 | 0.201 | 0.343 | 0.289 | 0.403 | 0.388 | 0.766 |
| 12. | 0.503 | 0.801 | 1.63 | 0.546 | 0.982 | 0.882 | 0.635 | 0.405 | 0.215 | 0.342 | 0.304 | 0.401 | 0.368 | 0.642 |
| 13. | 0.486 | 0.909 | 1.86 | 0.545 | 0.941 | 1.03 | 0.577 | 0.395 | 0.227 | 0.329 | 0.285 | 0.437 | 0.345 | 0.580 |
| 14. | 0.493 | 1.04 | 1.50 | 0.564 | 0.903 | 0.851 | 0.570 | 0.387 | 0.256 | 0.323 | 0.288 | 0.421 | 0.344 | 0.557 |
| 15. | 0.502 | 1.11 | 1.22 | 0.687 | 0.888 | 0.765 | 0.580 | 0.383 | 0.251 | 0.318 | 0.286 | 0.398 | 0.345 | 1.38 |
| 16. | 0.511 | 1.89 | 1.01 | 0.656 | 0.853 | 0.727 | 0.581 | 0.391 | 0.291 | 0.366 | 0.278 | 0.385 | 0.346 | 1.13 |
| 17. | 0.511 | 2.64 | 0.967 | 0.846 | 0.827 | 0.727 | 0.557 | 0.361 | 0.328 | 0.338 | 0.273 | 0.376 | 0.348 | 0.898 |
| 18. | 0.507 | 1.48 | 0.931 | 0.844 | 0.811 | 0.722 | 0.535 | 0.339 | 0.317 | 0.325 | 0.272 | 0.396 | 0.351 | 0.949 |
| 19. | 0.506 | 1.13 | 1.68 | 1.18 | 0.763 | 0.689 | 0.513 | 0.329 | 0.377 | 0.313 | 0.270 | 0.385 | 0.376 | 0.779 |
| 20. | 0.505 | 1.04 | 2.82 | 0.921 | 0.705 | 0.674 | 0.476 | 0.327 | 0.361 | 0.305 | 0.272 | 0.383 | 0.354 | 0.678 |
| 21. | 0.504 | 1.08 | 3.35 | 0.846 | 0.695 | 0.693 | 0.469 | 0.329 | 0.305 | 0.306 | 0.271 | 0.385 | 0.360 | 0.610 |
| 22. | 0.503 | 1.13 | 6.89 | 0.860 | 0.695 | 0.744 | 0.429 | 0.320 | 0.284 | 0.315 | 0.265 | 0.387 | 0.352 | 0.619 |
| 23. | 0.503 | 1.32 | 9.97 | 0.987 | 0.695 | 0.760 | 0.403 | 0.311 | 0.266 | 0.297 | 0.273 | 0.376 | 0.345 | 2.43 |
| 24. | 0.502 | 1.30 | 4.29 | 1.30 | 0.683 | 0.764 | 0.397 | 0.332 | 0.262 | 0.298 | 0.402 | 0.367 | 0.366 | 2.06 |
| 25. | 0.501 | 1.24 | 3.00 | 1.72 | 0.656 | 0.733 | 0.385 | 0.400 | 0.243 | 0.314 | 0.368 | 0.368 | 0.411 | 1.45 |
| 26. | 0.499 | 1.01 | 2.23 | 1.48 | 0.648 | 0.720 | 0.385 | 0.355 | 0.255 | 0.312 | 0.354 | 0.358 | 0.402 | 1.43 |
| 27. | 0.498 | 0.896 | 1.97 | 1.32 | 0.649 | 0.683 | 0.383 | 0.341 | 0.249 | 0.322 | 0.348 | 0.345 | 0.419 | 1.41 |
| 28. | 0.483 | 0.818 | 1.72 | 1.30 | 0.623 | 0.699 | 0.380 | 0.348 | 0.250 | 0.312 | 0.325 | 0.322 | 0.396 | 1.09 |
| 29. | 0.493 | 0.764 | 1.45 | 1.23 | 0.616 | 0.675 | 0.380 | 0.321 | 0.273 | 0.311 | 0.333 | 0.323 | 0.369 | 0.943 |
| 30. | 0.479 | 1.12 | 1.16 | | 0.650 | 0.645 | 0.403 | 0.329 | 0.276 | 0.303 | 0.333 | 0.324 | 0.368 | 0.902 |
| 31. | | 1.09 | 0.953 | | 0.654 | | 0.568 | | 0.259 | 0.299 | | 0.325 | | 0.830 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 18. | 13. | 29. | 8. | 28.+ | 23. | 11. | 3. | 10. | 2. | 1. | 8. |
| NQ | 0.479 | 0.477 | 0.931 | 0.545 | 0.616 | 0.611 | 0.380 | 0.311 | 0.201 | 0.252 | 0.264 | 0.307 | 0.329 | 0.332 |
| MQ | 0.506 | 1.06 | 2.55 | 0.863 | 0.871 | 0.718 | 0.551 | 0.404 | 0.267 | 0.313 | 0.297 | 0.408 | 0.370 | 0.860 |
| HQ | 0.550 | 3.77 | 14.2 | 1.90 | 1.85 | 1.24 | 1.04 | 0.879 | 0.494 | 0.495 | 0.538 | 1.21 | 0.440 | 4.15 |
| Tag | 3. | 17. | 23. | 24. | 8. | 12. | 11. | 1. | 19. | 8. | 24. | 6. | 8. | 23. |
| $h_N$ mm / $h_A$ mm | 8 | 17 | 42 | 13 | 14 | 11 | 9 | 6 | 4 | 5 | 5 | 7 | 6 | 14 |

| | 1978/2011 | | 1979/2012 34 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2001 | 1989 | 2005 | 2012 | 1996 | 1996 | 2011 | 2011 | 2012 | 1996 | 1989 | 2012 | 2012 | 2012 |
| NQ | 0.369 | 0.453 | 0.553 | 0.545 | 0.612 | 0.451 | 0.327 | 0.277 | 0.201 | 0.228 | 0.250 | 0.307 | 0.329 | 0.332 |
| MNQ | 0.623 | 0.716 | 0.872 | 0.937 | 0.957 | 0.781 | 0.610 | 0.540 | 0.505 | 0.474 | 0.464 | 0.528 | 0.618 | 0.710 |
| MQ | 1.08 | 1.44 | 1.92 | 1.79 | 1.84 | 1.15 | 0.853 | 0.768 | 0.763 | 0.764 | 0.642 | 0.818 | 1.07 | 1.43 |
| MHQ | 3.32 | 5.80 | 7.54 | 6.07 | 6.73 | 2.94 | 2.12 | 3.24 | 2.45 | 2.49 | 1.54 | 2.72 | 3.31 | 5.69 |
| HQ | 13.0 | 16.8 | 20.4 | 15.5 | 19.3 | 15.4 | 6.66 | 16.9 | 18.8 | 16.6 | 6.65 | 22.3 | 13.0 | 16.8 |
| Jahr | 2002 | 1993 | 1994 | 1996 | 1979 | 1994 | 2004 | 2006 | 2002 | 2002 | 2001 | 1998 | 2002 | 1993 |
| $Mh_N$ mm / $Mh_A$ mm | 17 | 24 | 32 | 28 | 30 | 18 | 14 | 12 | 13 | 13 | 10 | 13 | 17 | 23 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.201 | am 11.07.2012 | 0.477 | 0.201 | 0.201 | am 11.07.2012 |
| MQ $m^3/s$ | 0.736 | | 1.10 | 0.374 | 0.708 | |
| HQ $m^3/s$ | 14.2 | am 23.01.2012 bei W= 216 cm | 14.2 | 1.21 | 14.2 | am 23.01.2012 bei W= 216 cm |
| Nq $l/(s km^2)$ | 1.23 | | 2.93 | 1.23 | 1.23 | |
| Mq $l/(s km^2)$ | 4.52 | | 6.75 | 2.29 | 4.34 | |
| Hq $l/(s km^2)$ | 87.4 | | 87.4 | 7.44 | 87.4 | |
| $h_N$ mm / $h_A$ mm | 143 | | 106 | 36 | 137 | |
| | 1979/2012 (*) 34 Jahre | | | | 1979/2012 | |
| NQ $m^3/s$ | 0.201 | am 11.07.2012 | 0.369 | 0.201 | 0.201 | am 11.07.2012 |
| MNQ $m^3/s$ | 0.370 | | 0.584 | 0.386 | 0.386 | |
| MQ $m^3/s$ | 1.15 | | 1.54 | 0.769 | 1.15 | |
| MHQ $m^3/s$ | 12.2 | | 10.8 | 6.00 | 12.5 | |
| HQ $m^3/s$ | 22.3 | am 28.10.1998 bei W= 276 cm | 20.4 | 22.3 | 22.3 | am 28.10.1998 bei W= 276 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.27 | | 3.58 | 2.37 | 2.37 | |
| Mq $l/(s km^2)$ | 7.06 | | 9.45 | 4.72 | 7.06 | |
| MHq $l/(s km^2)$ | 74.8 | | 66.3 | 36.8 | 76.7 | |
| $Mh_N$ mm / $Mh_A$ mm | 223 | | 149 | 75 | 223 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.201 | 1.23 | 11.07.2012 | 22.3 | 137 | 276 | 28.10.1998 |
| 2 | 0.228 | 1.40 | 07.08.1996 | 20.4 | 125 | 263 | 28.01.1994 |
| 3 | 0.237 | 1.45 | 01.08.1986 | 19.3 | 118 | 260 | 04.03.1979 |
| 4 | 0.250 | 1.53 | 13.09.1989 | 18.8 | 115 | 252 | 18.07.2002 |
| 5 | 0.252 | 1.55 | 25.09.2009 | 18.4 | 113 | 249 | 11.03.1981 |
| 6 | 0.263 | 1.61 | 12.08.1990 | 17.2 | 106 | 239 | 19.03.1994 |
| 7 | 0.272 | 1.67 | 03.08.2011 | 16.9 | 104 | 236 | 26.06.2006 |
| 8 | 0.284 | 1.74 | 03.07.1992 | 16.8 | 103 | 237 | 31.12.1993 |
| 9 | 0.298 | 1.83 | 06.09.1999 | 16.6 | 102 | 234 | 04.08.2002 |
| 10 | 0.312 | 1.91 | 14.08.1988 | 16.4 | 101 | 234 | 22.01.2008 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1979/2012 34 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 9.97 | 9.97 | | | |
| 364 | 6.89 | 6.89 | 18.9 | 8.59 | 2.98 |
| 363 | 4.34 | 4.34 | 16.2 | 7.09 | 2.87 |
| 362 | 4.29 | 4.29 | 14.8 | 6.44 | 2.54 |
| 361 | 4.05 | 4.05 | 12.4 | 5.90 | 2.45 |
| 360 | 3.80 | 3.80 | 10.3 | 5.42 | 2.37 |
| 359 | 3.35 | 3.35 | 9.90 | 5.11 | 2.15 |
| 358 | 3.00 | 3.00 | 9.78 | 4.77 | 1.92 |
| 357 | 2.97 | 2.97 | 9.04 | 4.49 | 1.92 |
| 356 | 2.82 | 2.82 | 7.97 | 4.25 | 1.92 |
| 350 | 1.97 | 2.06 | 6.48 | 3.23 | 1.38 |
| 340 | 1.57 | 1.57 | 5.25 | 2.54 | 1.11 |
| 330 | 1.32 | 1.32 | 4.27 | 2.12 | 0.933 |
| 320 | 1.15 | 1.08 | 3.54 | 1.84 | 0.811 |
| 300 | 0.941 | 0.900 | 2.66 | 1.49 | 0.730 |
| 270 | 0.765 | 0.733 | 2.08 | 1.20 | 0.675 |
| 240 | 0.674 | 0.651 | 1.80 | 1.04 | 0.633 |
| 210 | 0.586 | 0.570 | 1.57 | 0.916 | 0.570 |
| 183 | 0.513 | 0.430 | 1.36 | 0.826 | 0.430 |
| 150 | 0.467 | 0.387 | 1.22 | 0.731 | 0.387 |
| 130 | 0.395 | 0.369 | 1.18 | 0.681 | 0.369 |
| 120 | 0.385 | 0.357 | 1.17 | 0.662 | 0.357 |
| 110 | 0.366 | 0.348 | 1.14 | 0.641 | 0.348 |
| 100 | 0.345 | 0.339 | 1.11 | 0.620 | 0.339 |
| 90 | 0.332 | 0.332 | 1.08 | 0.598 | 0.332 |
| 80 | 0.324 | 0.324 | 1.06 | 0.576 | 0.324 |
| 70 | 0.315 | 0.315 | 1.03 | 0.555 | 0.315 |
| 60 | 0.306 | 0.306 | 0.979 | 0.531 | 0.306 |
| 50 | 0.297 | 0.297 | 0.954 | 0.502 | 0.297 |
| 40 | 0.284 | 0.284 | 0.903 | 0.475 | 0.284 |
| 30 | 0.274 | 0.274 | 0.850 | 0.441 | 0.274 |
| 25 | 0.271 | 0.271 | 0.833 | 0.423 | 0.271 |
| 20 | 0.264 | 0.264 | 0.817 | 0.400 | 0.264 |
| 15 | 0.259 | 0.259 | 0.796 | 0.379 | 0.259 |
| 10 | 0.250 | 0.250 | 0.791 | 0.355 | 0.250 |
| 9 | 0.250 | 0.250 | 0.788 | 0.349 | 0.250 |
| 8 | 0.250 | 0.250 | 0.786 | 0.340 | 0.250 |
| 7 | 0.243 | 0.243 | 0.785 | 0.332 | 0.243 |
| 6 | 0.235 | 0.235 | 0.775 | 0.324 | 0.235 |
| 5 | 0.235 | 0.235 | 0.771 | 0.319 | 0.235 |
| 4 | 0.235 | 0.235 | 0.769 | 0.312 | 0.235 |
| 3 | 0.226 | 0.226 | 0.768 | 0.298 | 0.226 |
| 2 | 0.217 | 0.217 | 0.762 | 0.284 | 0.217 |
| 1 | 0.215 | 0.215 | 0.741 | 0.263 | 0.215 |
| 0 | 0.201 | 0.201 | 0.740 | 0.201 | 0.201 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Moorgeest

NLWKN

$A_{Eo}$ : 152 km²
PNP : NN + 113.24 m
Lage: 237.0 km oberhalb der Mündung, links

# Q

m³/s

Pegel : Alleringersleben Nr. 440004
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.225 | 0.233 | 0.447 | 0.579 | 0.907 | 0.354 | 0.239 | 0.220 | 0.239 | 0.179 | 0.253 | 0.148 | 0.174 | 0.259 |
| 2. | 0.224 | 0.233 | 0.519 | 0.565 | 0.848 | 0.337 | 0.238 | 0.175 | 0.212 | 0.161 | 0.210 | 0.142 | 0.167 | 0.258 |
| 3. | 0.228 | 0.238 | 0.594 | 0.551 | 0.782 | 0.337 | 0.237 | 0.178 | 0.196 | 0.150 | 0.183 | 0.142 | 0.178 | 0.258 |
| 4. | 0.233 | 0.252 | 0.573 | 0.537 | 0.727 | 0.405 | 0.236 | 0.236 | 0.188 | 0.137 | 0.153 | 0.198 | 0.212 | 0.258 |
| 5. | 0.237 | 0.289 | 0.919 | 0.523 | 0.683 | 0.375 | 0.248 | 0.569 | 0.181 | 0.132 | 0.146 | 0.263 | 0.239 | 0.258 |
| 6. | 0.232 | 0.313 | 1.46 | 0.509 | 0.626 | 0.370 | 0.266 | 0.356 | 0.330 | 0.157 | 0.149 | 0.230 | 0.219 | 0.249 |
| 7. | 0.230 | 0.364 | 1.27 | 0.495 | 0.586 | 0.476 | 0.277 | 0.266 | 0.341 | 0.137 | 0.140 | 0.221 | 0.200 | 0.250 |
| 8. | 0.235 | 0.410 | 1.25 | 0.481 | 0.640 | 0.786 | 0.251 | 0.231 | 0.334 | 0.126 | 0.140 | 0.200 | 0.222 | 0.219 |
| 9. | 0.239 | 0.397 | 1.40 | 0.467 | 0.617 | 0.723 | 0.231 | 0.207 | 0.300 | 0.126 | 0.140 | 0.183 | 0.215 | 0.219 |
| 10. | 0.243 | 0.367 | 1.37 | 0.453 | 0.577 | 0.592 | 0.228 | 0.192 | 0.280 | 0.120 | 0.131 | 0.173 | 0.244 | 0.248 |
| 11. | 0.247 | 0.341 | 1.21 | 0.439 | 0.579 | 0.484 | 0.231 | 0.186 | 0.307 | 0.117 | 0.137 | 0.163 | 0.327 | 0.257 |
| 12. | 0.251 | 0.341 | 1.07 | 0.426 | 0.550 | 0.441 | 0.205 | 0.179 | 0.295 | 0.111 | 0.267 | 0.173 | 0.288 | 0.228 |
| 13. | 0.252 | 0.326 | 1.01 | 0.412 | 0.549 | 0.541 | 0.190 | 0.177 | 0.278 | 0.106 | 0.301 | 0.208 | 0.242 | 0.231 |
| 14. | 0.243 | 0.342 | 0.890 | 0.398 | 0.531 | 0.493 | 0.190 | 0.166 | 0.402 | 0.099 | 0.229 | 0.182 | 0.221 | 0.235 |
| 15. | 0.247 | 0.375 | 0.739 | 0.492 | 0.510 | 0.439 | 0.189 | 0.161 | 0.396 | 0.095 | 0.204 | 0.198 | 0.215 | 0.388 |
| 16. | 0.239 | 0.735 | 0.644 | 0.444 | 0.487 | 0.398 | 0.196 | 0.161 | 0.328 | 0.107 | 0.183 | 0.181 | 0.201 | 0.444 |
| 17. | 0.233 | 1.37 | 0.597 | 0.646 | 0.471 | 0.378 | 0.183 | 0.161 | 0.314 | 0.112 | 0.165 | 0.174 | 0.204 | 0.450 |
| 18. | 0.233 | 1.05 | 0.562 | 0.645 | 0.459 | 0.355 | 0.169 | 0.153 | 0.321 | 0.122 | 0.155 | 0.169 | 0.223 | 0.541 |
| 19. | 0.233 | 0.873 | 0.719 | 0.655 | 0.445 | 0.352 | 0.168 | 0.149 | 0.391 | 0.109 | 0.138 | 0.164 | 0.224 | 0.643 |
| 20. | 0.233 | 0.719 | 1.24 | 0.612 | 0.413 | 0.347 | 0.177 | 0.174 | 0.362 | 0.097 | 0.163 | 0.162 | 0.211 | 0.613 |
| 21. | 0.244 | 0.641 | 1.40 | 0.588 | 0.397 | 0.346 | 0.181 | 0.184 | 0.314 | 0.091 | 0.146 | 0.154 | 0.210 | 0.560 |
| 22. | 0.252 | 0.624 | 1.64 | 0.593 | 0.397 | 0.349 | 0.177 | 0.174 | 0.276 | 0.106 | 0.137 | 0.146 | 0.212 | 0.487 |
| 23. | 0.264 | 0.645 | 1.92 | 0.634 | 0.397 | 0.337 | 0.164 | 0.159 | 0.247 | 0.094 | 0.128 | 0.145 | 0.214 | 0.737 |
| 24. | 0.249 | 0.673 | 1.97 | 0.747 | 0.415 | 0.319 | 0.152 | 0.151 | 0.219 | 0.088 | 0.131 | 0.146 | 0.238 | 1.37 |
| 25. | 0.243 | 0.688 | 1.82 | 0.954 | 0.398 | 0.310 | 0.147 | 0.161 | 0.196 | 0.348 | 0.136 | 0.156 | 0.237 | 1.22 |
| 26. | 0.250 | 0.609 | 1.63 | 0.972 | 0.367 | 0.291 | 0.146 | 0.165 | 0.178 | 0.299 | 0.136 | 0.163 | 0.231 | 1.06 |
| 27. | 0.250 | 0.540 | 1.38 | 0.919 | 0.367 | 0.275 | 0.145 | 0.157 | 0.165 | 0.247 | 0.223 | 0.164 | 0.250 | 0.985 |
| 28. | 0.244 | 0.506 | 1.11 | 0.951 | 0.367 | 0.253 | 0.144 | 0.242 | 0.303 | 0.203 | 0.224 | 0.151 | 0.253 | 0.879 |
| 29. | 0.235 | 0.460 | 0.931 | 0.937 | 0.348 | 0.256 | 0.136 | 0.199 | 0.270 | 0.179 | 0.165 | 0.152 | 0.256 | 0.771 |
| 30. | 0.233 | 0.487 | 0.776 | | 0.364 | 0.260 | 0.130 | 0.184 | 0.244 | 0.185 | 0.149 | 0.166 | 0.259 | 0.681 |
| 31. | | 0.453 | 0.647 | | 0.366 | | 0.149 | | 0.208 | 0.294 | | 0.172 | | 0.619 |

## Hauptwerte

| | 1970/2011 | | 1971/2012 – 42 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 2. | 1.+ | 1. | 14. | 29. | 28. | 30. | 19. | 27. | 24. | 23. | 2.+ | 2. | 8.+ |
| NQ | 0.224 | 0.233 | 0.447 | 0.398 | 0.348 | 0.253 | 0.130 | 0.149 | 0.165 | 0.088 | 0.128 | 0.142 | 0.167 | 0.219 |
| MQ | 0.240 | 0.513 | 1.09 | 0.608 | 0.522 | 0.399 | 0.194 | 0.202 | 0.278 | 0.149 | 0.172 | 0.174 | 0.226 | 0.512 |
| HQ | 0.287 | 1.52 | 2.02 | 0.973 | 0.937 | 0.808 | 0.280 | 0.620 | 0.537 | 0.575 | 0.342 | 0.287 | 0.357 | 1.41 |
| Tag | 28. | 16.+ | 24. | 25. | 1. | 8. | 6. | 5. | 14. | 25. | 12. | 4. | 11. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 9 | 19 | 10 | 9 | 7 | 3 | 3 | 5 | 3 | 3 | 3 | 4 | 9 |

| | 1970/2011 | | 1971/2012 – 42 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1976 + | 1992 | 1996 | 1992 | 1991 | 1991 | 1991 | 1990 + | 1990 | 1991 | 1991 | 1991 | 1976 + |
| NQ | 0.040 | 0.070 | 0.050 | 0.055 | 0.110 | 0.130 | 0.070 | 0.030 | 0.030 | 0.020 | 0.030 | 0.020 | 0.040 | 0.070 |
| MNQ | 0.218 | 0.276 | 0.388 | 0.412 | 0.480 | 0.377 | 0.232 | 0.169 | 0.129 | 0.106 | 0.120 | 0.146 | 0.209 | 0.265 |
| MQ | 0.349 | 0.500 | 0.714 | 0.733 | 0.839 | 0.597 | 0.362 | 0.304 | 0.225 | 0.197 | 0.181 | 0.229 | 0.333 | 0.492 |
| MHQ | 0.682 | 1.14 | 1.70 | 1.62 | 1.77 | 1.23 | 0.856 | 1.14 | 0.613 | 0.514 | 0.506 | 0.454 | 0.660 | 1.15 |
| HQ | 2.82 | 5.55 | 9.62 | 4.77 | 7.15 | 7.74 | 3.31 | 10.8 | 3.38 | 1.75 | 2.38 | 1.80 | 2.82 | 5.55 |
| Jahr | 2002 | 2002 | 2003 | 1996 | 1979 | 1994 | 1999 | 1981 | 2002 | 2002 | 1979 | 1998 | 2002 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 6 | 9 | 13 | 12 | 15 | 10 | 6 | 5 | 4 | 3 | 3 | 4 | 6 | 9 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.088 | am 24.08.2012 | 0.224 | 0.088 | 0.088 | am 24.08.2012 |
| MQ m³/s | 0.378 | | 0.564 | 0.195 | 0.377 | |
| HQ m³/s | 2.02 | am 24.01.2012 bei W= 74 cm | 2.02 | 0.620 | 2.02 | am 24.01.2012 bei W= 74 cm |
| Nq l/(s km²) | 0.579 | | 1.47 | 0.579 | 0.579 | |
| Mq l/(s km²) | 2.49 | | 3.71 | 1.28 | 2.48 | |
| Hq l/(s km²) | 13.3 | | 13.3 | 4.08 | 13.3 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 78 | | 58 | 20 | 78 | |
| | 1971/2012 (*) 42 Jahre | | | | 1971/2012 | |
| NQ m³/s | 0.020 | am 04.08.1990 | 0.040 | 0.020 | 0.020 | am 04.08.1990 |
| MNQ m³/s | 0.081 | | 0.199 | 0.087 | 0.086 | |
| MQ m³/s | 0.434 | | 0.622 | 0.250 | 0.432 | |
| MHQ m³/s | 3.08 | | 2.74 | 1.61 | 3.21 | |
| HQ m³/s | 10.8 | am 04.06.1981 bei W= 172 cm | 9.62 | 10.8 | 10.8 | am 04.06.1981 bei W= 172 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(s km²) | 0.533 | | 1.31 | 0.572 | 0.566 | |
| Mq l/(s km²) | 2.86 | | 4.09 | 1.64 | 2.84 | |
| MHq l/(s km²) | 20.3 | | 18.0 | 10.6 | 21.1 | |
| | 1971/2012 (*) 42 Jahre | | | | 1971/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 90 | | 64 | 26 | 90 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.020 | 0.132 | 12.10.1991 | 10.8 | 71.1 | 172 | 04.06.1981 |
| 2 | 0.020 | 0.132 | 04.08.1990 | 9.62 | 63.3 | 176 | 03.01.2003 |
| 3 | 0.032 | 0.211 | 24.07.2006 | 7.74 | 50.9 | 154 | 13.04.1994 |
| 4 | 0.039 | 0.257 | 21.07.1994 | 7.15 | 47.0 | 151 | 04.03.1979 |
| 5 | 0.040 | 0.263 | 01.11.1991 | 6.12 | 40.3 | 132 | 09.01.2011 |
| 6 | 0.040 | 0.263 | 14.08.1989 | 5.55 | 36.5 | 132 | 30.12.2002 |
| 7 | 0.040 | 0.263 | 08.09.1988 | 4.91 | 32.3 | 118 | 01.03.2010 |
| 8 | 0.040 | 0.263 | 03.09.1976 | 4.77 | 31.4 | 126 | 17.02.1996 |
| 9 | 0.040 | 0.263 | 05.08.1971 | 4.76 | 31.3 | 116 | 28.02.2010 |
| 10 | 0.044 | 0.289 | 04.08.2005 | 4.37 | 28.8 | 142 | 09.06.1988 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1971/2012 – 42 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 1.97 | 1.97 | | | |
| 364 | 1.92 | 1.92 | 8.41 | 3.07 | 0.720 |
| 363 | 1.82 | 1.82 | 6.39 | 2.69 | 0.700 |
| 362 | 1.64 | 1.64 | 6.21 | 2.43 | 0.670 |
| 361 | 1.63 | 1.63 | 4.85 | 2.23 | 0.650 |
| 360 | 1.46 | 1.46 | 4.19 | 2.10 | 0.650 |
| 359 | 1.46 | 1.46 | 3.72 | 1.96 | 0.600 |
| 358 | 1.40 | 1.40 | 3.64 | 1.87 | 0.600 |
| 357 | 1.38 | 1.38 | 3.44 | 1.80 | 0.580 |
| 356 | 1.38 | 1.38 | 3.32 | 1.72 | 0.580 |
| 350 | 1.11 | 1.21 | 2.64 | 1.40 | 0.510 |
| 340 | 0.919 | 0.931 | 2.34 | 1.11 | 0.400 |
| 330 | 0.735 | 0.771 | 2.06 | 0.941 | 0.330 |
| 320 | 0.646 | 0.647 | 1.89 | 0.820 | 0.310 |
| 300 | 0.577 | 0.577 | 1.62 | 0.658 | 0.270 |
| 270 | 0.453 | 0.447 | 1.33 | 0.502 | 0.230 |
| 240 | 0.367 | 0.362 | 1.08 | 0.412 | 0.180 |
| 210 | 0.310 | 0.291 | 0.770 | 0.335 | 0.140 |
| 183 | 0.252 | 0.250 | 0.630 | 0.281 | 0.110 |
| 150 | 0.235 | 0.222 | 0.580 | 0.231 | 0.100 |
| 130 | 0.219 | 0.205 | 0.550 | 0.211 | 0.080 |
| 120 | 0.199 | 0.198 | 0.530 | 0.191 | 0.080 |
| 110 | 0.188 | 0.185 | 0.530 | 0.181 | 0.070 |
| 100 | 0.182 | 0.181 | 0.500 | 0.175 | 0.070 |
| 90 | 0.177 | 0.175 | 0.500 | 0.161 | 0.070 |
| 80 | 0.168 | 0.167 | 0.480 | 0.153 | 0.050 |
| 70 | 0.164 | 0.164 | 0.460 | 0.141 | 0.050 |
| 60 | 0.159 | 0.159 | 0.460 | 0.131 | 0.050 |
| 50 | 0.151 | 0.151 | 0.430 | 0.116 | 0.050 |
| 40 | 0.147 | 0.147 | 0.410 | 0.107 | 0.050 |
| 30 | 0.140 | 0.140 | 0.370 | 0.101 | 0.040 |
| 25 | 0.137 | 0.137 | 0.350 | 0.091 | 0.040 |
| 20 | 0.132 | 0.132 | 0.320 | 0.081 | 0.040 |
| 15 | 0.126 | 0.126 | 0.320 | 0.073 | 0.040 |
| 10 | 0.111 | 0.111 | 0.300 | 0.067 | 0.040 |
| 9 | 0.109 | 0.109 | 0.300 | 0.064 | 0.040 |
| 8 | 0.107 | 0.107 | 0.300 | 0.064 | 0.040 |
| 7 | 0.107 | 0.107 | 0.300 | 0.058 | 0.030 |
| 6 | 0.106 | 0.106 | 0.300 | 0.052 | 0.030 |
| 5 | 0.099 | 0.099 | 0.280 | 0.052 | 0.030 |
| 4 | 0.097 | 0.097 | 0.270 | 0.052 | 0.030 |
| 3 | 0.095 | 0.095 | 0.270 | 0.044 | 0.030 |
| 2 | 0.094 | 0.094 | 0.270 | 0.044 | 0.030 |
| 1 | 0.091 | 0.091 | 0.250 | 0.032 | 0.030 |
| 0 | 0.088 | 0.088 | 0.230 | 0.020 | 0.020 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Ausbau 1963, Pegelnulländerungen 1955/64

Landesbetrieb für Hochwasserschutz und Wasserwirtschaft Sachsen-Anhalt

$A_{Eo}$ : 249 km²
PNP : NN + 84.32 m
Lage: 222.5 km oberhalb der Mündung, rechts

# Q
m³/s

Pegel : Weferlingen Nr. 440010
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.502 | 0.502 | 0.758 | 1.34 | 1.67 | 0.783 | 0.750 | 0.501 | 1.22 | 0.495 | 0.373 | 0.221 | 0.380 | 0.445 |
| 2. | 0.502 | 0.502 | 0.911 | 1.29 | 1.57 | 0.726 | 0.750 | 0.475 | 0.740 | 0.511 | 0.345 | 0.218 | 0.380 | 0.445 |
| 3. | 0.502 | 0.502 | 1.08 | 1.23 | 1.45 | 0.724 | 0.750 | 0.475 | 0.669 | 0.495 | 0.365 | 0.204 | 0.380 | 0.445 |
| 4. | 0.502 | 0.527 | 1.00 | 1.17 | 1.36 | 0.861 | 0.750 | 0.486 | 0.664 | 0.495 | 0.404 | 0.217 | 0.380 | 0.465 |
| 5. | 0.502 | 0.588 | 1.91 | 1.11 | 1.29 | 0.856 | 0.750 | 1.07 | 0.668 | 0.495 | 0.404 | 0.241 | 0.380 | 0.477 |
| 6. | 0.502 | 0.626 | 2.82 | 1.05 | 1.22 | 0.795 | 0.750 | 0.750 | 2.02 | 0.537 | 0.404 | 0.237 | 0.380 | 0.477 |
| 7. | 0.502 | 0.753 | 2.00 | 0.994 | 1.20 | 0.820 | 0.750 | 0.627 | 1.01 | 0.474 | 0.404 | 0.234 | 0.380 | 0.477 |
| 8. | 0.502 | 0.811 | 1.99 | 0.935 | 1.31 | 1.10 | 0.686 | 0.499 | 0.682 | 0.417 | 0.404 | 0.231 | 0.427 | 0.875 |
| 9. | 0.502 | 0.762 | 2.36 | 0.881 | 1.24 | 1.11 | 0.618 | 0.484 | 0.550 | 0.373 | 0.401 | 0.248 | 0.455 | 0.620 |
| 10. | 0.502 | 0.722 | 2.45 | 0.871 | 1.13 | 0.977 | 0.618 | 0.484 | 0.578 | 0.373 | 0.356 | 0.259 | 0.468 | 0.475 |
| 11. | 0.502 | 0.671 | 2.12 | 0.871 | 1.10 | 0.889 | 0.593 | 0.484 | 0.597 | 0.373 | 0.331 | 0.259 | 0.501 | 0.475 |
| 12. | 0.502 | 0.653 | 1.84 | 0.871 | 1.10 | 0.863 | 0.531 | 0.484 | 0.669 | 0.373 | 0.314 | 0.289 | 0.501 | 0.475 |
| 13. | 0.502 | 0.677 | 1.75 | 0.871 | 1.10 | 0.928 | 0.531 | 0.484 | 0.643 | 0.373 | 0.314 | 0.348 | 0.501 | 0.475 |
| 14. | 0.502 | 0.703 | 1.57 | 0.881 | 1.07 | 0.906 | 0.531 | 0.484 | 1.02 | 0.351 | 0.314 | 0.348 | 0.501 | 0.475 |
| 15. | 0.502 | 0.774 | 1.41 | 1.08 | 1.07 | 0.841 | 0.531 | 0.484 | 0.928 | 0.336 | 0.314 | 0.348 | 0.431 | 0.683 |
| 16. | 0.502 | 1.50 | 1.25 | 1.01 | 1.07 | 0.840 | 0.531 | 0.484 | 0.713 | 0.358 | 0.314 | 0.408 | 0.400 | 0.811 |
| 17. | 0.502 | 2.50 | 1.17 | 1.40 | 0.991 | 0.831 | 0.531 | 0.484 | 0.711 | 0.373 | 0.314 | 0.458 | 0.400 | 0.913 |
| 18. | 0.502 | 1.57 | 1.08 | 1.32 | 0.927 | 0.772 | 0.531 | 0.484 | 0.848 | 0.373 | 0.314 | 0.417 | 0.400 | 1.10 |
| 19. | 0.502 | 1.35 | 1.34 | 1.37 | 0.948 | 0.772 | 0.531 | 0.484 | 0.989 | 0.373 | 0.314 | 0.380 | 0.400 | 1.24 |
| 20. | 0.502 | 1.16 | 2.51 | 1.30 | 0.894 | 0.772 | 0.531 | 0.554 | 0.910 | 0.353 | 0.314 | 0.380 | 0.400 | 1.17 |
| 21. | 0.502 | 1.11 | 2.68 | 1.18 | 0.856 | 0.772 | 0.531 | 0.674 | 0.673 | 0.336 | 0.314 | 0.380 | 0.400 | 1.07 |
| 22. | 0.502 | 1.10 | 3.51 | 1.22 | 0.828 | 0.752 | 0.531 | 0.664 | 0.577 | 0.336 | 0.305 | 0.380 | 0.400 | 0.908 |
| 23. | 0.502 | 1.11 | 4.52 | 1.36 | 0.882 | 0.750 | 0.531 | 0.664 | 0.560 | 0.336 | 0.242 | 0.380 | 0.400 | 1.67 |
| 24. | 0.502 | 1.18 | 4.08 | 1.65 | 0.867 | 0.750 | 0.531 | 0.664 | 0.543 | 0.336 | 0.209 | 0.380 | 0.400 | 2.38 |
| 25. | 0.502 | 1.25 | 3.42 | 1.92 | 0.809 | 0.750 | 0.531 | 0.667 | 0.539 | 0.347 | 0.229 | 0.380 | 0.400 | 1.87 |
| 26. | 0.502 | 1.03 | 2.90 | 1.85 | 0.806 | 0.750 | 0.531 | 0.664 | 0.497 | 0.349 | 0.234 | 0.380 | 0.400 | 1.60 |
| 27. | 0.502 | 0.903 | 2.32 | 1.72 | 0.814 | 0.750 | 0.531 | 0.676 | 0.495 | 0.336 | 0.254 | 0.380 | 0.400 | 1.43 |
| 28. | 0.502 | 0.855 | 1.78 | 1.77 | 0.800 | 0.750 | 0.531 | 0.856 | 0.618 | 0.336 | 0.262 | 0.380 | 0.422 | 1.25 |
| 29. | 0.502 | 0.819 | 1.60 | 1.76 | 0.798 | 0.750 | 0.531 | 0.664 | 0.593 | 0.336 | 0.259 | 0.380 | 0.445 | 1.06 |
| 30. | 0.502 | 0.919 | 1.39 | | 0.846 | 0.750 | 0.531 | 0.664 | 0.581 | 0.336 | 0.239 | 0.380 | 0.445 | 0.956 |
| 31. | | 0.824 | 1.35 | | 0.854 | | 0.531 | | 0.522 | 0.358 | | 0.380 | | 0.897 |
| Tag | 1.+ | 1.+ | 1. | 10.+ | 29. | 3. | 12.+ | 2.+ | 27. | 15.+ | 24. | 3. | 1.+ | 1.+ |
| NQ | 0.502 | 0.502 | 0.758 | 0.871 | 0.798 | 0.724 | 0.531 | 0.475 | 0.495 | 0.336 | 0.209 | 0.204 | 0.380 | 0.445 |
| MQ | 0.502 | 0.934 | 2.03 | 1.25 | 1.06 | 0.823 | 0.593 | 0.587 | 0.743 | 0.388 | 0.319 | 0.327 | 0.419 | 0.907 |
| HQ | 0.502 | 3.08 | 4.63 | 1.92 | 1.75 | 1.19 | 0.750 | 1.32 | 2.57 | 0.868 | 0.404 | 0.458 | 0.501 | 2.88 |
| Tag | 1.+ | 16.+ | 23. | 24.+ | 1. | 8. | 1.+ | 28. | 6. | 6. | 3.+ | 16.+ | 10.+ | 23. |
| $h_N$ mm / $h_A$ mm | 5 | 10 | 22 | 13 | 11 | 9 | 6 | 6 | 8 | 4 | 3 | 4 | 4 | 10 |

| | 1970/2011 | | 1971/2012 – 42 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1984 + | 2006 | 1997 | 1996 | 1992 | 1991 | 1989 | 1974 | 1992 | 1973 | 1973 | 1983 | 1984 + | 2006 |
| NQ | 0.190 | 0.209 | 0.187 | 0.316 | 0.430 | 0.430 | 0.190 | 0.100 | 0.070 | 0.060 | 0.040 | 0.090 | 0.190 | 0.209 |
| MNQ | 0.535 | 0.607 | 0.840 | 0.865 | 0.968 | 0.846 | 0.565 | 0.408 | 0.332 | 0.294 | 0.310 | 0.407 | 0.512 | 0.591 |
| MQ | 0.780 | 1.02 | 1.50 | 1.45 | 1.62 | 1.27 | 0.818 | 0.660 | 0.540 | 0.452 | 0.458 | 0.549 | 0.739 | 1.00 |
| MHQ | 1.58 | 2.48 | 3.52 | 3.11 | 3.51 | 2.45 | 1.82 | 2.11 | 1.51 | 1.18 | 0.992 | 1.12 | 1.48 | 2.48 |
| HQ | 5.72 | 10.0 | 14.0 | 8.68 | 10.2 | 12.8 | 5.61 | 15.8 | 14.7 | 7.56 | 6.33 | 5.85 | 5.72 | 10.0 |
| Jahr | 2010 | 1986 | 2003 | 2010 | 2010 | 1994 | 2010 | 1981 | 2002 | 2002 | 2010 | 1998 | 2010 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 8 | 11 | 16 | 15 | 17 | 13 | 9 | 7 | 6 | 5 | 5 | 6 | 8 | 11 |

## Hauptwerte

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.204 | am 03.10.2012 | 0.502 | 0.204 | 0.204 | am 03.10.2012 |
| MQ m³/s | 0.796 | | 1.10 | 0.493 | 0.787 | |
| HQ m³/s | 4.63 | am 23.01.2012 bei W= 78 cm | 4.63 | 2.57 | 4.63 | am 23.01.2012 bei W= 78 cm |
| Nq l/(s km²) | 0.819 | | 2.02 | 0.819 | 0.819 | |
| Mq l/(s km²) | 3.20 | | 4.43 | 1.98 | 3.16 | |
| Hq l/(s km²) | 18.6 | | 18.6 | 10.3 | 18.6 | |
| $h_N$ mm / $h_A$ mm | 101 | | 70 | 31 | 100 | |
| | 1971/2012 (*) 42 Jahre | | | | 1971/2012 | |
| NQ m³/s | 0.040 | am 04.09.1973 | 0.187 | 0.040 | 0.040 | am 04.09.1973 |
| MNQ m³/s | 0.230 | | 0.457 | 0.245 | 0.240 | |
| MQ m³/s | 0.923 | | 1.27 | 0.580 | 0.918 | |
| MHQ m³/s | 5.97 | | 5.28 | 3.28 | 6.25 | |
| HQ m³/s | 15.8 | am 04.06.1981 bei W= 153 cm | 14.0 | 15.8 | 15.8 | am 04.06.1981 bei W= 153 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(s km²) | 0.924 | | 1.84 | 0.984 | 0.964 | |
| Mq l/(s km²) | 3.71 | | 5.10 | 2.33 | 3.69 | |
| MHq l/(s km²) | 24.0 | | 21.2 | 13.2 | 25.1 | |
| | 1971/2012 (*) 42 Jahre | | | | 1971/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 117 | | 80 | 37 | 117 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.030 | 0.120 | 03.08.1964 | 15.8 | 63.5 | 153 | 04.06.1981 |
| 2 | 0.040 | 0.161 | 04.09.1973 | 14.7 | 59.0 | 142 | 18.07.2002 |
| 3 | 0.070 | 0.281 | 30.07.1992 | 14.0 | 56.2 | 140 | 03.01.2003 |
| 4 | 0.090 | 0.361 | 01.10.1983 | 12.8 | 51.4 | 132 | 13.04.1994 |
| 5 | 0.100 | 0.402 | 29.06.1974 | 10.5 | 42.2 | 107 | 09.01.2011 |
| 6 | 0.120 | 0.482 | 12.08.1976 | 10.2 | 41.0 | 101 | 01.03.2010 |
| 7 | 0.130 | 0.522 | 05.08.2006 | 10.0 | 40.2 | 110 | 31.12.1986 |
| 8 | 0.140 | 0.562 | 15.09.1991 | 9.35 | 37.6 | 113 | 05.03.1979 |
| 9 | 0.140 | 0.562 | 14.08.1989 | 7.94 | 31.9 | 118 | 13.03.1981 |
| 10 | 0.150 | 0.602 | 24.08.1990 | 7.83 | 31.4 | 114 | 20.04.1983 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1971/2012 – 42 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.52 | 4.52 | | | |
| 364 | 4.08 | 4.08 | 12.6 | 6.12 | 1.44 |
| 363 | 3.51 | 3.51 | 11.6 | 5.30 | 1.43 |
| 362 | 3.42 | 3.42 | 8.82 | 4.75 | 1.22 |
| 361 | 2.90 | 2.90 | 8.43 | 4.37 | 1.22 |
| 360 | 2.82 | 2.82 | 7.26 | 4.05 | 1.10 |
| 359 | 2.68 | 2.68 | 6.96 | 3.85 | 1.04 |
| 358 | 2.51 | 2.51 | 6.82 | 3.60 | 1.04 |
| 357 | 2.50 | 2.45 | 6.53 | 3.41 | 1.04 |
| 356 | 2.45 | 2.38 | 6.53 | 3.26 | 1.04 |
| 350 | 1.99 | 1.99 | 5.59 | 2.57 | 0.980 |
| 340 | 1.67 | 1.72 | 5.33 | 2.02 | 0.920 |
| 330 | 1.39 | 1.41 | 4.84 | 1.73 | 0.870 |
| 320 | 1.30 | 1.31 | 4.48 | 1.57 | 0.810 |
| 300 | 1.11 | 1.11 | 3.81 | 1.32 | 0.720 |
| 270 | 0.910 | 0.911 | 2.64 | 1.08 | 0.630 |
| 240 | 0.811 | 0.811 | 1.89 | 0.922 | 0.540 |
| 210 | 0.752 | 0.726 | 1.49 | 0.781 | 0.400 |
| 183 | 0.653 | 0.597 | 1.15 | 0.693 | 0.370 |
| 150 | 0.537 | 0.511 | 1.06 | 0.590 | 0.310 |
| 130 | 0.511 | 0.486 | 1.01 | 0.540 | 0.310 |
| 120 | 0.511 | 0.477 | 1.01 | 0.501 | 0.280 |
| 110 | 0.511 | 0.455 | 0.960 | 0.478 | 0.280 |
| 100 | 0.495 | 0.408 | 0.910 | 0.459 | 0.270 |
| 90 | 0.486 | 0.401 | 0.910 | 0.420 | 0.250 |
| 80 | 0.408 | 0.400 | 0.860 | 0.401 | 0.230 |
| 70 | 0.401 | 0.400 | 0.860 | 0.381 | 0.213 |
| 60 | 0.380 | 0.380 | 0.860 | 0.349 | 0.210 |
| 50 | 0.358 | 0.358 | 0.820 | 0.331 | 0.190 |
| 40 | 0.345 | 0.345 | 0.770 | 0.311 | 0.180 |
| 30 | 0.331 | 0.331 | 0.770 | 0.282 | 0.170 |
| 25 | 0.331 | 0.331 | 0.720 | 0.260 | 0.150 |
| 20 | 0.305 | 0.305 | 0.720 | 0.241 | 0.150 |
| 15 | 0.259 | 0.259 | 0.690 | 0.218 | 0.100 |
| 10 | 0.239 | 0.239 | 0.650 | 0.191 | 0.080 |
| 9 | 0.237 | 0.237 | 0.650 | 0.191 | 0.080 |
| 8 | 0.237 | 0.237 | 0.650 | 0.190 | 0.080 |
| 7 | 0.234 | 0.234 | 0.620 | 0.172 | 0.080 |
| 6 | 0.231 | 0.231 | 0.620 | 0.172 | 0.080 |
| 5 | 0.229 | 0.229 | 0.620 | 0.172 | 0.080 |
| 4 | 0.221 | 0.221 | 0.620 | 0.166 | 0.080 |
| 3 | 0.218 | 0.218 | 0.620 | 0.166 | 0.060 |
| 2 | 0.217 | 0.217 | 0.620 | 0.166 | 0.060 |
| 1 | 0.209 | 0.209 | 0.550 | 0.130 | 0.060 |
| 0 | 0.204 | 0.204 | 0.480 | 0.040 | 0.040 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Landesbetrieb für Hochwasserschutz und Wasserwirtschaft Sachsen-Anhalt

$A_{Eo}$ : 1638 $km^2$

PNP : NN + 46.32 m

Lage: 154.9 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Brenneckenbrück Nr. 4819102

Gewässer : Aller

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.88 | 3.69 | 10.5 | 11.0 | 14.9 | 6.03 | 3.84 | 3.05 | 2.14 | 3.05 | 1.90 | 2.44 | 3.93 | 5.11 |
| 2. | 2.88 | 3.92 | 11.0 | 9.88 | 13.8 | 5.73 | 3.60 | 2.92 | 1.94 | 2.30 | 1.95 | 2.34 | 4.00 | 5.23 |
| 3. | 2.99 | 3.96 | 12.2 | 9.40 | 12.7 | 5.59 | 3.38 | 2.38 | 1.79 | 2.43 | 2.10 | 2.28 | 4.52 | 5.20 |
| 4. | 2.95 | 4.19 | 12.8 | 8.59 | 11.9 | 6.88 | 3.50 | 2.86 | 1.70 | 2.30 | 2.04 | 3.26 | 4.97 | 5.41 |
| 5. | 3.09 | 4.47 | 17.2 | 8.25 | 11.5 | 9.08 | 3.53 | 3.28 | 1.54 | 2.29 | 2.00 | 5.20 | 4.96 | 5.91 |
| 6. | 3.22 | 4.71 | 26.8 | 7.52 | 10.5 | 7.95 | 3.76 | 3.14 | 2.60 | 3.26 | 2.10 | 5.51 | 4.88 | 5.80 |
| 7. | 3.10 | 5.36 | 27.7 | 7.25 | 9.70 | 7.69 | 3.75 | 2.94 | 2.61 | 3.91 | 2.03 | 6.23 | 5.13 | 5.35 |
| 8. | 3.23 | 7.85 | 27.7 | 7.06 | 10.7 | 7.43 | 3.58 | 2.82 | 2.60 | 3.76 | 1.97 | 5.15 | 5.84 | 4.63 |
| 9. | 3.29 | 8.98 | 27.5 | 6.98 | 10.8 | 7.09 | 3.52 | 2.80 | 2.12 | 3.90 | 1.94 | 4.48 | 5.48 | 4.73 |
| 10. | 3.31 | 8.70 | 27.4 | 6.73 | 9.88 | 7.41 | 3.46 | 2.52 | 1.87 | 4.12 | 1.88 | 3.86 | 4.43 | 6.35 |
| 11. | 3.22 | 7.51 | 25.0 | 6.55 | 9.44 | 6.93 | 4.52 | 2.48 | 1.66 | 3.64 | 1.95 | 3.43 | 4.75 | 7.79 |
| 12. | 3.22 | 6.73 | 21.9 | 6.52 | 8.89 | 6.48 | 4.61 | 2.47 | 1.71 | 3.39 | 2.71 | 3.50 | 4.54 | 7.20 |
| 13. | 3.26 | 7.26 | 20.1 | 6.48 | 8.51 | 6.25 | 3.74 | 2.57 | 2.22 | 2.54 | 2.87 | 4.35 | 4.30 | 6.98 |
| 14. | 3.23 | 7.73 | 19.1 | 6.49 | 8.24 | 6.43 | 3.42 | 2.37 | 2.63 | 1.31 | 2.69 | 4.42 | 4.17 | 6.94 |
| 15. | 3.32 | 7.56 | 16.5 | 7.90 | 8.16 | 6.16 | 3.19 | 2.28 | 3.04 | 1.12 | 2.55 | 4.84 | 4.08 | 9.00 |
| 16. | 3.51 | 8.60 | 14.6 | 8.29 | 7.86 | 5.62 | 3.26 | 2.25 | 3.10 | 1.44 | 2.46 | 5.27 | 4.29 | 12.8 |
| 17. | 3.46 | 16.6 | 13.9 | 9.06 | 7.88 | 5.33 | 2.97 | 2.18 | 3.04 | 1.96 | 2.29 | 4.65 | 4.33 | 14.7 |
| 18. | 3.58 | 17.7 | 13.0 | 10.7 | 7.57 | 5.27 | 2.74 | 2.08 | 3.24 | 1.77 | 2.16 | 4.11 | 4.16 | 15.1 |
| 19. | 3.68 | 17.0 | 14.3 | 11.8 | 7.27 | 5.26 | 2.61 | 2.04 | 4.54 | 1.65 | 2.08 | 3.76 | 4.24 | 14.7 |
| 20. | 3.62 | 14.6 | 20.0 | 12.3 | 6.82 | 5.30 | 2.47 | 2.00 | 6.02 | 1.53 | 2.05 | 3.42 | 4.19 | 13.5 |
| 21. | 3.71 | 13.3 | 23.1 | 11.7 | 6.68 | 5.14 | 2.25 | 2.07 | 5.72 | 1.42 | 1.96 | 3.20 | 4.11 | 12.2 |
| 22. | 3.78 | 13.3 | 28.7 | 11.8 | 6.66 | 5.25 | 2.07 | 2.01 | 4.56 | 1.33 | 1.59 | 3.13 | 4.10 | 11.0 |
| 23. | 3.71 | 14.3 | 33.9 | 13.3 | 6.52 | 5.07 | 1.95 | 1.81 | 3.93 | 1.68 | 1.98 | 3.09 | 4.11 | 13.0 |
| 24. | 3.58 | 14.6 | 35.7 | 15.5 | 6.40 | 5.49 | 1.76 | 1.63 | 4.41 | 1.94 | 2.34 | 3.13 | 4.53 | 22.6 |
| 25. | 3.61 | 15.0 | 35.7 | 18.9 | 6.16 | 5.86 | 1.32 | 1.91 | 3.61 | 1.92 | 2.35 | 3.35 | 4.96 | 23.0 |
| 26. | 3.79 | 13.5 | 34.3 | 17.5 | 6.11 | 5.30 | 1.57 | 2.06 | 3.07 | 1.95 | 2.37 | 3.43 | 5.40 | 20.0 |
| 27. | 3.74 | 12.2 | 30.4 | 15.8 | 5.92 | 4.86 | 1.66 | 2.06 | 2.93 | 2.05 | 2.48 | 3.46 | 5.64 | 18.2 |
| 28. | 3.71 | 11.3 | 24.3 | 15.3 | 5.79 | 4.72 | 1.64 | 3.07 | 3.09 | 2.03 | 2.69 | 3.49 | 5.80 | 17.0 |
| 29. | 3.66 | 10.5 | 19.5 | 15.6 | 5.72 | 4.45 | 1.61 | 2.40 | 3.11 | 1.94 | 2.61 | 3.34 | 5.52 | 14.4 |
| 30. | 3.47 | 11.1 | 16.6 | | 5.90 | 4.16 | 1.54 | 2.16 | 2.95 | 1.91 | 2.60 | 3.59 | 5.30 | 13.1 |
| 31. | | 11.2 | 13.3 | | 6.07 | | 1.85 | | 3.03 | 1.93 | | 4.03 | | 12.5 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 1. | 1. | 1. | 13. | 29. | 30. | 25. | 24. | 5. | 15. | 22. | 3. | 1. | 8. |
| NQ | 2.88 | 3.69 | 10.5 | 6.48 | 5.72 | 4.16 | 1.32 | 1.63 | 1.54 | 1.12 | 1.59 | 2.28 | 3.93 | 4.63 |
| MQ | 3.39 | 9.92 | 21.8 | 10.5 | 8.54 | 6.01 | 2.86 | 2.42 | 2.98 | 2.32 | 2.22 | 3.86 | 4.69 | 10.9 |
| HQ | 3.88 | 18.6 | 35.8 | 19.8 | 15.5 | 9.52 | 4.92 | 3.50 | 6.27 | 4.74 | 2.98 | 6.46 | 6.02 | 23.9 |
| Tag | 23. | 17. | 25. | 25. | 1. | 5. | 11. | 5. | 20. | 10. | 13. | 7. | 28. | 25. |
| $h_N$ mm / $h_A$ mm | 5 | 16 | 36 | 16 | 14 | 10 | 5 | 4 | 5 | 4 | 4 | 6 | 7 | 18 |
| | 1945/2011 | | 1946/2012 | | | | | | 67 Jahre | | | | | |
| Jahr | 1947 | 1946 | 1947 | 1947 | 1947 | 1946 | 1947 | 1947 | 1947 | 1992 | 1975 | 1947 | 1947 | 1946 |
| NQ | 1.20 | 1.90 | 1.12 | 1.00 | 1.00 | 1.70 | 0.880 | 0.320 | 0.270 | 0.214 | 0.670 | 1.26 | 1.20 | 1.90 |
| MNQ | 4.28 | 5.32 | 6.13 | 7.00 | 7.04 | 5.84 | 3.64 | 2.90 | 2.38 | 2.29 | 2.74 | 3.29 | 4.29 | 5.32 |
| MQ | 7.01 | 10.3 | 12.5 | 12.9 | 13.3 | 9.86 | 5.83 | 4.93 | 4.17 | 3.94 | 4.07 | 4.79 | 7.01 | 10.3 |
| MHQ | 13.0 | 20.9 | 25.7 | 24.7 | 26.9 | 17.9 | 11.4 | 9.71 | 8.49 | 8.07 | 7.30 | 8.97 | 13.0 | 21.0 |
| HQ | 42.7 | 48.5 | 69.0 | 57.6 | 70.7 | 46.7 | 36.8 | 35.8 | 39.4 | 27.4 | 28.3 | 41.6 | 42.7 | 48.5 |
| Jahr | 1998 | 1961 | 1948 | 1994 | 1956 | 1969 | 1965 | 1956 | 1966 | 1954 | 2010 | 1998 | 1998 | 1961 |
| $Mh_N$ mm / $Mh_A$ mm | 11 | 17 | 20 | 20 | 22 | 16 | 10 | 8 | 7 | 6 | 6 | 8 | 11 | 17 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 1.12 | am 15.08.2012 | 2.88 | 1.12 | 1.12 | am 15.08.2012 |
| MQ $m^3/s$ | 6.41 | | 10.1 | 2.78 | 6.60 | |
| HQ $m^3/s$ | 35.8 | am 25.01.2012 bei W= 295 cm | 35.8 | 6.46 | 35.8 | am 25.01.2012 bei W= 295 cm |
| Nq $l/(s km^2)$ | 0.684 | | 1.76 | 0.684 | 0.684 | |
| Mq $l/(s km^2)$ | 3.91 | | 6.17 | 1.70 | 4.03 | |
| Hq $l/(s km^2)$ | 21.8 | | 21.8 | 3.95 | 21.8 | |
| $h_N$ mm / $h_A$ mm | 124 | | 97 | 27 | 127 | |
| | 1946/2012 (*) 67 Jahre | | | | 1946/2012 | |
| NQ $m^3/s$ | 0.214 | am 09.08.1992 | 1.00 | 0.214 | 0.214 | am 09.08.1992 |
| MNQ $m^3/s$ | 1.82 | | 3.52 | 1.85 | 1.84 | |
| MQ $m^3/s$ | 7.78 | | 11.0 | 4.62 | 7.78 | |
| MHQ $m^3/s$ | 37.1 | | 36.4 | 16.3 | 38.4 | |
| HQ $m^3/s$ | 70.7 | am 05.03.1956 bei W= 279 cm | 70.7 | 41.6 | 70.7 | am 05.03.1956 bei W= 279 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.11 | | 2.15 | 1.13 | 1.12 | |
| Mq $l/(s km^2)$ | 4.75 | | 6.72 | 2.82 | 4.75 | |
| MHq $l/(s km^2)$ | 22.6 | | 22.2 | 9.95 | 23.4 | |
| $Mh_N$ mm / $Mh_A$ mm | 150 | | 106 | 45 | 150 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.214 | 0.131 | 09.08.1992 | 70.7 | 43.2 | 279 | 05.03.1956 |
| 2 | 0.270 | 0.165 | 22.07.1947 | 69.0 | 42.1 | 277 | 15.01.1948 |
| 3 | 0.520 | 0.317 | 14.07.1952 | 63.0 | 38.5 | 362 | 14.03.1981 |
| 4 | 0.526 | 0.321 | 21.08.2009 | 59.4 | 36.3 | 351 | 31.01.1994 |
| 5 | 0.608 | 0.371 | 06.08.1990 | 58.4 | 35.7 | 356 | 21.03.1970 |
| 6 | 0.659 | 0.402 | 10.07.1993 | 57.5 | 35.1 | 270 | 21.03.1947 |
| 7 | 0.670 | 0.409 | 07.09.1975 | 56.0 | 34.2 | 269 | 10.02.1946 |
| 8 | 0.709 | 0.433 | 16.09.1999 | 54.9 | 33.5 | 343 | 23.02.1966 |
| 9 | 0.750 | 0.458 | 27.07.1959 | 53.1 | 32.4 | 340 | 20.03.1994 |
| 10 | 0.938 | 0.573 | 17.08.2003 | 52.7 | 32.2 | 350 | 18.01.1968 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1946/2012 67 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 35.8 | 35.8 | | | |
| 364 | 35.8 | 35.8 | 69.1 | 43.2 | 11.4 |
| 363 | 34.3 | 34.3 | 69.1 | 39.5 | 11.1 |
| 362 | 33.9 | 33.9 | 69.1 | 36.9 | 10.9 |
| 361 | 30.4 | 30.4 | 58.9 | 34.7 | 10.8 |
| 360 | 28.7 | 28.7 | 55.4 | 32.9 | 10.2 |
| 359 | 28.7 | 28.7 | 51.8 | 31.3 | 9.90 |
| 358 | 28.7 | 28.7 | 51.4 | 30.0 | 9.65 |
| 357 | 27.5 | 27.5 | 51.1 | 28.7 | 9.56 |
| 356 | 27.4 | 27.4 | 49.3 | 27.8 | 8.98 |
| 350 | 20.1 | 22.6 | 42.2 | 23.4 | 7.04 |
| 340 | 17.0 | 17.2 | 39.4 | 19.0 | 6.30 |
| 330 | 14.9 | 14.9 | 31.2 | 16.2 | 5.81 |
| 320 | 13.0 | 13.1 | 26.4 | 14.4 | 5.36 |
| 300 | 10.7 | 10.8 | 21.4 | 11.7 | 3.98 |
| 270 | 7.43 | 7.20 | 16.6 | 9.22 | 3.46 |
| 240 | 6.02 | 5.91 | 13.8 | 7.63 | 2.68 |
| 210 | 4.56 | 5.23 | 11.6 | 6.37 | 2.12 |
| 183 | 3.75 | 4.42 | 10.5 | 5.56 | 1.90 |
| 150 | 3.35 | 3.59 | 9.47 | 4.73 | 1.75 |
| 130 | 3.14 | 3.28 | 9.10 | 4.30 | 1.65 |
| 120 | 3.07 | 3.10 | 8.74 | 4.10 | 1.60 |
| 110 | 2.92 | 2.94 | 8.26 | 3.90 | 1.55 |
| 100 | 2.71 | 2.71 | 7.76 | 3.71 | 1.50 |
| 90 | 2.54 | 2.54 | 7.48 | 3.51 | 1.50 |
| 80 | 2.38 | 2.38 | 7.15 | 3.33 | 1.44 |
| 70 | 2.29 | 2.29 | 6.82 | 3.13 | 1.32 |
| 60 | 2.12 | 2.12 | 6.42 | 2.93 | 1.26 |
| 50 | 2.05 | 2.05 | 6.10 | 2.69 | 1.20 |
| 40 | 1.97 | 1.97 | 5.85 | 2.45 | 1.09 |
| 30 | 1.92 | 1.92 | 5.60 | 2.19 | 0.941 |
| 25 | 1.87 | 1.87 | 5.54 | 2.04 | 0.775 |
| 20 | 1.76 | 1.76 | 5.29 | 1.90 | 0.470 |
| 15 | 1.68 | 1.68 | 5.12 | 1.74 | 0.420 |
| 10 | 1.59 | 1.59 | 5.05 | 1.55 | 0.380 |
| 9 | 1.57 | 1.57 | 5.05 | 1.51 | 0.350 |
| 8 | 1.57 | 1.57 | 5.00 | 1.45 | 0.350 |
| 7 | 1.57 | 1.57 | 4.90 | 1.39 | 0.350 |
| 6 | 1.53 | 1.53 | 4.89 | 1.33 | 0.320 |
| 5 | 1.44 | 1.44 | 4.88 | 1.27 | 0.320 |
| 4 | 1.42 | 1.42 | 4.79 | 1.20 | 0.320 |
| 3 | 1.33 | 1.33 | 4.69 | 1.08 | 0.302 |
| 2 | 1.32 | 1.32 | 4.63 | 0.951 | 0.302 |
| 1 | 1.31 | 1.31 | 4.61 | 0.723 | 0.300 |
| 0 | 1.12 | 1.12 | 4.46 | 0.214 | 0.214 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Aller
Ableitung aus der Aller in den MLK bei Grafhorst
i.M. werden 620 l/s abgeleitet

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 4374 km²
PNP : NN + 31.80 m
Lage: 111.6 km oberhalb der Mündung, links

# Q
m³/s

Pegel : Celle Nr. 48300105
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 11.1 | 10.6 | 31.6 | 36.5 | 37.9 | 17.7 | 13.3 | 11.1 | 9.21 | 11.2 | 7.64 | 7.74 | 11.5 | 14.1 |
| 2. | 10.7 | 10.8 | 31.7 | 30.9 | 35.8 | 18.0 | 13.0 | 13.2 | 10.2 | 10.3 | 8.49 | 7.71 | 11.4 | 14.0 |
| 3. | 11.0 | 11.2 | 35.9 | 31.9 | 34.3 | 17.6 | 12.2 | 11.9 | 11.0 | 9.70 | 8.22 | 6.98 | 11.5 | 14.2 |
| 4. | 11.4 | 12.0 | 39.1 | 28.9 | 32.2 | 19.2 | 13.6 | 11.5 | 9.57 | 9.08 | 8.09 | 8.80 | 12.5 | 14.8 |
| 5. | 10.7 | 12.0 | 44.7 | 28.2 | 30.5 | 23.1 | 12.6 | 13.5 | 8.74 | 8.83 | 7.73 | 14.2 | 14.0 | 15.4 |
| 6. | 11.4 | 13.9 | 62.6 | 23.9 | 28.5 | 21.4 | 12.3 | 17.1 | 12.8 | 9.10 | 7.23 | 17.4 | 14.2 | 15.7 |
| 7. | 10.6 | 14.9 | 73.9 | 23.1 | 26.9 | 20.5 | 14.4 | 15.6 | 18.5 | 10.0 | 6.76 | 18.3 | 13.1 | 14.8 |
| 8. | 10.6 | 19.1 | 75.0 | 24.1 | 27.9 | 19.6 | 13.9 | 12.7 | 16.6 | 10.8 | 6.26 | 16.0 | 14.2 | 13.8 |
| 9. | 11.2 | 22.0 | 74.2 | 23.0 | 29.9 | 19.2 | 12.8 | 12.2 | 15.6 | 9.78 | 6.57 | 14.4 | 15.3 | 13.7 |
| 10. | 10.6 | 22.3 | 73.3 | 22.6 | 28.1 | 20.0 | 13.5 | 11.2 | 15.6 | 9.40 | 6.35 | 12.8 | 13.8 | 16.1 |
| 11. | 10.9 | 20.8 | 69.0 | 22.2 | 26.9 | 20.5 | 14.7 | 10.0 | 13.2 | 9.31 | 6.19 | 12.2 | 13.6 | 19.5 |
| 12. | 10.8 | 18.5 | 62.1 | 21.5 | 25.5 | 19.1 | 16.3 | 9.68 | 12.1 | 8.61 | 7.59 | 12.3 | 13.9 | 19.2 |
| 13. | 10.9 | 18.7 | 56.3 | 21.5 | 25.1 | 18.5 | 13.8 | 10.4 | 14.3 | 8.20 | 9.56 | 13.6 | 12.9 | 17.8 |
| 14. | 10.4 | 19.4 | 53.9 | 21.7 | 24.5 | 20.4 | 13.6 | 9.75 | 15.8 | 8.05 | 8.28 | 14.5 | 13.1 | 17.3 |
| 15. | 10.7 | 20.0 | 49.8 | 23.3 | 24.1 | 19.4 | 13.3 | 9.62 | 17.6 | 7.41 | 7.79 | 14.3 | 12.4 | 20.2 |
| 16. | 11.2 | 22.8 | 43.8 | 25.8 | 23.6 | 17.8 | 13.7 | 9.28 | 18.6 | 8.00 | 7.70 | 15.7 | 12.7 | 29.3 |
| 17. | 11.0 | 36.7 | 40.4 | 26.1 | 22.9 | 16.7 | 14.8 | 9.27 | 18.5 | 8.94 | 7.35 | 14.7 | 13.4 | 36.4 |
| 18. | 10.8 | 45.0 | 37.4 | 28.3 | 22.7 | 15.8 | 12.8 | 9.04 | 17.6 | 8.81 | 7.30 | 13.6 | 12.5 | 36.9 |
| 19. | 11.3 | 43.0 | 39.6 | 30.5 | 22.5 | 15.9 | 12.4 | 8.77 | 21.5 | 8.14 | 7.21 | 12.6 | 12.3 | 35.0 |
| 20. | 10.8 | 37.2 | 49.5 | 32.6 | 22.6 | 15.9 | 11.9 | 8.50 | 25.0 | 7.08 | 6.67 | 11.9 | 12.5 | 33.8 |
| 21. | 10.9 | 33.7 | 60.2 | 30.7 | 20.7 | 15.7 | 11.3 | 9.10 | 23.5 | 6.83 | 6.94 | 11.2 | 12.4 | 29.8 |
| 22. | 10.4 | 33.4 | 70.4 | 30.5 | 21.0 | 15.9 | 10.0 | 9.78 | 19.6 | 6.80 | 6.67 | 10.1 | 12.4 | 27.0 |
| 23. | 11.2 | 35.3 | 79.4 | 33.4 | 20.1 | 17.3 | 9.91 | 9.17 | 16.2 | 7.06 | 6.44 | 12.0 | 12.3 | 29.8 |
| 24. | 11.0 | 36.8 | 85.5 | 37.9 | 19.5 | 17.0 | 9.25 | 7.86 | 14.7 | 6.96 | 7.36 | 10.5 | 12.7 | 50.5 |
| 25. | 10.4 | 39.4 | 87.5 | 45.0 | 18.7 | 17.3 | 8.83 | 9.06 | 12.7 | 7.22 | 7.53 | 10.9 | 13.7 | 57.3 |
| 26. | 10.8 | 37.6 | 86.2 | 46.3 | 18.6 | 16.4 | 8.21 | 10.3 | 11.9 | 7.42 | 7.39 | 10.9 | 13.8 | 55.6 |
| 27. | 11.1 | 33.2 | 82.8 | 43.0 | 18.1 | 15.4 | 8.11 | 10.8 | 12.2 | 7.95 | 7.59 | 10.8 | 14.8 | 50.6 |
| 28. | 10.6 | 30.8 | 73.1 | 40.1 | 17.6 | 13.6 | 7.78 | 10.9 | 12.0 | 7.50 | 7.58 | 10.5 | 15.5 | 47.0 |
| 29. | 10.0 | 29.4 | 59.4 | 39.1 | 17.7 | 14.0 | 7.90 | 10.2 | 12.7 | 7.26 | 7.85 | 10.8 | 14.6 | 41.6 |
| 30. | 10.2 | 29.1 | 50.6 | | 17.4 | 13.8 | 7.54 | 9.94 | 12.4 | 7.04 | 7.98 | 11.3 | 14.9 | 37.6 |
| 31. | | 31.2 | 43.8 | | 18.4 | | 7.80 | | 11.9 | 7.10 | | 11.0 | | 34.5 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 1. | 12.+ | 30. | 28. | 30. | 24. | 5. | 22. | 11. | 3. | 2. | 9. |
| NQ | 10.0 | 10.6 | 31.6 | 21.5 | 17.4 | 13.6 | 7.54 | 7.86 | 8.74 | 6.80 | 6.19 | 6.98 | 11.4 | 13.7 |
| MQ | 10.8 | 25.8 | 58.8 | 30.1 | 24.5 | 17.8 | 11.8 | 10.7 | 14.9 | 8.38 | 7.41 | 12.2 | 13.3 | 28.2 |
| HQ | 13.2 | 46.0 | 87.8 | 48.0 | 38.6 | 23.8 | 16.8 | 18.3 | 25.9 | 12.7 | 10.1 | 18.6 | 18.9 | 57.8 |
| Tag | 6. | 17. | 25. | 25. | 1. | 5. | 12. | 6. | 20. | 1. | 13. | 7. | 9. | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 16 | 36 | 17 | 15 | 11 | 7 | 6 | 9 | 5 | 4 | 7 | 8 | 17 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1959 | 1947 | 1947 | 1947 | 1960 | 1960 | 1957 | 1959 | 1953 | 1964 | 1959 | 1949 | 1959 |
| NQ | 5.80 | 4.70 | 8.00 | 7.10 | 6.00 | 8.55 | 5.72 | 3.80 | 3.69 | 2.50 | 3.98 | 3.80 | 5.80 | 4.70 |
| MNQ | 16.1 | 19.4 | 23.5 | 26.2 | 26.0 | 23.5 | 15.6 | 12.4 | 10.3 | 9.95 | 10.8 | 12.7 | 16.0 | 19.3 |
| MQ | 24.5 | 33.2 | 41.7 | 43.6 | 44.6 | 36.1 | 23.2 | 19.8 | 16.9 | 15.5 | 15.0 | 18.0 | 24.2 | 33.2 |
| MHQ | 40.3 | 59.3 | 77.1 | 77.0 | 83.5 | 57.7 | 40.0 | 36.1 | 30.9 | 27.3 | 24.3 | 30.7 | 39.5 | 59.4 |
| HQ | 150 | 154 | 305 | 342 | 298 | 181 | 130 | 138 | 195 | 94.7 | 74.3 | 129 | 150 | 154 |
| Jahr | 1998 | 1954 | 1948 | 1946 | 1981 | 1994 | 1961 | 1961 | 2002 | 2002 | 2010 | 1998 | 1998 | 1954 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 15 | 20 | 26 | 25 | 27 | 21 | 14 | 12 | 10 | 9 | 9 | 11 | 14 | 20 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 6.19 | am 11.09.2012 | 10.0 | 6.19 | 6.19 | am 11.09.2012 |
| MQ m³/s | 19.5 | | 28.1 | 10.9 | 19.9 | |
| HQ m³/s | 87.8 | am 25.01.2012 bei W= 390 cm | 87.8 | 25.9 | 87.8 | am 25.01.2012 bei W= 390 cm |
| Nq l/(s km²) | 1.42 | | 2.29 | 1.42 | 1.42 | |
| Mq l/(s km²) | 4.45 | | 6.42 | 2.50 | 4.54 | |
| Hq l/(s km²) | 20.1 | | 20.1 | 5.92 | 20.1 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 140 | | 101 | 40 | 144 | |

| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 2.50 | am 27.08.1953 | 4.70 | 2.50 | 2.50 | am 27.08.1953 |
| MNQ m³/s | 7.92 | | 13.9 | 8.07 | 8.06 | |
| MQ m³/s | 27.6 | | 37.3 | 18.1 | 27.6 | |
| MHQ m³/s | 123 | | 120 | 55.4 | 127 | |
| HQ m³/s | 342 | am 12.02.1946 bei W= 528 cm | 342 | 195 | 342 | am 12.02.1946 bei W= 528 cm |
| $HQ_1$ m³/s | 88.3 | | 82.6 | 35.2 | 88.3 | |
| $HQ_5$ m³/s | 169 | | 166 | 75.0 | 169 | |
| MNq l/(s km²) | 1.81 | | 3.18 | 1.84 | 1.84 | |
| Mq l/(s km²) | 6.31 | | 8.53 | 4.14 | 6.31 | |
| MHq l/(s km²) | 28.1 | | 27.4 | 12.7 | 29.0 | |

| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 199 | | 134 | 66 | 200 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.50 | 0.572 | 27.08.1953 | 342 | 78.2 | 528 | 12.02.1946 |
| 2 | 3.12 | 0.713 | 07.09.1936 | 305 | 69.7 | 510 | 17.01.1948 |
| 3 | 3.15 | 0.720 | 08.08.1964 | 298 | 68.1 | 519 | 15.03.1981 |
| 4 | 3.20 | 0.732 | 19.07.1925 | 270 | 61.7 | 499 | 06.03.1956 |
| 5 | 3.69 | 0.844 | 16.07.1959 | 260 | 59.4 | 495 | 04.11.1926 |
| 6 | 3.80 | 0.869 | 23.06.1957 | 247 | 56.5 | 493 | 03.01.1926 |
| 7 | 3.80 | 0.869 | 02.07.1952 | 246 | 56.2 | 518 | 06.01.2003 |
| 8 | 3.83 | 0.876 | 24.08.1989 | 235 | 53.7 | 488 | 19.01.1968 |
| 9 | 4.00 | 0.914 | 16.09.1973 | 230 | 52.6 | 470 | 22.03.1942 |
| 10 | 4.15 | 0.949 | 10.08.1990 | 228 | 52.1 | 485 | 22.03.1970 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 87.5 | 87.5 | | | |
| 364 | 86.2 | 86.2 | 330 | 145 | 33.2 |
| 363 | 85.5 | 85.5 | 285 | 128 | 32.4 |
| 362 | 82.8 | 82.8 | 282 | 116 | 32.1 |
| 361 | 79.4 | 79.4 | 212 | 109 | 31.3 |
| 360 | 75.0 | 75.0 | 200 | 103 | 31.1 |
| 359 | 74.2 | 74.2 | 184 | 97.4 | 30.3 |
| 358 | 73.9 | 73.9 | 167 | 94.1 | 29.3 |
| 357 | 73.3 | 73.3 | 153 | 91.4 | 29.3 |
| 356 | 73.1 | 73.1 | 151 | 89.2 | 28.8 |
| 350 | 59.4 | 59.4 | 140 | 76.9 | 27.1 |
| 340 | 44.7 | 47.0 | 129 | 64.4 | 23.8 |
| 330 | 39.1 | 39.6 | 111 | 55.4 | 21.4 |
| 320 | 35.3 | 35.9 | 98.4 | 49.1 | 20.6 |
| 300 | 29.1 | 29.3 | 86.0 | 40.1 | 18.8 |
| 270 | 22.3 | 22.2 | 67.5 | 32.3 | 15.2 |
| 240 | 18.6 | 18.3 | 59.6 | 27.4 | 12.6 |
| 210 | 15.9 | 15.8 | 51.4 | 23.6 | 10.4 |
| 183 | 13.7 | 14.2 | 43.2 | 20.8 | 9.24 |
| 150 | 12.0 | 12.9 | 34.5 | 18.0 | 8.36 |
| 130 | 11.1 | 12.4 | 32.4 | 16.5 | 7.94 |
| 120 | 10.9 | 12.0 | 31.1 | 15.7 | 7.30 |
| 110 | 10.8 | 11.3 | 30.2 | 15.1 | 6.84 |
| 100 | 10.5 | 10.9 | 29.0 | 14.4 | 6.60 |
| 90 | 10.1 | 10.1 | 28.1 | 13.7 | 6.35 |
| 80 | 9.68 | 9.68 | 27.2 | 12.9 | 6.35 |
| 70 | 9.17 | 9.17 | 26.4 | 12.2 | 6.10 |
| 60 | 8.80 | 8.80 | 25.5 | 11.4 | 5.80 |
| 50 | 8.14 | 8.14 | 24.3 | 10.6 | 5.50 |
| 40 | 7.80 | 7.80 | 23.2 | 9.76 | 5.30 |
| 30 | 7.58 | 7.58 | 22.5 | 8.91 | 5.20 |
| 25 | 7.41 | 7.41 | 22.2 | 8.46 | 5.00 |
| 20 | 7.26 | 7.26 | 22.0 | 8.01 | 4.85 |
| 15 | 7.08 | 7.08 | 21.6 | 7.47 | 4.70 |
| 10 | 6.94 | 6.94 | 20.9 | 6.92 | 4.60 |
| 9 | 6.83 | 6.83 | 20.6 | 6.81 | 4.60 |
| 8 | 6.80 | 6.80 | 20.5 | 6.71 | 4.60 |
| 7 | 6.76 | 6.76 | 20.4 | 6.54 | 4.56 |
| 6 | 6.76 | 6.76 | 20.4 | 6.40 | 4.40 |
| 5 | 6.67 | 6.67 | 20.1 | 6.21 | 4.30 |
| 4 | 6.57 | 6.57 | 20.1 | 6.01 | 4.27 |
| 3 | 6.44 | 6.44 | 20.0 | 5.76 | 4.00 |
| 2 | 6.35 | 6.35 | 19.8 | 5.43 | 3.98 |
| 1 | 6.26 | 6.26 | 19.8 | 5.03 | 3.25 |
| 0 | 6.19 | 6.19 | 19.7 | 2.50 | 2.50 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1921/2012
Extremwerte ab 1921
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 7209 km²
PNP : NN + 23.01 m
Lage: 75.9 km oberhalb der Mündung, rechts

# Q
m³/s

Pegel : Marklendorf Nr. 48700103
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 19.5 | 18.7 | 46.4 | 61.6 | 56.7 | 14.3 | 23.7 | 21.4 | 20.3 | 17.7 | 20.2 | 15.7 | 19.1 | 23.3 |
| 2. | 17.8 | 24.7 | 45.4 | 50.0 | 53.4 | 14.8 | 23.1 | 25.3 | 16.9 | 16.9 | 19.3 | 14.9 | 25.0 | 21.2 |
| 3. | 21.2 | 23.9 | 50.8 | 49.7 | 51.2 | 13.9 | 22.4 | 20.6 | 20.0 | 18.2 | 14.5 | 17.9 | 20.3 | 21.2 |
| 4. | 20.2 | 22.3 | 57.7 | 44.6 | 47.5 | 17.3 | 23.6 | 20.4 | 14.6 | 15.8 | 18.3 | 18.4 | 22.7 | 26.0 |
| 5. | 18.1 | 18.8 | 65.3 | 40.6 | 44.1 | 26.8 | 22.0 | 23.1 | 14.7 | 15.4 | 15.2 | 32.8 | 24.5 | 27.3 |
| 6. | 21.4 | 22.7 | 85.6 | 32.5 | 39.9 | 23.3 | 20.4 | 29.4 | 22.0 | 16.9 | 13.5 | 34.3 | 24.9 | 25.4 |
| 7. | 22.1 | 26.6 | 100 | 22.8 | 36.3 | 21.1 | 25.0 | 25.4 | 29.1 | 17.4 | 15.2 | 36.6 | 20.9 | 25.0 |
| 8. | 18.1 | 36.3 | 111 | 34.6 | 38.9 | 18.6 | 23.7 | 19.8 | 23.8 | 21.9 | 12.4 | 33.0 | 26.7 | 19.7 |
| 9. | 20.5 | 37.9 | 118 | 31.2 | 42.8 | 17.1 | 20.2 | 20.8 | 20.9 | 17.3 | 14.3 | 27.7 | 26.1 | 23.2 |
| 10. | 16.3 | 43.9 | 118 | 28.7 | 40.3 | 17.7 | 25.4 | 21.8 | 25.3 | 17.5 | 16.0 | 23.4 | 28.4 | 29.1 |
| 11. | 20.0 | 38.9 | 116 | 27.2 | 37.3 | 20.1 | 28.0 | 18.1 | 19.2 | 20.0 | 17.2 | 22.9 | 23.5 | 34.4 |
| 12. | 18.2 | 33.8 | 108 | 26.1 | 34.1 | 16.9 | 32.9 | 19.6 | 20.1 | 17.8 | 18.9 | 25.0 | 24.6 | 29.3 |
| 13. | 20.3 | 32.6 | 97.9 | 25.0 | 32.9 | 16.1 | 24.3 | 18.1 | 24.6 | 15.7 | 20.1 | 26.1 | 19.1 | 14.3 |
| 14. | 18.8 | 34.3 | 90.1 | 25.9 | 31.7 | 18.6 | 25.2 | 17.1 | 26.2 | 16.6 | 17.0 | 30.8 | 23.2 | 11.3 |
| 15. | 17.5 | 30.2 | 84.1 | 29.2 | 29.1 | 16.8 | 19.8 | 18.4 | 30.5 | 13.5 | 15.4 | 27.5 | 20.3 | 15.1 |
| 16. | 19.7 | 23.9 | 75.1 | 36.2 | 28.4 | 15.5 | 23.3 | 15.7 | 27.7 | 16.7 | 18.9 | 29.2 | 20.0 | 32.4 |
| 17. | 21.3 | 45.4 | 65.9 | 35.2 | 26.7 | 24.2 | 27.9 | 16.6 | 29.8 | 20.1 | 16.1 | 26.1 | 23.5 | 45.2 |
| 18. | 20.3 | 64.3 | 60.9 | 39.7 | 25.5 | 27.3 | 21.9 | 16.7 | 28.7 | 16.4 | 14.7 | 24.4 | 19.5 | 48.0 |
| 19. | 21.1 | 65.2 | 61.9 | 44.4 | 24.8 | 30.6 | 21.2 | 15.5 | 34.6 | 19.6 | 17.2 | 21.7 | 18.2 | 44.5 |
| 20. | 19.8 | 56.5 | 75.9 | 48.2 | 24.0 | 28.2 | 22.2 | 16.4 | 43.0 | 15.5 | 15.2 | 20.2 | 19.3 | 42.8 |
| 21. | 19.5 | 50.0 | 89.5 | 46.1 | 21.7 | 28.8 | 19.4 | 16.2 | 42.5 | 13.4 | 15.0 | 21.7 | 18.9 | 36.8 |
| 22. | 18.5 | 48.1 | 100 | 44.3 | 20.5 | 28.2 | 16.6 | 17.3 | 34.0 | 15.2 | 14.9 | 20.0 | 18.6 | 30.5 |
| 23. | 17.7 | 50.5 | 113 | 48.1 | 19.8 | 30.6 | 18.3 | 15.9 | 28.5 | 14.8 | 13.2 | 19.8 | 18.7 | 34.6 |
| 24. | 20.8 | 53.0 | 131 | 55.3 | 18.2 | 29.9 | 16.0 | 14.4 | 26.1 | 15.6 | 15.9 | 15.8 | 22.0 | 65.7 |
| 25. | 17.4 | 57.5 | 150 | 64.5 | 17.3 | 31.3 | 17.4 | 17.5 | 24.1 | 16.8 | 15.8 | 18.0 | 26.6 | 81.3 |
| 26. | 16.6 | 56.6 | 153 | 69.8 | 16.2 | 27.8 | 17.4 | 17.7 | 21.2 | 16.2 | 15.5 | 22.1 | 25.7 | 81.3 |
| 27. | 20.8 | 49.5 | 144 | 66.1 | 15.9 | 26.5 | 17.8 | 20.0 | 18.5 | 17.2 | 15.1 | 22.4 | 26.3 | 75.1 |
| 28. | 20.9 | 42.8 | 131 | 60.9 | 14.6 | 24.4 | 15.8 | 18.7 | 22.1 | 14.9 | 15.7 | 22.4 | 26.8 | 69.5 |
| 29. | 18.5 | 40.4 | 112 | 58.6 | 14.2 | 24.0 | 14.2 | 20.2 | 21.5 | 14.2 | 20.0 | 21.7 | 22.3 | 62.0 |
| 30. | 16.1 | 38.4 | 89.8 | | 14.3 | 24.4 | 14.7 | 18.3 | 21.9 | 14.4 | 15.2 | 21.6 | 25.4 | 54.8 |
| 31. | | 44.1 | 75.3 | | 16.0 | | 18.3 | | 19.3 | 14.6 | | 18.1 | | 48.8 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 2. | 7. | 29. | 3. | 29. | 24. | 4. | 21. | 8. | 2. | 19. | 14. |
| NQ | 16.1 | 18.7 | 45.4 | 22.8 | 14.2 | 13.9 | 14.2 | 14.4 | 14.6 | 13.4 | 12.4 | 14.9 | 18.2 | 11.3 |
| MQ | 19.3 | 39.7 | 94.3 | 43.0 | 30.1 | 22.5 | 21.4 | 19.2 | 24.9 | 16.6 | 16.2 | 23.6 | 22.7 | 38.7 |
| HQ | 30.4 | 68.7 | 155 | 70.5 | 59.7 | 34.9 | 40.0 | 31.2 | 45.8 | 24.7 | 26.5 | 42.3 | 33.2 | 83.5 |
| Tag | 19. | 19. | 26. | 26. | 1. | 25. | 12. | 2. | 20.+ | 11. | 29. | 7. | 10. | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 15 | 35 | 15 | 11 | 8 | 8 | 7 | 9 | 6 | 6 | 9 | 8 | 14 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1971 | 2006 | 2007 | 1954 | 1954 | 1960 | 1954 | 1964 | 1964 | 1964 | 1964 | 1959 | 1971 | 2006 |
| NQ | 8.83 | 4.40 | 5.44 | 6.50 | 10.2 | 13.6 | 7.60 | 5.90 | 3.70 | 5.10 | 4.21 | 5.09 | 8.83 | 4.40 |
| MNQ | 24.4 | 28.8 | 34.3 | 39.3 | 39.2 | 37.0 | 24.6 | 18.6 | 15.6 | 15.2 | 16.0 | 18.7 | 24.3 | 28.5 |
| MQ | 39.3 | 51.8 | 63.7 | 66.6 | 67.8 | 56.5 | 37.2 | 31.3 | 26.9 | 24.4 | 23.6 | 28.4 | 38.7 | 51.5 |
| MHQ | 62.5 | 87.3 | 110 | 109 | 117 | 85.5 | 60.1 | 52.9 | 47.1 | 41.5 | 37.2 | 46.5 | 61.3 | 87.1 |
| HQ | 193 | 203 | 378 | 400 | 338 | 225 | 172 | 169 | 276 | 110 | 106 | 169 | 193 | 203 |
| Jahr | 1998 | 1954 | 2003 | 1946 | 1981 | 1994 | 1961 | 1961 | 2002 | 2002 | 2010 | 1998 | 1998 | 1954 |

| | 1940/2011 | | 1941/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 14 | 19 | 24 | 23 | 25 | 20 | 14 | 11 | 10 | 9 | 8 | 11 | 14 | 19 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 12.4 | am 08.09.2012 | 13.9 | 12.4 | 11.3 | am 14.12.2012 |
| MQ m³/s | 31.0 | | 41.7 | 20.3 | 31.2 | |
| HQ m³/s | 155 | am 26.01.2012 bei W= 356 cm | 155 | 45.8 | 155 | am 26.01.2012 bei W= 356 cm |
| Nq l/(s km²) | 1.72 | | 1.93 | 1.72 | 1.57 | |
| Mq l/(s km²) | 4.30 | | 5.78 | 2.82 | 4.32 | |
| Hq l/(s km²) | 21.5 | | 21.5 | 6.35 | 21.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 135 | | 91 | 45 | 137 | |

| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 3.70 | am 28.07.1964 | 4.40 | 3.70 | 3.70 | am 28.07.1964 |
| MNQ m³/s | 11.2 | | 19.6 | 11.9 | 11.4 | |
| MQ m³/s | 43.0 | | 57.6 | 28.6 | 42.9 | |
| MHQ m³/s | 165 | | 160 | 79.5 | 169 | |
| HQ m³/s | 400 | am 13.02.1946 bei W= 432 cm | 400 | 276 | 400 | am 13.02.1946 bei W= 432 cm |
| $HQ_1$ m³/s | 131 | | 122 | 63.0 | 131 | |
| $HQ_5$ m³/s | 227 | | 224 | 109 | 227 | |
| MNq l/(s km²) | 1.55 | | 2.72 | 1.65 | 1.58 | |
| Mq l/(s km²) | 5.96 | | 7.99 | 3.97 | 5.95 | |
| MHq l/(s km²) | 22.9 | | 22.2 | 11.0 | 23.4 | |

| | 1941/2012 (*) 72 Jahre | | | 1941/2012 |
|---|---|---|---|---|
| $Mh_N$ mm | | | | |
| $Mh_A$ mm | 188 | 126 | 63 | 188 |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 3.70 | 0.513 | 28.07.1964 | 400 | 55.5 | 432 | 13.02.1946 |
| 2 | 4.21 | 0.584 | 13.09.1964 | 378 | 52.4 | 429 | 07.01.2003 |
| 3 | 4.40 | 0.610 | 28.12.2006 | 350 | 48.6 | 423 | 07.03.1956 |
| 4 | 4.70 | 0.652 | 12.01.2009 | 343 | 47.6 | 424 | 15.03.1981 |
| 5 | 5.01 | 0.695 | 13.09.1959 | 342 | 47.4 | 424 | 04.01.1987 |
| 6 | 5.40 | 0.749 | 11.09.1953 | 284 | 39.4 | 419 | 17.01.1948 |
| 7 | 6.10 | 0.846 | 08.07.1954 | 276 | 38.3 | 413 | 24.07.2002 |
| 8 | 6.20 | 0.860 | 08.07.1952 | 270 | 37.5 | 412 | 30.01.1994 |
| 9 | 6.46 | 0.896 | 27.06.1989 | 261 | 36.2 | 414 | 22.03.1957 |
| 10 | 6.50 | 0.902 | 12.08.2003 | 258 | 35.8 | 409 | 26.02.1966 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 153 | 153 | | | |
| 364 | 150 | 150 | 400 | 211 | 59.8 |
| 363 | 144 | 144 | 349 | 189 | 57.5 |
| 362 | 144 | 144 | 305 | 173 | 57.1 |
| 361 | 131 | 131 | 304 | 164 | 56.6 |
| 360 | 131 | 131 | 274 | 156 | 53.5 |
| 359 | 118 | 118 | 257 | 150 | 52.6 |
| 358 | 116 | 116 | 237 | 144 | 51.8 |
| 357 | 113 | 113 | 234 | 139 | 51.8 |
| 356 | 112 | 112 | 232 | 135 | 51.0 |
| 350 | 90.1 | 90.1 | 207 | 118 | 47.1 |
| 340 | 65.9 | 75.1 | 186 | 98.0 | 42.6 |
| 330 | 57.7 | 61.6 | 163 | 85.8 | 37.9 |
| 320 | 50.5 | 50.8 | 153 | 76.5 | 36.4 |
| 300 | 43.0 | 42.5 | 132 | 63.9 | 33.3 |
| 270 | 32.5 | 30.6 | 111 | 51.3 | 30.1 |
| 240 | 27.2 | 26.8 | 99.0 | 43.2 | 23.7 |
| 210 | 24.0 | 24.8 | 85.6 | 37.2 | 19.3 |
| 183 | 21.9 | 22.7 | 72.0 | 32.8 | 16.4 |
| 150 | 20.2 | 20.4 | 60.7 | 28.4 | 14.2 |
| 130 | 19.5 | 20.0 | 53.5 | 26.0 | 13.2 |
| 120 | 18.7 | 19.2 | 51.0 | 24.9 | 12.4 |
| 110 | 18.4 | 18.6 | 48.8 | 23.7 | 11.9 |
| 100 | 18.0 | 18.2 | 46.7 | 22.5 | 10.9 |
| 90 | 17.7 | 17.7 | 45.4 | 21.3 | 10.6 |
| 80 | 17.3 | 17.3 | 44.2 | 20.3 | 10.3 |
| 70 | 16.9 | 16.9 | 41.8 | 19.1 | 9.70 |
| 60 | 16.3 | 16.4 | 40.6 | 18.0 | 9.40 |
| 50 | 16.0 | 15.9 | 38.3 | 17.0 | 8.89 |
| 40 | 15.7 | 15.6 | 36.7 | 15.8 | 8.39 |
| 30 | 15.4 | 15.2 | 35.4 | 14.5 | 7.65 |
| 25 | 15.0 | 14.9 | 34.7 | 13.8 | 7.45 |
| 20 | 14.8 | 14.7 | 34.0 | 13.0 | 6.92 |
| 15 | 14.6 | 14.5 | 33.6 | 12.1 | 5.74 |
| 10 | 14.4 | 14.3 | 32.6 | 11.0 | 5.14 |
| 9 | 14.3 | 14.3 | 32.5 | 10.8 | 5.09 |
| 8 | 14.3 | 14.3 | 32.4 | 10.5 | 5.09 |
| 7 | 14.3 | 14.2 | 32.1 | 10.3 | 4.91 |
| 6 | 14.2 | 13.9 | 32.0 | 9.91 | 4.86 |
| 5 | 13.9 | 13.9 | 31.9 | 9.59 | 4.80 |
| 4 | 13.9 | 13.5 | 31.8 | 9.20 | 4.78 |
| 3 | 13.5 | 13.4 | 31.7 | 8.81 | 4.60 |
| 2 | 13.4 | 13.2 | 31.0 | 8.05 | 4.47 |
| 1 | 13.2 | 12.4 | 30.4 | 6.82 | 4.21 |
| 0 | 12.4 | 11.3 | 29.5 | 3.70 | 3.70 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1941/2012
Extremwerte ab 1941
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 14730 km²
PNP : NN + 14.31 m
Lage: 34.2 km oberhalb der Mündung, links

# Q
m³/s

Pegel : Rethem Nr. 48900204
Gewässer : Aller
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 46.2 | 42.4 | 139 | 183 | 136 | 79.8 | 60.0 | 47.1 | 52.2 | 50.4 | 39.1 | 37.9 | 42.6 | 47.8 |
| 2. | 46.0 | 42.5 | 137 | 158 | 135 | 78.7 | 58.8 | 56.1 | 48.5 | 47.6 | 45.5 | 37.0 | 42.3 | 47.8 |
| 3. | 45.7 | 44.1 | 143 | 143 | 133 | 77.9 | 57.7 | 57.0 | 50.3 | 45.7 | 42.9 | 36.5 | 43.8 | 47.2 |
| 4. | 46.8 | 46.3 | 157 | 134 | 130 | 78.0 | 59.4 | 52.7 | 48.5 | 45.0 | 39.4 | 38.3 | 44.3 | 47.4 |
| 5. | 46.2 | 49.0 | 173 | 124 | 126 | 85.7 | 67.1 | 55.3 | 44.7 | 44.2 | 39.0 | 50.0 | 46.1 | 49.2 |
| 6. | 44.5 | 50.5 | 209 | 119 | 122 | 86.8 | 62.5 | 62.5 | 44.0 | 44.2 | 37.9 | 65.8 | 48.3 | 50.5 |
| 7. | 44.9 | 54.2 | 252 | 111 | 117 | 82.5 | 62.4 | 70.9 | 52.3 | 44.7 | 36.9 | 70.4 | 48.7 | 50.7 |
| 8. | 45.2 | 63.4 | 275 | 108 | 116 | 80.6 | 65.7 | 61.3 | 56.8 | 46.5 | 36.7 | 68.5 | 48.3 | 48.4 |
| 9. | 44.7 | 79.1 | 286 | 107 | 120 | 78.3 | 62.0 | 55.9 | 55.6 | 47.1 | 35.8 | 59.0 | 51.2 | 46.5 |
| 10. | 45.1 | 80.8 | 291 | 105 | 120 | 77.6 | 59.6 | 52.5 | 52.3 | 43.9 | 35.6 | 52.7 | 53.0 | 50.1 |
| 11. | 44.3 | 79.5 | 290 | 102 | 115 | 78.9 | 63.7 | 50.3 | 51.3 | 42.9 | 35.6 | 48.5 | 51.0 | 59.8 |
| 12. | 44.3 | 73.4 | 282 | 99.2 | 111 | 78.4 | 73.7 | 47.6 | 48.3 | 42.1 | 36.8 | 47.3 | 50.5 | 64.1 |
| 13. | 43.7 | 68.1 | 273 | 97.3 | 109 | 76.8 | 67.3 | 47.4 | 50.2 | 41.1 | 41.7 | 48.6 | 50.5 | 64.1 |
| 14. | 43.7 | 69.9 | 261 | 96.5 | 107 | 79.4 | 60.6 | 48.7 | 55.1 | 39.5 | 42.8 | 50.8 | 47.5 | 58.2 |
| 15. | 43.9 | 74.4 | 245 | 99.3 | 105 | 81.2 | 59.8 | 46.5 | 57.3 | 39.3 | 39.5 | 51.0 | 47.2 | 58.9 |
| 16. | 43.8 | 82.7 | 221 | 104 | 104 | 74.9 | 58.8 | 46.5 | 65.4 | 38.7 | 38.0 | 50.9 | 45.9 | 73.9 |
| 17. | 43.9 | 99.3 | 196 | 106 | 102 | 68.4 | 61.4 | 45.9 | 68.7 | 41.0 | 37.9 | 53.3 | 45.4 | 96.8 |
| 18. | 44.0 | 136 | 176 | 107 | 99.0 | 68.9 | 61.0 | 45.6 | 67.9 | 43.1 | 37.2 | 50.8 | 46.1 | 108 |
| 19. | 43.8 | 144 | 165 | 112 | 98.2 | 67.2 | 56.9 | 45.0 | 81.5 | 40.1 | 36.3 | 48.0 | 45.4 | 108 |
| 20. | 43.8 | 129 | 181 | 117 | 96.8 | 68.2 | 55.0 | 43.6 | 96.5 | 38.8 | 36.3 | 46.4 | 45.5 | 106 |
| 21. | 43.6 | 117 | 215 | 117 | 94.9 | 67.2 | 54.3 | 43.4 | 94.9 | 38.1 | 36.0 | 44.8 | 45.1 | 103 |
| 22. | 43.5 | 114 | 250 | 113 | 91.7 | 66.8 | 52.5 | 47.1 | 83.8 | 37.0 | 35.8 | 44.8 | 44.7 | 95.2 |
| 23. | 43.3 | 117 | 280 | 113 | 90.3 | 68.0 | 50.0 | 49.8 | 72.0 | 36.8 | 35.4 | 42.9 | 44.2 | 94.9 |
| 24. | 43.3 | 124 | 303 | 118 | 88.6 | 70.1 | 49.0 | 45.1 | 64.8 | 36.8 | 36.1 | 43.5 | 43.9 | 130 |
| 25. | 43.6 | 133 | 319 | 129 | 87.1 | 70.1 | 47.1 | 44.1 | 60.6 | 37.0 | 38.4 | 42.1 | 45.1 | 179 |
| 26. | 43.0 | 141 | 324 | 144 | 84.9 | 69.1 | 45.9 | 49.5 | 56.3 | 37.7 | 38.7 | 42.3 | 47.2 | 195 |
| 27. | 42.8 | 140 | 314 | 151 | 83.6 | 66.3 | 44.8 | 50.6 | 53.7 | 40.3 | 39.4 | 42.2 | 48.1 | 193 |
| 28. | 43.3 | 127 | 302 | 146 | 81.5 | 64.4 | 44.1 | 49.3 | 52.6 | 41.0 | 38.8 | 41.7 | 49.6 | 188 |
| 29. | 43.3 | 121 | 287 | 140 | 79.0 | 62.1 | 43.4 | 47.5 | 54.2 | 39.7 | 38.0 | 41.3 | 49.8 | 181 |
| 30. | 43.0 | 121 | 259 | | 78.8 | 61.6 | 42.7 | 49.0 | 54.9 | 38.4 | 38.8 | 41.6 | 48.0 | 169 |
| 31. | | 128 | 220 | | 79.0 | | 42.6 | | 51.8 | 37.9 | | 43.4 | | 160 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27. | 1. | 2. | 14. | 30. | 30. | 31. | 21. | 6. | 23.+ | 23. | 3. | 2. | 9. |
| NQ | 42.8 | 42.4 | 137 | 96.5 | 78.8 | 61.6 | 42.6 | 43.4 | 44.0 | 36.8 | 35.4 | 36.5 | 42.3 | 46.5 |
| MQ | 44.2 | 93.3 | 240 | 121 | 105 | 73.8 | 56.4 | 50.5 | 59.6 | 41.5 | 38.2 | 47.8 | 47.0 | 95.9 |
| HQ | 47.3 | 147 | 327 | 200 | 138 | 88.6 | 75.5 | 72.4 | 98.0 | 51.2 | 46.9 | 72.5 | 53.4 | 197 |
| Tag | 4. | 18.+ | 26. | 1. | 1. | 5.+ | 12. | 7. | 20. | 1. | 2. | 7. | 10. | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 17 | 44 | 21 | 19 | 13 | 10 | 9 | 11 | 8 | 7 | 9 | 8 | 17 |

| | 1940/2011 | | 1941/2012 | | | | | | | 72 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1947 | 1959 | 1954 | 1954 | 1963 | 1960 | 1954 | 1959 | 1959 | 1959 | 1959 | 1959 | 1947 | 1959 |
| NQ | 29.0 | 31.6 | 43.3 | 36.8 | 51.5 | 41.2 | 37.0 | 29.0 | 25.6 | 27.6 | 22.3 | 23.5 | 29.0 | 31.6 |
| MNQ | 66.1 | 82.2 | 103 | 115 | 112 | 107 | 76.1 | 63.1 | 55.3 | 51.0 | 50.8 | 54.7 | 65.8 | 81.5 |
| MQ | 99.2 | 135 | 171 | 177 | 180 | 150 | 102 | 87.0 | 76.9 | 67.6 | 63.8 | 72.8 | 97.1 | 134 |
| MHQ | 157 | 217 | 284 | 285 | 302 | 219 | 154 | 135 | 118 | 102 | 92.0 | 113 | 153 | 216 |
| HQ | 758 | 565 | 902 | 1450 | 1050 | 760 | 430 | 460 | 524 | 279 | 222 | 418 | 758 | 565 |
| Jahr | 1998 | 1965 | 1987 | 1946 | 1981 | 1988 | 1961 | 1961 | 2002 | 2002 | 1957 | 1998 | 1998 | 1965 |

| | 1940/2011 | | 1941/2012 | | | | | | | 72 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 17 | 24 | 31 | 30 | 33 | 26 | 19 | 15 | 14 | 12 | 11 | 13 | 17 | 24 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 35.4 | am 23.09.2012 | 42.4 | 35.4 | 35.4 | am 23.09.2012 |
| MQ m³/s | 81.0 | | 113 | 49.1 | 81.4 | |
| HQ m³/s | 327 | am 26.01.2012 bei W= 407 cm | 327 | 98.0 | 327 | am 26.01.2012 bei W= 407 cm |
| Nq l/(s km²) | 2.40 | | 2.88 | 2.40 | 2.40 | |
| Mq l/(s km²) | 5.50 | | 7.68 | 3.33 | 5.53 | |
| Hq l/(s km²) | 22.2 | | 22.2 | 6.65 | 22.2 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 173 | | 121 | 53 | 175 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 22.3 | am 15.09.1959 | 29.0 | 22.3 | 22.3 | am 15.09.1959 |
| MNQ m³/s | 41.9 | | 59.9 | 44.3 | 43.9 | |
| MQ m³/s | 115 | | 152 | 78.4 | 115 | |
| MHQ m³/s | 430 | | 421 | 201 | 437 | |
| HQ m³/s | 1450 | am 11.02.1946 bei W= 451 cm | 1450 | 524 | 1450 | am 11.02.1946 bei W= 451 cm |
| $HQ_1$ m³/s | 324 | | 308 | 150 | 324 | |
| $HQ_5$ m³/s | 580 | | 569 | 295 | 580 | |
| MNq l/(s km²) | 2.84 | | 4.07 | 3.01 | 2.98 | |
| Mq l/(s km²) | 7.81 | | 10.3 | 5.32 | 7.81 | |
| MHq l/(s km²) | 29.2 | | 28.6 | 13.6 | 29.7 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 246 | | 162 | 85 | 247 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 22.3 | 1.51 | 15.09.1959 | 1450 | 98.4 | 451 | 11.02.1946 |
| 2 | 25.0 | 1.70 | 20.09.1947 | 1050 | 71.3 | 434 | 15.03.1981 |
| 3 | 27.8 | 1.89 | 10.07.1954 | 902 | 61.2 | 420 | 04.01.1987 |
| 4 | 29.0 | 1.97 | 29.07.1960 | 843 | 57.2 | 447 | 08.01.2003 |
| 5 | 29.6 | 2.01 | 07.09.1991 | 835 | 56.7 | 436 | 31.01.1994 |
| 6 | 29.7 | 2.02 | 15.08.2003 | 768 | 52.1 | 409 | 26.02.1970 |
| 7 | 30.6 | 2.08 | 09.08.1990 | 760 | 51.6 | 431 | 01.04.1988 |
| 8 | 30.6 | 2.08 | 05.11.1949 | 758 | 51.5 | 439 | 06.11.1998 |
| 9 | 31.0 | 2.10 | 07.08.1996 | 757 | 51.4 | 434 | 26.03.1994 |
| 10 | 31.3 | 2.12 | 25.08.1989 | 750 | 50.9 | 420 | 07.03.1956 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 Obere Hüllwerte | 72 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 324 | 324 | | | |
| 364 | 319 | 319 | 1000 | 530 | 154 |
| 363 | 314 | 314 | 1000 | 451 | 150 |
| 362 | 303 | 303 | 978 | 422 | 148 |
| 361 | 302 | 302 | 892 | 400 | 147 |
| 360 | 291 | 291 | 791 | 382 | 143 |
| 359 | 290 | 290 | 754 | 368 | 137 |
| 358 | 287 | 287 | 717 | 357 | 136 |
| 357 | 286 | 286 | 695 | 348 | 131 |
| 356 | 282 | 282 | 684 | 339 | 128 |
| 350 | 252 | 252 | 595 | 305 | 121 |
| 340 | 176 | 188 | 487 | 268 | 115 |
| 330 | 143 | 158 | 423 | 231 | 107 |
| 320 | 134 | 136 | 378 | 202 | 101 |
| 300 | 118 | 113 | 327 | 168 | 91.0 |
| 270 | 96.5 | 95.2 | 294 | 137 | 77.5 |
| 240 | 78.0 | 74.9 | 263 | 116 | 64.1 |
| 210 | 65.7 | 63.7 | 218 | 101 | 47.1 |
| 183 | 56.9 | 56.1 | 175 | 88.5 | 41.2 |
| 150 | 50.3 | 50.4 | 150 | 76.7 | 36.3 |
| 130 | 47.4 | 48.5 | 139 | 69.6 | 34.9 |
| 120 | 46.4 | 47.8 | 132 | 66.6 | 33.6 |
| 110 | 45.5 | 47.2 | 128 | 63.7 | 33.2 |
| 100 | 44.8 | 46.1 | 124 | 61.1 | 32.4 |
| 90 | 44.1 | 45.4 | 120 | 58.5 | 31.2 |
| 80 | 43.7 | 44.7 | 118 | 55.7 | 30.4 |
| 70 | 43.4 | 43.8 | 114 | 53.3 | 29.7 |
| 60 | 42.8 | 42.8 | 112 | 50.9 | 29.0 |
| 50 | 41.7 | 41.7 | 108 | 48.3 | 27.9 |
| 40 | 39.5 | 39.5 | 106 | 45.8 | 27.2 |
| 30 | 38.7 | 38.7 | 104 | 43.3 | 26.5 |
| 25 | 38.1 | 38.1 | 103 | 41.6 | 26.2 |
| 20 | 37.9 | 37.9 | 99.4 | 39.8 | 25.9 |
| 15 | 37.0 | 37.0 | 96.4 | 38.0 | 25.3 |
| 10 | 36.7 | 36.7 | 91.3 | 35.9 | 24.7 |
| 9 | 36.5 | 36.5 | 91.2 | 35.5 | 24.4 |
| 8 | 36.5 | 36.5 | 90.8 | 35.1 | 24.4 |
| 7 | 36.3 | 36.3 | 90.7 | 34.5 | 24.1 |
| 6 | 36.1 | 36.1 | 90.7 | 33.9 | 24.1 |
| 5 | 36.0 | 36.0 | 89.8 | 33.3 | 23.8 |
| 4 | 36.0 | 36.0 | 89.8 | 32.6 | 23.8 |
| 3 | 35.8 | 35.8 | 88.5 | 31.7 | 23.8 |
| 2 | 35.8 | 35.8 | 88.3 | 30.2 | 23.5 |
| 1 | 35.6 | 35.6 | 87.2 | 27.9 | 23.3 |
| 0 | 35.4 | 35.4 | 86.3 | 22.3 | 22.3 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1954/2012
Extremwerte ab 1941
Wasserstände bis 1953 für Aller-km 34.82
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 31.2 $km^2$

PNP : NN + 417.49 m

Lage: 120.0 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Altenau O Nr. 4821103

Gewässer : Oker

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.188 | 0.084 | 3.56 | 0.489 | 2.87 | 0.551 | 0.231 | 0.951 | 0.368 | 0.343 | 0.168 | 0.183 | 0.132 | 0.265 |
| 2. | 0.185 | 0.143 | 5.77 | 0.432 | 2.34 | 0.447 | 0.246 | 0.445 | 0.257 | 0.253 | 0.141 | 0.187 | 0.262 | 0.251 |
| 3. | 0.180 | 0.691 | 3.62 | 0.378 | 1.95 | 0.422 | 0.720 | 0.392 | 0.227 | 0.221 | 0.107 | 0.182 | 0.571 | 0.235 |
| 4. | 0.168 | 0.785 | 3.10 | 0.344 | 1.73 | 0.516 | 0.340 | 0.784 | 0.193 | 0.194 | 0.093 | 1.39 | 0.521 | 0.233 |
| 5. | 0.163 | 0.375 | 4.99 | 0.318 | 1.51 | 0.446 | 0.412 | 1.84 | 0.168 | 0.177 | 0.090 | 1.01 | 0.555 | 0.269 |
| 6. | 0.170 | 0.293 | 3.80 | 0.292 | 1.28 | 0.366 | 0.660 | 0.693 | 0.154 | 0.306 | 0.086 | 1.01 | 0.477 | 0.246 |
| 7. | 0.153 | 0.385 | 3.22 | 0.297 | 0.999 | 0.345 | 0.461 | 0.517 | 0.141 | 0.240 | 0.110 | 0.711 | 2.49 | 0.202 |
| 8. | 0.133 | 0.697 | 3.33 | 0.368 | 0.970 | 0.299 | 0.381 | 0.415 | 0.148 | 0.184 | 0.120 | 0.421 | 1.21 | 0.209 |
| 9. | 0.110 | 2.02 | 3.13 | 0.390 | 0.875 | 0.316 | 0.335 | 0.334 | 0.154 | 0.160 | 0.119 | 0.239 | 0.834 | 0.237 |
| 10. | 0.100 | 0.862 | 3.70 | 0.361 | 0.920 | 0.765 | 0.340 | 0.283 | 0.162 | 0.146 | 0.122 | 0.191 | 0.772 | 0.247 |
| 11. | 0.099 | 0.610 | 2.73 | 0.311 | 1.26 | 0.602 | 0.316 | 0.251 | 0.165 | 0.136 | 0.204 | 0.154 | 0.821 | 0.246 |
| 12. | 0.096 | 1.14 | 3.74 | 0.294 | 1.51 | 0.429 | 0.371 | 0.231 | 0.338 | 0.124 | 0.312 | 0.185 | 0.591 | 0.241 |
| 13. | 0.094 | 1.49 | 2.91 | 0.228 | 1.47 | 0.765 | 0.302 | 0.213 | 0.713 | 0.110 | 0.208 | 0.328 | 0.470 | 0.230 |
| 14. | 0.087 | 1.68 | 2.05 | 0.211 | 1.14 | 0.532 | 0.251 | 0.198 | 2.10 | 0.101 | 0.183 | 0.259 | 0.421 | 0.241 |
| 15. | 0.080 | 2.07 | 1.61 | 0.222 | 0.917 | 0.378 | 0.247 | 0.181 | 1.47 | 0.102 | 0.190 | 0.779 | 0.362 | 3.38 |
| 16. | 0.080 | 2.43 | 1.30 | 0.197 | 0.956 | 0.329 | 0.390 | 0.223 | 1.34 | 0.158 | 0.178 | 0.554 | 0.318 | 2.88 |
| 17. | 0.077 | 2.44 | 1.08 | 0.308 | 1.13 | 0.291 | 0.437 | 0.205 | 3.93 | 0.139 | 0.167 | 0.340 | 0.286 | 2.58 |
| 18. | 0.080 | 1.83 | 0.928 | 0.410 | 1.24 | 0.262 | 0.287 | 0.158 | 2.53 | 0.109 | 0.164 | 0.226 | 0.286 | 2.63 |
| 19. | 0.082 | 1.46 | 1.22 | 0.833 | 0.982 | 0.259 | 0.230 | 0.136 | 2.55 | 0.092 | 0.164 | 0.173 | 0.313 | 2.18 |
| 20. | 0.076 | 1.19 | 1.18 | 0.479 | 0.700 | 0.277 | 0.211 | 0.312 | 1.95 | 0.084 | 0.162 | 0.149 | 0.294 | 1.73 |
| 21. | 0.074 | 1.14 | 1.17 | 0.379 | 0.710 | 0.277 | 0.193 | 0.374 | 1.43 | 0.115 | 0.159 | 0.138 | 0.267 | 1.40 |
| 22. | 0.071 | 1.41 | 1.86 | 0.362 | 0.808 | 0.523 | 0.163 | 0.242 | 1.08 | 0.271 | 0.172 | 0.119 | 0.244 | 1.31 |
| 23. | 0.070 | 3.65 | 2.87 | 0.678 | 0.761 | 0.794 | 0.149 | 0.212 | 0.855 | 0.134 | 0.168 | 0.109 | 0.224 | 5.67 |
| 24. | 0.069 | 4.43 | 2.25 | 3.16 | 0.700 | 0.706 | 0.134 | 0.251 | 0.677 | 0.104 | 0.159 | 0.113 | 0.448 | 7.87 |
| 25. | 0.067 | 3.56 | 1.74 | 3.43 | 0.659 | 0.562 | 0.117 | 0.496 | 0.563 | 0.179 | 0.151 | 0.132 | 0.412 | 5.54 |
| 26. | 0.071 | 4.28 | 1.36 | 2.19 | 0.573 | 0.426 | 0.110 | 0.353 | 0.475 | 0.214 | 0.150 | 0.152 | 0.318 | 4.16 |
| 27. | 0.085 | 4.10 | 1.11 | 1.71 | 0.526 | 0.348 | 0.101 | 0.256 | 0.430 | 0.490 | 0.275 | 0.148 | 0.398 | 4.27 |
| 28. | 0.109 | 2.87 | 0.946 | 1.75 | 0.529 | 0.316 | 0.093 | 0.301 | 0.507 | 0.237 | 0.305 | 0.142 | 0.366 | 2.72 |
| 29. | 0.091 | 2.26 | 0.811 | 2.74 | 0.495 | 0.283 | 0.089 | 0.241 | 0.487 | 0.149 | 0.223 | 0.127 | 0.433 | 1.92 |
| 30. | 0.084 | 1.93 | 0.671 | | 0.870 | 0.253 | 0.120 | 0.198 | 0.415 | 0.118 | 0.184 | 0.136 | 0.351 | 1.62 |
| 31. | | 1.51 | 0.543 | | 0.797 | | 0.356 | | 0.325 | 0.124 | | 0.130 | | 1.27 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 1. | 31. | 16. | 29. | 30. | 29. | 19. | 7. | 20. | 6. | 23. | 1. | 7. |
| NQ | 0.067 | 0.084 | 0.543 | 0.197 | 0.495 | 0.253 | 0.089 | 0.136 | 0.141 | 0.084 | 0.086 | 0.109 | 0.132 | 0.202 |
| MQ | 0.106 | 1.74 | 2.33 | 0.812 | 1.10 | 0.436 | 0.284 | 0.390 | 0.848 | 0.178 | 0.168 | 0.326 | 0.515 | 1.82 |
| HQ | 0.191 | 4.92 | 6.75 | 5.22 | 2.98 | 1.01 | 1.41 | 3.45 | 6.13 | 0.656 | 0.647 | 3.91 | 3.24 | 9.97 |
| Tag | 1. | 24. | 2. | 24. | 1. | 22. | 31. | 5. | 17. | 27. | 11. | 4. | 7. | 23. |
| $h_N$ mm / $h_A$ mm | 9 | 149 | 200 | 65 | 94 | 36 | 24 | 32 | 73 | 15 | 14 | 28 | 43 | 156 |

| | 1948/2011 | | 1949/2012 – 64 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1978 | 1996 | 1996 | 1996 | 1959 | 1981 | 1981 | 1994 | 1976 | 1975 | 1979 | 1949 | 1978 |
| NQ | 0.014 | 0.017 | 0.015 | 0.014 | 0.063 | 0.100 | 0.008 | 0.009 | 0.013 | 0.010 | 0.004 | 0.018 | 0.014 | 0.017 |
| MNQ | 0.252 | 0.317 | 0.311 | 0.290 | 0.354 | 0.410 | 0.188 | 0.136 | 0.142 | 0.142 | 0.176 | 0.182 | 0.252 | 0.319 |
| MQ | 0.915 | 1.30 | 1.24 | 0.985 | 1.30 | 1.19 | 0.613 | 0.502 | 0.562 | 0.444 | 0.575 | 0.683 | 0.914 | 1.32 |
| MHQ | 5.63 | 8.78 | 7.61 | 4.80 | 7.12 | 5.01 | 3.34 | 5.64 | 5.15 | 5.25 | 4.22 | 4.83 | 5.60 | 8.93 |
| HQ | 27.7 | 26.0 | 26.7 | 16.1 | 27.3 | 42.2 | 19.7 | 69.0 | 18.1 | 59.9 | 26.3 | 47.5 | 27.7 | 26.0 |
| Jahr | 1990 | 1966 | 1995 | 2002 | 1957 | 1994 | 1961 | 1953 | 1997+ | 1967 | 2007 | 1998 | 1990 | 1966 |
| $Mh_N$ mm / $Mh_A$ mm | 76 | 112 | 106 | 79 | 112 | 99 | 53 | 42 | 48 | 38 | 48 | 59 | 76 | 113 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.067 | am 25.11.2011 | 0.067 | 0.084 | 0.084 | am 20.08.2012 |
| MQ $m^3/s$ | 0.731 | | 1.10 | 0.367 | 0.772 | |
| HQ $m^3/s$ | 6.75 | am 02.01.2012 bei W= 45 cm | 6.75 | 6.13 | 9.97 | am 23.12.2012 bei W= 56 cm |
| Nq $l/(s km^2)$ | 2.15 | | 2.15 | 2.69 | 2.69 | |
| Mq $l/(s km^2)$ | 23.4 | | 35.3 | 11.8 | 24.7 | |
| Hq $l/(s km^2)$ | 216 | | 216 | 196 | 320 | |
| $h_N$ mm / $h_A$ mm | 741 | | 554 | 187 | 782 | |
| | 1949/2012 (*) 64 Jahre | | | | 1949/2012 | |
| NQ $m^3/s$ | 0.004 | am 24.09.1975 | 0.014 | 0.004 | 0.004 | am 24.09.1975 |
| MNQ $m^3/s$ | 0.061 | | 0.134 | 0.071 | 0.064 | |
| MQ $m^3/s$ | 0.859 | | 1.16 | 0.563 | 0.861 | |
| MHQ $m^3/s$ | 18.0 | | 14.6 | 12.5 | 18.3 | |
| HQ $m^3/s$ | 69.0 | am 25.06.1953 | 42.2 | 69.0 | 69.0 | am 25.06.1953 |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.96 | | 4.29 | 2.28 | 2.05 | |
| Mq $l/(s km^2)$ | 27.5 | | 37.2 | 18.0 | 27.6 | |
| MHq $l/(s km^2)$ | 577 | | 468 | 401 | 587 | |
| $Mh_N$ mm / $Mh_A$ mm | 871 | | 585 | 287 | 873 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.004 | 0.128 | 24.09.1975 | 69.0 | 2210 | | 25.06.1953 |
| 2 | 0.008 | 0.256 | 31.05.1981 | 59.9 | 1920 | 168 | 01.08.1967 |
| 3 | 0.009 | 0.288 | 01.06.1981 | 47.5 | 1520 | 122 | 28.10.1998 |
| 4 | 0.010 | 0.321 | 01.09.1976 | 42.2 | 1350 | 114 | 13.04.1994 |
| 5 | 0.010 | 0.321 | 24.08.1976 | 30.6 | 981 | 108 | 19.06.1969 |
| 6 | 0.013 | 0.417 | 25.07.1994 | 27.7 | 888 | 91 | 17.11.1990 |
| 7 | 0.013 | 0.417 | 05.08.1975 | 27.3 | 875 | | 18.03.1957 |
| 8 | 0.014 | 0.449 | 02.02.1996 | 26.7 | 856 | 89 | 30.01.1995 |
| 9 | 0.014 | 0.449 | 05.11.1949 | 26.3 | 843 | 91 | 29.09.2007 |
| 10 | 0.015 | 0.481 | 28.01.1996 | 26.0 | 833 | 97 | 20.12.1966 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1949/2012 64 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 5.77 | 7.87 | | | |
| 364 | 4.99 | 5.77 | 24.6 | 9.33 | 3.48 |
| 363 | 4.43 | 5.67 | 17.0 | 7.40 | 2.10 |
| 362 | 4.28 | 5.54 | 17.0 | 6.36 | 1.66 |
| 361 | 4.10 | 4.99 | 17.0 | 5.75 | 1.58 |
| 360 | 3.93 | 4.27 | 12.5 | 5.29 | 1.48 |
| 359 | 3.80 | 4.16 | 11.2 | 4.86 | 1.36 |
| 358 | 3.74 | 3.93 | 9.04 | 4.62 | 1.29 |
| 357 | 3.70 | 3.80 | 8.73 | 4.36 | 1.26 |
| 356 | 3.65 | 3.74 | 7.24 | 4.16 | 1.16 |
| 350 | 3.22 | 3.33 | 6.34 | 3.32 | 0.970 |
| 340 | 2.55 | 2.73 | 4.81 | 2.54 | 0.670 |
| 330 | 2.05 | 2.18 | 3.83 | 2.06 | 0.590 |
| 320 | 1.73 | 1.74 | 3.28 | 1.75 | 0.580 |
| 300 | 1.22 | 1.22 | 2.47 | 1.33 | 0.390 |
| 270 | 0.794 | 0.784 | 1.99 | 0.951 | 0.240 |
| 240 | 0.532 | 0.529 | 1.71 | 0.720 | 0.170 |
| 210 | 0.392 | 0.421 | 1.44 | 0.551 | 0.130 |
| 183 | 0.329 | 0.344 | 1.25 | 0.451 | 0.130 |
| 150 | 0.256 | 0.287 | 1.03 | 0.341 | 0.100 |
| 130 | 0.222 | 0.253 | 0.913 | 0.291 | 0.100 |
| 120 | 0.204 | 0.242 | 0.871 | 0.272 | 0.100 |
| 110 | 0.187 | 0.233 | 0.775 | 0.242 | 0.080 |
| 100 | 0.178 | 0.221 | 0.730 | 0.235 | 0.070 |
| 90 | 0.165 | 0.202 | 0.658 | 0.209 | 0.070 |
| 80 | 0.159 | 0.185 | 0.603 | 0.198 | 0.060 |
| 70 | 0.150 | 0.173 | 0.555 | 0.175 | 0.060 |
| 60 | 0.138 | 0.163 | 0.474 | 0.161 | 0.054 |
| 50 | 0.127 | 0.152 | 0.418 | 0.136 | 0.052 |
| 40 | 0.113 | 0.142 | 0.378 | 0.125 | 0.040 |
| 30 | 0.102 | 0.134 | 0.378 | 0.103 | 0.040 |
| 25 | 0.096 | 0.122 | 0.378 | 0.097 | 0.034 |
| 20 | 0.091 | 0.118 | 0.310 | 0.081 | 0.025 |
| 15 | 0.085 | 0.113 | 0.286 | 0.072 | 0.025 |
| 10 | 0.082 | 0.104 | 0.286 | 0.057 | 0.019 |
| 9 | 0.082 | 0.102 | 0.286 | 0.052 | 0.019 |
| 8 | 0.082 | 0.102 | 0.286 | 0.052 | 0.019 |
| 7 | 0.077 | 0.102 | 0.286 | 0.051 | 0.019 |
| 6 | 0.076 | 0.101 | 0.286 | 0.050 | 0.017 |
| 5 | 0.074 | 0.101 | 0.286 | 0.041 | 0.017 |
| 4 | 0.074 | 0.092 | 0.286 | 0.041 | 0.014 |
| 3 | 0.074 | 0.090 | 0.286 | 0.036 | 0.010 |
| 2 | 0.070 | 0.089 | 0.286 | 0.026 | 0.010 |
| 1 | 0.069 | 0.086 | 0.286 | 0.019 | 0.010 |
| 0 | 0.067 | 0.084 | 0.168 | 0.004 | 0.004 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
Repräsentativ für die Hydrologische Landschaft Oberharz
Zulauf Okertalsperre

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 813 $km^2$

PNP : NN + 75.54 m

Lage: 73.1 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Ohrum Nr. 4825109

Gewässer : Oker

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.61 | 1.34 | 3.54 | 4.50 | 3.53 | 2.30 | 1.43 | 2.33 | 3.20 | 2.10 | 2.48 | 2.28 | 2.24 | 2.23 |
| 2. | 1.33 | 1.39 | 5.14 | 4.62 | 3.35 | 2.03 | 1.49 | 1.74 | 2.38 | 1.96 | 2.11 | 2.55 | 2.57 | 2.17 |
| 3. | 1.30 | 1.50 | 5.54 | 3.82 | 3.01 | 1.95 | 2.19 | 1.54 | 1.93 | 1.99 | 2.01 | 2.37 | 2.55 | 2.31 |
| 4. | 1.26 | 1.84 | 5.15 | 3.93 | 2.78 | 2.07 | 1.76 | 2.10 | 1.93 | 2.05 | 1.99 | 2.83 | 2.52 | 2.31 |
| 5. | 1.23 | 1.79 | 9.96 | 3.60 | 2.58 | 2.01 | 1.86 | 4.54 | 1.86 | 1.88 | 2.03 | 3.96 | 2.46 | 2.44 |
| 6. | 1.22 | 1.93 | 12.8 | 3.29 | 2.56 | 1.84 | 2.36 | 2.14 | 3.17 | 2.38 | 2.05 | 3.61 | 2.34 | 2.14 |
| 7. | 1.23 | 1.91 | 9.32 | 3.01 | 2.47 | 1.80 | 2.01 | 1.88 | 1.86 | 2.12 | 1.99 | 3.51 | 2.86 | 1.75 |
| 8. | 1.18 | 2.36 | 10.4 | 3.21 | 2.63 | 1.75 | 1.93 | 1.64 | 2.14 | 1.84 | 1.92 | 2.95 | 2.99 | 1.92 |
| 9. | 1.14 | 2.29 | 9.73 | 3.33 | 2.53 | 1.60 | 1.86 | 1.43 | 2.09 | 1.76 | 1.89 | 2.99 | 2.24 | 2.17 |
| 10. | 1.11 | 2.12 | 9.12 | 3.31 | 2.45 | 1.59 | 1.87 | 1.37 | 1.78 | 1.81 | 1.94 | 2.64 | 2.13 | 2.36 |
| 11. | 1.05 | 1.97 | 8.13 | 3.07 | 2.43 | 1.59 | 1.88 | 1.43 | 2.17 | 1.67 | 2.14 | 2.82 | 2.49 | 2.07 |
| 12. | 1.12 | 1.90 | 7.30 | 2.92 | 2.45 | 1.44 | 1.82 | 1.24 | 2.32 | 1.58 | 3.16 | 2.64 | 2.46 | 1.87 |
| 13. | 1.21 | 2.21 | 8.24 | 3.00 | 2.57 | 2.01 | 1.76 | 1.65 | 2.63 | 1.61 | 2.58 | 2.79 | 2.01 | 1.88 |
| 14. | 1.04 | 2.84 | 7.22 | 3.19 | 2.54 | 1.78 | 1.80 | 1.48 | 2.88 | 1.62 | 2.60 | 2.33 | 2.19 | 1.86 |
| 15. | 1.04 | 2.59 | 6.46 | 3.97 | 2.41 | 1.58 | 1.89 | 1.47 | 3.49 | 1.59 | 2.66 | 2.75 | 2.33 | 3.95 |
| 16. | 1.05 | 2.60 | 5.74 | 2.46 | 2.54 | 1.49 | 2.33 | 1.58 | 2.92 | 1.77 | 2.53 | 3.14 | 1.92 | 4.20 |
| 17. | 1.06 | 4.76 | 5.34 | 2.71 | 3.03 | 1.34 | 2.03 | 1.56 | 3.11 | 1.80 | 2.48 | 2.69 | 1.93 | 3.54 |
| 18. | 1.08 | 3.49 | 4.97 | 2.72 | 2.95 | 1.44 | 2.01 | 1.43 | 3.66 | 1.59 | 2.57 | 2.52 | 2.06 | 3.40 |
| 19. | 1.10 | 2.68 | 5.42 | 2.84 | 2.80 | 1.43 | 1.96 | 1.37 | 3.60 | 1.44 | 2.54 | 2.53 | 2.40 | 2.86 |
| 20. | 1.19 | 2.54 | 7.89 | 2.65 | 2.50 | 1.46 | 1.68 | 1.86 | 3.64 | 1.42 | 2.58 | 2.40 | 2.30 | 2.62 |
| 21. | 1.37 | 2.66 | 7.93 | 2.46 | 2.48 | 1.42 | 1.87 | 2.42 | 2.76 | 1.36 | 2.60 | 2.48 | 2.27 | 2.54 |
| 22. | 1.13 | 2.62 | 9.22 | 2.27 | 2.61 | 1.42 | 1.63 | 1.62 | 2.52 | 1.49 | 2.38 | 2.55 | 2.25 | 2.55 |
| 23. | 1.14 | 3.27 | 17.0 | 2.71 | 2.54 | 1.52 | 1.78 | 1.78 | 2.06 | 1.50 | 2.35 | 2.45 | 2.27 | 4.67 |
| 24. | 1.15 | 3.82 | 15.4 | 2.70 | 2.53 | 1.55 | 1.70 | 1.76 | 2.36 | 1.55 | 2.49 | 2.47 | 2.32 | 7.68 |
| 25. | 1.24 | 3.53 | 12.3 | 3.97 | 2.51 | 1.46 | 1.60 | 1.93 | 2.19 | 2.04 | 2.62 | 2.42 | 2.41 | 5.76 |
| 26. | 1.27 | 3.10 | 10.1 | 3.38 | 2.38 | 1.30 | 1.55 | 1.96 | 1.97 | 1.87 | 2.66 | 2.20 | 2.23 | 5.36 |
| 27. | 1.41 | 3.75 | 8.42 | 2.96 | 2.22 | 1.38 | 1.52 | 1.57 | 2.07 | 1.81 | 2.91 | 2.33 | 2.31 | 5.36 |
| 28. | 1.22 | 3.35 | 7.42 | 2.87 | 2.07 | 1.57 | 1.46 | 1.74 | 2.52 | 1.75 | 2.76 | 2.37 | 2.33 | 5.22 |
| 29. | 1.26 | 2.81 | 6.64 | 2.95 | 2.17 | 1.57 | 1.38 | 1.60 | 2.60 | 1.73 | 2.47 | 2.12 | 2.35 | 4.25 |
| 30. | 1.33 | 4.50 | 5.93 | | 2.21 | 1.54 | 1.34 | 1.70 | 2.57 | 1.76 | 2.22 | 2.24 | 2.31 | 4.00 |
| 31. | | 4.04 | 5.33 | | 2.47 | | 1.42 | | 2.14 | 2.09 | | 2.35 | | 3.85 |
| Tag | 14. | 1. | 1. | 22. | 28. | 26. | 30. | 12. | 10. | 21. | 9. | 29. | 16. | 7. |
| NQ | 1.04 | 1.34 | 3.54 | 2.27 | 2.07 | 1.30 | 1.34 | 1.24 | 1.78 | 1.36 | 1.89 | 2.12 | 1.92 | 1.75 |
| MQ | 1.20 | 2.69 | 8.16 | 3.19 | 2.59 | 1.64 | 1.78 | 1.79 | 2.53 | 1.77 | 2.39 | 2.65 | 2.33 | 3.27 |
| HQ | 2.46 | 5.40 | 19.1 | 5.14 | 3.63 | 2.53 | 4.03 | 8.56 | 4.97 | 3.42 | 4.47 | 4.80 | 3.26 | 8.46 |
| Tag | 1. | 17. | 23. | 1. | 1. | 1. | 16. | 5. | 1. | 31. | 12. | 5. | 8. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 9 | 27 | 10 | 9 | 5 | 6 | 6 | 8 | 6 | 8 | 9 | 7 | 11 |

## Hauptwerte

| | 1925/2011 | | 1926/2012 87 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1953 | 1954 | 1947 | 1947 | 2012 | 1954 | 1947 | 1953+ | 1947 | 1953 | 1949 | 1949 | 1953 |
| NQ | 0.510 | 0.670 | 0.370 | 0.610 | 0.570 | 1.30 | 0.980 | 0.610 | 0.580 | 0.570 | 0.600 | 0.410 | 0.510 | 0.670 |
| MNQ | 3.10 | 3.44 | 4.21 | 4.71 | 4.83 | 5.33 | 3.54 | 2.81 | 2.43 | 2.25 | 2.25 | 2.35 | 3.09 | 3.42 |
| MQ | 5.70 | 6.83 | 8.61 | 8.50 | 9.11 | 8.85 | 5.69 | 4.78 | 4.49 | 3.86 | 3.43 | 4.06 | 5.68 | 6.75 |
| MHQ | 14.6 | 18.0 | 22.5 | 19.0 | 21.7 | 17.6 | 13.3 | 14.2 | 12.9 | 10.7 | 8.64 | 10.5 | 14.5 | 17.5 |
| HQ | 90.0 | 77.6 | 109 | 146 | 137 | 105 | 75.0 | 88.2 | 98.3 | 49.3 | 75.1 | 72.8 | 90.0 | 77.6 |
| Jahr | 1939 | 1939 | 1932+ | 1946 | 1947 | 1994 | 1941 | 1958 | 2002 | 1945 | 2007 | 2007 | 1939 | 1939 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 18 | 23 | 28 | 26 | 30 | 28 | 19 | 15 | 15 | 13 | 11 | 13 | 18 | 22 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 1.04 | am 14.11.2011 | 1.04 | 1.24 | 1.24 | am 12.06.2012 |
| MQ $m^3/s$ | 2.71 | | 3.27 | 2.15 | 2.85 | |
| HQ $m^3/s$ | 19.1 | am 23.01.2012 bei W= 265 cm | 19.1 | 8.56 | 19.1 | am 23.01.2012 bei W= 265 cm |
| Nq $l/(s km^2)$ | 1.28 | | 1.28 | 1.53 | 1.53 | |
| Mq $l/(s km^2)$ | 3.33 | | 4.02 | 2.64 | 3.51 | |
| Hq $l/(s km^2)$ | 23.5 | | 23.5 | 10.5 | 23.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 105 | | 63 | 42 | 111 | |
| | 1926/2012 (*) 87 Jahre | | | | 1926/2012 | |
| NQ $m^3/s$ | 0.370 | am 07.01.1954 | 0.370 | 0.410 | 0.370 | am 07.01.1954 |
| MNQ $m^3/s$ | 1.64 | | 2.45 | 1.77 | 1.70 | |
| MQ $m^3/s$ | 6.15 | | 7.93 | 4.39 | 6.14 | |
| MHQ $m^3/s$ | 43.8 | | 39.5 | 24.5 | 44.8 | |
| HQ $m^3/s$ | 146 | am 09.02.1946 bei W= 442 cm | 146 | 98.3 | 146 | am 09.02.1946 bei W= 442 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.02 | | 3.01 | 2.18 | 2.09 | |
| Mq $l/(s km^2)$ | 7.56 | | 9.75 | 5.40 | 7.55 | |
| MHq $l/(s km^2)$ | 53.9 | | 48.6 | 30.1 | 55.1 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 239 | | 153 | 86 | 239 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.370 | 0.455 | 07.01.1954 | 146 | 180 | 442 | 09.02.1946 |
| 2 | 0.410 | 0.504 | 21.10.1949 | 137 | 169 | 439 | 16.03.1947 |
| 3 | 0.570 | 0.701 | 05.08.1947 | 109 | 134 | 431 | 14.01.1948 |
| 4 | 0.570 | 0.701 | 02.03.1947 | 109 | 134 | 444 | 05.01.1932 |
| 5 | 0.580 | 0.713 | 19.07.1959 | 105 | 129 | 430 | 15.04.1994 |
| 6 | 0.790 | 0.972 | 15.10.1951 | 98.3 | 121 | 429 | 19.07.2002 |
| 7 | 0.830 | 1.02 | 07.09.1964 | 90.0 | 111 | 430 | 28.11.1939 |
| 8 | 0.850 | 1.05 | 26.06.1954 | 88.2 | 108 | 432 | 29.06.1958 |
| 9 | 0.870 | 1.07 | 21.09.1942 | 85.6 | 105 | 428 | 15.01.1938 |
| 10 | 0.880 | 1.08 | 01.01.1951 | 78.0 | 95.9 | 421 | 04.01.2003 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1926/2012 87 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 17.0 | 17.0 | | | |
| 364 | 15.4 | 15.4 | 96.7 | 43.3 | 6.30 |
| 363 | 12.8 | 12.8 | 88.2 | 35.8 | 5.92 |
| 362 | 12.3 | 12.3 | 79.5 | 32.0 | 5.80 |
| 361 | 10.4 | 10.4 | 74.0 | 29.1 | 5.52 |
| 360 | 10.1 | 10.1 | 72.9 | 27.0 | 5.42 |
| 359 | 9.96 | 9.96 | 69.5 | 25.4 | 5.40 |
| 358 | 9.73 | 9.73 | 60.5 | 24.0 | 5.20 |
| 357 | 9.32 | 9.32 | 56.4 | 22.8 | 5.15 |
| 356 | 9.22 | 9.22 | 49.8 | 21.7 | 5.13 |
| 350 | 7.89 | 7.89 | 38.3 | 18.1 | 4.58 |
| 340 | 5.34 | 5.54 | 33.0 | 14.9 | 4.10 |
| 330 | 4.04 | 4.67 | 29.4 | 12.7 | 3.87 |
| 320 | 3.61 | 3.95 | 25.8 | 11.2 | 3.66 |
| 300 | 3.16 | 3.21 | 18.6 | 8.98 | 3.21 |
| 270 | 2.72 | 2.78 | 14.8 | 7.06 | 2.78 |
| 240 | 2.56 | 2.56 | 12.8 | 5.78 | 1.87 |
| 210 | 2.43 | 2.47 | 10.5 | 4.88 | 1.51 |
| 183 | 2.22 | 2.34 | 9.42 | 4.25 | 1.34 |
| 150 | 2.03 | 2.19 | 8.31 | 3.65 | 1.11 |
| 130 | 1.90 | 2.07 | 7.23 | 3.34 | 1.02 |
| 120 | 1.87 | 2.03 | 7.05 | 3.19 | 0.930 |
| 110 | 1.81 | 1.95 | 6.55 | 3.04 | 0.930 |
| 100 | 1.77 | 1.92 | 6.23 | 2.89 | 0.930 |
| 90 | 1.67 | 1.87 | 6.05 | 2.75 | 0.930 |
| 80 | 1.61 | 1.82 | 5.83 | 2.60 | 0.900 |
| 70 | 1.58 | 1.77 | 5.71 | 2.45 | 0.870 |
| 60 | 1.52 | 1.73 | 5.48 | 2.32 | 0.870 |
| 50 | 1.46 | 1.61 | 5.33 | 2.17 | 0.820 |
| 40 | 1.43 | 1.58 | 5.07 | 2.01 | 0.790 |
| 30 | 1.36 | 1.54 | 5.00 | 1.83 | 0.680 |
| 25 | 1.33 | 1.48 | 4.92 | 1.72 | 0.650 |
| 20 | 1.26 | 1.46 | 4.79 | 1.60 | 0.630 |
| 15 | 1.21 | 1.44 | 4.77 | 1.44 | 0.600 |
| 10 | 1.15 | 1.43 | 4.54 | 1.24 | 0.580 |
| 9 | 1.13 | 1.43 | 4.51 | 1.20 | 0.580 |
| 8 | 1.12 | 1.42 | 4.41 | 1.16 | 0.560 |
| 7 | 1.11 | 1.42 | 4.34 | 1.12 | 0.560 |
| 6 | 1.10 | 1.38 | 4.31 | 1.06 | 0.560 |
| 5 | 1.08 | 1.38 | 4.31 | 1.02 | 0.560 |
| 4 | 1.06 | 1.36 | 4.31 | 0.940 | 0.510 |
| 3 | 1.06 | 1.36 | 4.19 | 0.900 | 0.510 |
| 2 | 1.06 | 1.36 | 4.14 | 0.830 | 0.490 |
| 1 | 1.05 | 1.30 | 4.13 | 0.750 | 0.430 |
| 0 | 1.04 | 1.24 | 4.04 | 0.370 | 0.370 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Oker
Eckertalsperre seit 1942 Okertalsperre seit 1956

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 1734 $km^2$

PNP : NN + 55.99 m

Lage: 29.5 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Gr.Schwülper Nr. 4829102

Gewässer : Oker

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.02 | 3.73 | 9.70 | 12.0 | 11.6 | 7.26 | 5.34 | 6.24 | 5.27 | 5.30 | 4.31 | 2.99 | 3.63 | 4.28 |
| 2. | 4.45 | 3.71 | 9.95 | 11.8 | 11.7 | 7.28 | 4.90 | 6.17 | 7.99 | 4.93 | 4.50 | 2.49 | 3.22 | 4.31 |
| 3. | 4.48 | 3.95 | 13.1 | 10.9 | 11.2 | 6.87 | 5.59 | 4.87 | 6.76 | 4.47 | 3.75 | 2.63 | 3.50 | 4.63 |
| 4. | 4.17 | 4.23 | 13.4 | 10.6 | 10.5 | 7.45 | 6.12 | 5.39 | 5.04 | 4.46 | 4.61 | 3.49 | 4.43 | 4.85 |
| 5. | 4.27 | 5.34 | 14.6 | 10.4 | 10.1 | 7.65 | 4.00 | 8.99 | 5.34 | 4.75 | 3.20 | 6.31 | 6.54 | 4.79 |
| 6. | 4.02 | 5.55 | 25.5 | 10.7 | 9.59 | 7.33 | 6.44 | 10.8 | 13.4 | 4.68 | 3.20 | 6.36 | 4.24 | 5.60 |
| 7. | 4.00 | 6.41 | 30.1 | 9.72 | 9.06 | 6.59 | 6.93 | 6.07 | 13.6 | 5.96 | 2.34 | 5.16 | 3.68 | 4.56 |
| 8. | 4.57 | 7.20 | 28.9 | 8.28 | 9.46 | 6.66 | 4.88 | 5.69 | 11.1 | 5.58 | 3.18 | 4.23 | 4.31 | 4.29 |
| 9. | 3.81 | 7.66 | 26.7 | 8.70 | 9.97 | 6.61 | 5.32 | 5.51 | 12.3 | 4.60 | 2.95 | 3.75 | 3.59 | 4.34 |
| 10. | 4.15 | 7.61 | 25.0 | 8.98 | 9.40 | 7.66 | 4.76 | 4.89 | 10.5 | 4.49 | 2.94 | 3.39 | 3.00 | 5.25 |
| 11. | 4.19 | 6.38 | 22.1 | 8.69 | 8.62 | 6.98 | 5.84 | 4.39 | 8.30 | 4.16 | 3.03 | 3.68 | 4.65 | 6.79 |
| 12. | 4.37 | 5.43 | 18.1 | 8.42 | 8.65 | 6.58 | 5.06 | 4.69 | 9.31 | 3.95 | 5.68 | 3.43 | 3.64 | 5.20 |
| 13. | 3.86 | 5.69 | 16.9 | 8.00 | 8.68 | 8.19 | 4.78 | 4.56 | 10.4 | 3.96 | 4.36 | 4.77 | 3.66 | 4.88 |
| 14. | 4.18 | 5.74 | 16.4 | 8.22 | 8.93 | 8.39 | 4.73 | 4.59 | 10.8 | 3.45 | 3.08 | 4.18 | 3.34 | 4.83 |
| 15. | 4.58 | 7.85 | 14.8 | 8.60 | 8.58 | 7.34 | 4.52 | 4.39 | 11.9 | 3.92 | 3.20 | 4.80 | 3.42 | 7.55 |
| 16. | 4.46 | 8.49 | 12.7 | 9.76 | 8.27 | 6.80 | 5.97 | 4.37 | 12.2 | 4.28 | 3.10 | 4.59 | 3.90 | 12.8 |
| 17. | 4.16 | 12.6 | 11.3 | 9.24 | 7.49 | 5.70 | 5.13 | 4.35 | 10.6 | 4.49 | 3.13 | 4.22 | 3.77 | 13.9 |
| 18. | 4.23 | 15.0 | 11.3 | 10.5 | 8.06 | 5.80 | 4.53 | 4.57 | 10.6 | 4.33 | 3.13 | 3.75 | 3.25 | 12.4 |
| 19. | 4.21 | 11.0 | 11.7 | 10.2 | 9.12 | 6.18 | 4.56 | 4.77 | 12.6 | 3.58 | 2.77 | 3.45 | 3.50 | 13.2 |
| 20. | 4.03 | 9.18 | 16.4 | 10.4 | 8.12 | 6.03 | 4.36 | 4.39 | 12.5 | 3.05 | 3.03 | 3.35 | 3.85 | 11.8 |
| 21. | 3.55 | 8.43 | 22.2 | 9.65 | 7.59 | 5.96 | 3.86 | 6.04 | 11.1 | 3.42 | 2.83 | 3.53 | 3.83 | 9.44 |
| 22. | 3.83 | 8.99 | 24.3 | 9.20 | 7.36 | 6.38 | 3.96 | 6.37 | 8.42 | 3.92 | 2.86 | 4.24 | 3.70 | 8.96 |
| 23. | 4.17 | 8.99 | 30.7 | 9.74 | 7.36 | 7.92 | 3.66 | 4.22 | 7.43 | 3.38 | 3.03 | 3.38 | 3.76 | 12.2 |
| 24. | 3.72 | 10.3 | 37.7 | 11.6 | 7.34 | 6.53 | 3.86 | 4.64 | 6.05 | 3.37 | 3.14 | 3.24 | 3.88 | 22.1 |
| 25. | 3.79 | 11.8 | 43.6 | 13.9 | 7.17 | 6.07 | 3.81 | 5.30 | 5.72 | 3.54 | 2.87 | 3.35 | 4.16 | 25.7 |
| 26. | 3.94 | 10.4 | 39.9 | 15.7 | 7.19 | 6.30 | 3.68 | 6.49 | 5.89 | 3.98 | 3.26 | 3.10 | 4.24 | 21.1 |
| 27. | 3.80 | 8.76 | 29.1 | 13.5 | 7.00 | 4.86 | 3.36 | 5.30 | 5.08 | 3.84 | 2.90 | 3.11 | 4.67 | 16.2 |
| 28. | 3.72 | 8.62 | 21.2 | 12.4 | 7.01 | 4.57 | 3.57 | 4.80 | 6.23 | 3.56 | 3.37 | 3.01 | 4.00 | 14.7 |
| 29. | 3.62 | 8.30 | 17.5 | 11.9 | 6.59 | 5.27 | 3.37 | 4.87 | 6.46 | 3.37 | 3.56 | 3.43 | 4.47 | 13.5 |
| 30. | 3.68 | 8.10 | 14.9 | | 7.03 | 5.18 | 3.38 | 4.77 | 6.42 | 3.41 | 3.27 | 3.44 | 4.25 | 11.6 |
| 31. | | 10.2 | 13.4 | | 6.91 | | 3.49 | | 6.19 | 3.46 | | 3.80 | | 11.1 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 21. | 2. | 1. | 13. | 29. | 28. | 27. | 23. | 4. | 20. | 7. | 2. | 10. | 1. |
| NQ | 3.55 | 3.71 | 9.70 | 8.00 | 6.59 | 4.57 | 3.36 | 4.22 | 5.04 | 3.05 | 2.34 | 2.49 | 3.00 | 4.28 |
| MQ | 4.07 | 7.92 | 20.7 | 10.4 | 8.57 | 6.61 | 4.64 | 5.42 | 8.88 | 4.12 | 3.35 | 3.83 | 3.94 | 9.90 |
| HQ | 4.88 | 16.4 | 44.1 | 16.4 | 11.7 | 10.2 | 7.67 | 12.3 | 16.1 | 6.90 | 7.30 | 7.13 | 7.83 | 26.6 |
| Tag | 8. | 18. | 25. | 26. | 2. | 23. | 6. | 6. | 6. | 7. | 12. | 5. | 5. | 25. |
| $h_N$ mm / $h_A$ mm | 6 | 12 | 32 | 15 | 13 | 10 | 7 | 8 | 14 | 6 | 5 | 6 | 6 | 15 |
| | 1925/2011 | | 1926/2012 86 Jahre | | | | | | | | | | | |
| Jahr | 1949 | 1933 | 1933 | 1949 | 1930 | 1933 | 1948 | 1948 | 1989 | 1947 | 1947 | 1959 | 1949 | 1933 |
| NQ | 1.91 | 2.35 | 2.58 | 1.91 | 3.31 | 2.70 | 2.18 | 1.96 | 2.05 | 1.66 | 1.66 | 1.51 | 1.91 | 2.35 |
| MNQ | 5.54 | 6.46 | 7.98 | 9.11 | 9.39 | 9.72 | 6.49 | 5.34 | 4.64 | 4.41 | 4.41 | 4.46 | 5.62 | 6.56 |
| MQ | 10.1 | 12.4 | 16.8 | 17.0 | 18.2 | 16.0 | 10.3 | 8.84 | 8.36 | 7.21 | 6.25 | 7.25 | 10.3 | 12.6 |
| MHQ | 23.3 | 30.1 | 40.6 | 36.2 | 40.9 | 29.8 | 20.9 | 21.3 | 19.0 | 16.5 | 12.6 | 17.0 | 23.7 | 29.0 |
| HQ | 183 | 144 | 168 | 217 | 173 | 154 | 81.8 | 127 | 140 | 80.8 | 61.6 | 121 | 183 | 122 |
| Jahr | 1926 | 1925 | 2003 | 1946 | 1947 | 1994 | 1961 | 1981 | 2002 | 1926 | 2010 | 2007 | 1926 | 1939 |
| $Mh_N$ mm / $Mh_A$ mm | 15 | 19 | 26 | 25 | 28 | 24 | 16 | 13 | 13 | 11 | 9 | 11 | 15 | 19 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 2.34 | am 07.09.2012 | 3.55 | 2.34 | 2.34 | am 07.09.2012 |
| MQ $m^3/s$ | 7.39 | | 9.76 | 5.05 | 7.55 | |
| HQ $m^3/s$ | 44.1 | am 25.01.2012 bei W= 449 cm | 44.1 | 16.1 | 44.1 | am 25.01.2012 bei W= 449 cm |
| Nq $l/(s km^2)$ | 1.35 | | 2.05 | 1.35 | 1.35 | |
| Mq $l/(s km^2)$ | 4.26 | | 5.63 | 2.91 | 4.35 | |
| Hq $l/(s km^2)$ | 25.4 | | 25.4 | 9.29 | 25.4 | |
| $h_N$ mm / $h_A$ mm | 135 | | 89 | 46 | 138 | |
| | 1926/2012 (*) 86 Jahre | | | | 1926/2012 | |
| NQ $m^3/s$ | 1.51 | am 12.10.1959 | 1.91 | 1.51 | 1.51 | am 12.10.1959 |
| MNQ $m^3/s$ | 3.30 | | 4.62 | 3.54 | 3.44 | |
| MQ $m^3/s$ | 11.5 | | 15.1 | 8.04 | 11.6 | |
| MHQ $m^3/s$ | 72.6 | | 68.8 | 35.5 | 74.4 | |
| HQ $m^3/s$ | 217 | am 11.02.1946 bei W= 568 cm | 217 | 140 | 217 | am 11.02.1946 bei W= 568 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.90 | | 2.66 | 2.04 | 1.98 | |
| Mq $l/(s km^2)$ | 6.63 | | 8.71 | 4.64 | 6.69 | |
| MHq $l/(s km^2)$ | 41.9 | | 39.7 | 20.5 | 42.9 | |
| $Mh_N$ mm / $Mh_A$ mm | 210 | | 137 | 74 | 212 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.51 | 0.871 | 12.10.1959 | 217 | 125 | 568 | 11.02.1946 |
| 2 | 1.66 | 0.957 | 31.08.1947 | 183 | 106 | 541 | 02.11.1926 |
| 3 | 1.82 | 1.05 | 06.10.2009 | 173 | 99.8 | 541 | 16.03.1947 |
| 4 | 1.85 | 1.07 | 08.09.1964 | 168 | 96.9 | 537 | 04.01.2003 |
| 5 | 1.91 | 1.10 | 07.11.1949 | 161 | 92.8 | 532 | 01.01.1926 |
| 6 | 1.91 | 1.10 | 20.02.1949 | 156 | 90.0 | 520 | 14.03.1981 |
| 7 | 1.96 | 1.13 | 17.09.1944 | 154 | 88.8 | 534 | 15.04.1994 |
| 8 | 2.05 | 1.18 | 19.07.1989 | 140 | 80.7 | 557 | 20.07.2002 |
| 9 | 2.06 | 1.19 | 02.09.1933 | 138 | 79.6 | 515 | 15.01.1948 |
| 10 | 2.07 | 1.19 | 06.08.1943 | 136 | 78.4 | 519 | 06.01.1932 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1926/2012 86 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 43.6 | 43.6 | | | |
| 364 | 39.9 | 39.9 | 209 | 80.1 | 11.5 |
| 363 | 37.7 | 37.7 | 201 | 68.2 | 10.6 |
| 362 | 30.7 | 30.7 | 153 | 59.8 | 10.4 |
| 361 | 30.1 | 30.1 | 124 | 55.3 | 10.3 |
| 360 | 29.1 | 29.1 | 123 | 52.0 | 9.80 |
| 359 | 28.9 | 28.9 | 104 | 48.7 | 9.75 |
| 358 | 26.7 | 26.7 | 97.2 | 47.0 | 9.65 |
| 357 | 25.5 | 25.7 | 92.5 | 45.0 | 9.60 |
| 356 | 25.0 | 25.5 | 87.6 | 43.0 | 9.25 |
| 350 | 17.5 | 21.2 | 75.1 | 35.5 | 8.65 |
| 340 | 13.6 | 14.8 | 60.4 | 28.3 | 7.90 |
| 330 | 12.4 | 13.5 | 55.2 | 24.2 | 7.66 |
| 320 | 11.7 | 12.3 | 49.8 | 21.0 | 7.00 |
| 300 | 10.5 | 10.9 | 45.3 | 16.9 | 6.03 |
| 270 | 8.68 | 8.98 | 35.0 | 13.2 | 5.12 |
| 240 | 7.45 | 7.43 | 28.1 | 10.8 | 4.26 |
| 210 | 6.42 | 6.38 | 21.5 | 8.98 | 3.81 |
| 183 | 5.70 | 5.59 | 17.8 | 7.77 | 3.62 |
| 150 | 4.86 | 4.78 | 15.0 | 6.64 | 3.35 |
| 130 | 4.57 | 4.57 | 14.0 | 6.04 | 3.04 |
| 120 | 4.45 | 4.43 | 13.5 | 5.78 | 2.92 |
| 110 | 4.31 | 4.33 | 13.0 | 5.52 | 2.69 |
| 100 | 4.19 | 4.23 | 12.3 | 5.26 | 2.50 |
| 90 | 4.03 | 3.98 | 12.1 | 5.03 | 2.40 |
| 80 | 3.94 | 3.83 | 11.7 | 4.80 | 2.29 |
| 70 | 3.79 | 3.70 | 11.4 | 4.56 | 2.24 |
| 60 | 3.71 | 3.57 | 11.2 | 4.32 | 2.18 |
| 50 | 3.53 | 3.44 | 10.8 | 4.10 | 2.13 |
| 40 | 3.39 | 3.38 | 10.5 | 3.84 | 2.07 |
| 30 | 3.36 | 3.25 | 10.0 | 3.59 | 1.96 |
| 25 | 3.24 | 3.22 | 9.76 | 3.46 | 1.93 |
| 20 | 3.14 | 3.11 | 9.51 | 3.32 | 1.91 |
| 15 | 3.05 | 3.05 | 9.36 | 3.16 | 1.88 |
| 10 | 2.99 | 2.99 | 9.08 | 2.95 | 1.77 |
| 9 | 2.95 | 2.95 | 9.07 | 2.89 | 1.72 |
| 8 | 2.94 | 2.94 | 9.07 | 2.83 | 1.72 |
| 7 | 2.90 | 2.90 | 9.07 | 2.76 | 1.72 |
| 6 | 2.87 | 2.87 | 8.98 | 2.66 | 1.72 |
| 5 | 2.86 | 2.86 | 8.85 | 2.57 | 1.72 |
| 4 | 2.83 | 2.83 | 8.79 | 2.47 | 1.67 |
| 3 | 2.77 | 2.77 | 8.59 | 2.36 | 1.67 |
| 2 | 2.63 | 2.63 | 8.58 | 2.23 | 1.67 |
| 1 | 2.49 | 2.49 | 8.55 | 2.06 | 1.56 |
| 0 | 2.34 | 2.34 | 7.70 | 1.51 | 1.51 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1942; AJ 1942;
übergreifendes Gewässer Oker
Eckertalsperre seit 1942 Okertalsperre seit 1956

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 18.3 $km^2$

PNP : NN + 407.27 m

Lage: 14.0 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Harzburg Nr. 4821122

Gewässer : Radau ges.

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.095 | 0.080 | 1.38 | 0.277 | 0.945 | 0.257 | 0.142 | 0.272 | 0.205 | 0.121 | 0.081 | 0.069 | 0.082 | 0.128 |
| 2. | 0.094 | 0.099 | 1.59 | 0.243 | 0.721 | 0.234 | 0.150 | 0.163 | 0.153 | 0.111 | 0.078 | 0.066 | 0.101 | 0.119 |
| 3. | 0.093 | 0.175 | 1.01 | 0.215 | 0.610 | 0.223 | 0.177 | 0.153 | 0.140 | 0.108 | 0.076 | 0.065 | 0.129 | 0.112 |
| 4. | 0.091 | 0.241 | 0.996 | 0.181 | 0.567 | 0.233 | 0.158 | 0.308 | 0.124 | 0.105 | 0.075 | 0.255 | 0.128 | 0.110 |
| 5. | 0.091 | 0.154 | 2.14 | 0.154 | 0.528 | 0.239 | 0.181 | 1.17 | 0.113 | 0.103 | 0.074 | 0.235 | 0.141 | 0.108 |
| 6. | 0.089 | 0.129 | 1.27 | 0.133 | 0.446 | 0.228 | 0.244 | 0.369 | 0.106 | 0.171 | 0.074 | 0.232 | 0.132 | 0.105 |
| 7. | 0.090 | 0.160 | 1.17 | 0.130 | 0.423 | 0.224 | 0.204 | 0.254 | 0.100 | 0.121 | 0.071 | 0.170 | 0.481 | 0.110 |
| 8. | 0.087 | 0.239 | 1.52 | 0.149 | 0.435 | 0.211 | 0.175 | 0.181 | 0.101 | 0.106 | 0.071 | 0.120 | 0.306 | 0.118 |
| 9. | 0.086 | 0.724 | 1.26 | 0.169 | 0.413 | 0.210 | 0.153 | 0.133 | 0.103 | 0.101 | 0.071 | 0.094 | 0.198 | 0.121 |
| 10. | 0.086 | 0.330 | 1.46 | 0.171 | 0.442 | 0.290 | 0.156 | 0.118 | 0.118 | 0.100 | 0.068 | 0.083 | 0.168 | 0.123 |
| 11. | 0.087 | 0.206 | 1.06 | 0.164 | 0.477 | 0.246 | 0.148 | 0.108 | 0.124 | 0.097 | 0.082 | 0.080 | 0.164 | 0.129 |
| 12. | 0.092 | 0.278 | 1.32 | 0.156 | 0.479 | 0.237 | 0.168 | 0.145 | 0.146 | 0.093 | 0.097 | 0.082 | 0.139 | 0.126 |
| 13. | 0.091 | 0.678 | 1.20 | 0.149 | 0.477 | 0.411 | 0.148 | 0.250 | 0.173 | 0.088 | 0.077 | 0.084 | 0.122 | 0.131 |
| 14. | 0.090 | 0.857 | 0.829 | 0.144 | 0.427 | 0.289 | 0.138 | 0.163 | 0.516 | 0.084 | 0.075 | 0.084 | 0.113 | 0.143 |
| 15. | 0.088 | 0.468 | 0.708 | 0.149 | 0.379 | 0.229 | 0.137 | 0.134 | 0.441 | 0.082 | 0.082 | 0.144 | 0.108 | 1.27 |
| 16. | 0.087 | 0.614 | 0.620 | 0.160 | 0.355 | 0.199 | 0.154 | 0.127 | 0.335 | 0.093 | 0.077 | 0.126 | 0.103 | 0.891 |
| 17. | 0.087 | 0.658 | 0.556 | 0.218 | 0.353 | 0.186 | 0.148 | 0.121 | 0.756 | 0.087 | 0.075 | 0.102 | 0.102 | 0.658 |
| 18. | 0.089 | 0.390 | 0.501 | 0.284 | 0.376 | 0.184 | 0.134 | 0.119 | 0.529 | 0.081 | 0.071 | 0.089 | 0.104 | 0.630 |
| 19. | 0.089 | 0.306 | 0.659 | 0.428 | 0.356 | 0.176 | 0.128 | 0.114 | 0.702 | 0.077 | 0.073 | 0.082 | 0.113 | 0.504 |
| 20. | 0.089 | 0.273 | 0.706 | 0.294 | 0.304 | 0.181 | 0.123 | 0.183 | 0.535 | 0.074 | 0.070 | 0.080 | 0.108 | 0.363 |
| 21. | 0.089 | 0.272 | 0.617 | 0.243 | 0.287 | 0.178 | 0.119 | 0.230 | 0.317 | 0.076 | 0.070 | 0.079 | 0.106 | 0.299 |
| 22. | 0.089 | 0.423 | 0.875 | 0.254 | 0.287 | 0.255 | 0.113 | 0.175 | 0.249 | 0.101 | 0.070 | 0.077 | 0.099 | 0.298 |
| 23. | 0.086 | 1.20 | 1.24 | 0.412 | 0.277 | 0.360 | 0.112 | 0.148 | 0.206 | 0.082 | 0.070 | 0.076 | 0.095 | 1.54 |
| 24. | 0.086 | 1.22 | 0.797 | 1.41 | 0.266 | 0.288 | 0.111 | 0.157 | 0.178 | 0.079 | 0.070 | 0.080 | 0.124 | 1.94 |
| 25. | 0.086 | 0.894 | 0.665 | 1.26 | 0.248 | 0.234 | 0.114 | 0.225 | 0.161 | 0.098 | 0.070 | 0.091 | 0.124 | 1.53 |
| 26. | 0.087 | 1.12 | 0.586 | 0.705 | 0.230 | 0.194 | 0.117 | 0.200 | 0.148 | 0.098 | 0.069 | 0.084 | 0.114 | 1.16 |
| 27. | 0.089 | 1.01 | 0.528 | 0.526 | 0.220 | 0.171 | 0.114 | 0.160 | 0.139 | 0.103 | 0.086 | 0.085 | 0.117 | 1.33 |
| 28. | 0.089 | 0.685 | 0.491 | 0.540 | 0.213 | 0.161 | 0.108 | 0.141 | 0.150 | 0.087 | 0.080 | 0.086 | 0.119 | 0.830 |
| 29. | 0.086 | 0.568 | 0.449 | 0.994 | 0.212 | 0.152 | 0.105 | 0.119 | 0.184 | 0.082 | 0.076 | 0.087 | 0.180 | 0.635 |
| 30. | 0.083 | 0.532 | 0.399 | | 0.313 | 0.146 | 0.103 | 0.114 | 0.160 | 0.078 | 0.071 | 0.085 | 0.162 | 0.598 |
| 31. | | 0.455 | 0.348 | | 0.307 | | 0.154 | | 0.135 | 0.085 | | 0.083 | | 0.549 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 7. | 29. | 30. | 30. | 11. | 7. | 20. | 10. | 3. | 1. | 6. |
| NQ | 0.083 | 0.080 | 0.348 | 0.130 | 0.212 | 0.146 | 0.103 | 0.108 | 0.100 | 0.074 | 0.068 | 0.065 | 0.082 | 0.105 |
| MQ | 0.089 | 0.498 | 0.934 | 0.356 | 0.399 | 0.228 | 0.143 | 0.208 | 0.243 | 0.096 | 0.075 | 0.105 | 0.143 | 0.539 |
| HQ | 0.096 | 1.52 | 3.54 | 2.04 | 1.04 | 0.515 | 0.516 | 2.16 | 0.982 | 0.282 | 0.137 | 0.653 | 0.628 | 2.91 |
| Tag | 1. | 13. | 5. | 24. | 1. | 13. | 31. | 5. | 19. | 6. | 11. | 4. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 13 | 73 | 137 | 49 | 58 | 32 | 21 | 29 | 36 | 14 | 11 | 15 | 20 | 79 |
| | 1925/2011 | | 1926/2012 87 Jahre | | | | | | | | | | | |
| Jahr | 2003 | 1959 | 1940 | 1940 | 1929+ | 1946 | 1946 | 1989 | 1989 | 2003 | 2003 | 1959 | 2003 | 1959 |
| NQ | 0.051 | 0.050 | 0.060 | 0.060 | 0.070 | 0.060 | 0.060 | 0.042 | 0.041 | 0.037 | 0.036 | 0.040 | 0.051 | 0.050 |
| MNQ | 0.196 | 0.210 | 0.215 | 0.231 | 0.255 | 0.306 | 0.188 | 0.148 | 0.131 | 0.120 | 0.123 | 0.133 | 0.195 | 0.209 |
| MQ | 0.444 | 0.534 | 0.564 | 0.509 | 0.590 | 0.629 | 0.354 | 0.292 | 0.291 | 0.248 | 0.241 | 0.312 | 0.442 | 0.523 |
| MHQ | 2.17 | 2.94 | 3.00 | 2.02 | 2.49 | 2.20 | 1.59 | 2.24 | 2.33 | 2.07 | 1.61 | 1.83 | 2.15 | 2.67 |
| HQ | 11.7 | 26.0 | 16.3 | 15.7 | 9.29 | 19.2 | 7.52 | 30.3 | 21.5 | 12.7 | 12.3 | 15.3 | 11.7 | 11.2 |
| Jahr | 1990 | 1925 | 1948 | 1946 | 1957 | 1994 | 1941+ | 1981 | 2002 | 2002 | 1984 | 1998 | 1990 | 1974 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 63 | 78 | 83 | 70 | 86 | 89 | 52 | 41 | 43 | 36 | 34 | 46 | 63 | 77 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.065 | am 03.10.2012 | 0.080 | 0.065 | 0.065 | am 03.10.2012 |
| MQ $m^3/s$ | 0.282 | | 0.421 | 0.145 | 0.290 | |
| HQ $m^3/s$ | 3.54 | am 05.01.2012 bei W= 46 cm | 3.54 | 2.16 | 3.54 | am 05.01.2012 bei W= 46 cm |
| Nq $l/(s km^2)$ | 3.55 | | 4.37 | 3.55 | 3.55 | |
| Mq $l/(s km^2)$ | 15.4 | | 23.0 | 7.92 | 15.8 | |
| Hq $l/(s km^2)$ | 193 | | 193 | 118 | 193 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 487 | | 362 | 126 | 501 | |
| | 1926/2012 (*) 87 Jahre | | | | 1926/2012 | |
| NQ $m^3/s$ | 0.036 | am 06.09.2003 | 0.050 | 0.036 | 0.036 | am 06.09.2003 |
| MNQ $m^3/s$ | 0.087 | | 0.127 | 0.092 | 0.087 | |
| MQ $m^3/s$ | 0.417 | | 0.545 | 0.290 | 0.416 | |
| MHQ $m^3/s$ | 7.43 | | 5.48 | 5.24 | 7.37 | |
| HQ $m^3/s$ | 30.3 | am 04.06.1981 bei W= 125 cm | 26.0 | 30.3 | 30.3 | am 04.06.1981 bei W= 125 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 4.75 | | 6.94 | 5.03 | 4.75 | |
| Mq $l/(s km^2)$ | 22.8 | | 29.8 | 15.8 | 22.7 | |
| MHq $l/(s km^2)$ | 406 | | 299 | 286 | 403 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 721 | | 468 | 252 | 719 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.036 | 1.97 | 06.09.2003 | 30.4 | 1660 | 125 | 04.06.1981 |
| 2 | 0.037 | 2.02 | 09.08.2003 | 26.0 | 1420 | 150 | 30.12.1925 |
| 3 | 0.040 | 2.19 | 21.08.1989 | 21.5 | 1170 | 124 | 17.07.2002 |
| 4 | 0.040 | 2.19 | 01.10.1959 | 19.2 | 1050 | 101 | 13.04.1994 |
| 5 | 0.040 | 2.19 | 20.09.1959 | 18.6 | 1020 | 107 | 04.07.1926 |
| 6 | 0.041 | 2.24 | 23.07.1989 | 16.8 | 918 | 101 | 28.06.1958 |
| 7 | 0.042 | 2.30 | 28.06.1989 | 16.3 | 891 | 100 | 13.01.1948 |
| 8 | 0.043 | 2.35 | 01.10.2003 | 15.7 | 856 | 98 | 03.02.1946 |
| 9 | 0.043 | 2.35 | 12.07.2003 | 15.3 | 836 | 90 | 28.10.1998 |
| 10 | 0.046 | 2.51 | 29.06.2003 | 12.7 | 694 | 92 | 12.08.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1926/2012 Obere Hüllwerte | 87 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 2.14 | 2.14 | | | |
| 364 | 1.59 | 1.94 | 10.6 | 3.54 | 1.13 |
| 363 | 1.52 | 1.59 | 5.96 | 2.87 | 0.846 |
| 362 | 1.46 | 1.54 | 5.46 | 2.46 | 0.841 |
| 361 | 1.41 | 1.53 | 5.41 | 2.21 | 0.798 |
| 360 | 1.38 | 1.52 | 5.41 | 2.05 | 0.750 |
| 359 | 1.32 | 1.46 | 4.09 | 1.91 | 0.720 |
| 358 | 1.27 | 1.41 | 3.54 | 1.80 | 0.670 |
| 357 | 1.27 | 1.38 | 3.36 | 1.71 | 0.670 |
| 356 | 1.27 | 1.33 | 3.09 | 1.62 | 0.670 |
| 350 | 1.20 | 1.24 | 2.45 | 1.32 | 0.570 |
| 340 | 0.857 | 0.891 | 1.85 | 1.06 | 0.380 |
| 330 | 0.685 | 0.702 | 1.55 | 0.881 | 0.340 |
| 320 | 0.568 | 0.586 | 1.29 | 0.771 | 0.320 |
| 300 | 0.442 | 0.442 | 1.03 | 0.621 | 0.260 |
| 270 | 0.289 | 0.289 | 0.870 | 0.471 | 0.190 |
| 240 | 0.235 | 0.229 | 0.720 | 0.391 | 0.150 |
| 210 | 0.183 | 0.177 | 0.620 | 0.321 | 0.125 |
| 183 | 0.157 | 0.156 | 0.530 | 0.271 | 0.110 |
| 150 | 0.135 | 0.134 | 0.450 | 0.228 | 0.092 |
| 130 | 0.117 | 0.122 | 0.400 | 0.199 | 0.083 |
| 120 | 0.111 | 0.119 | 0.370 | 0.182 | 0.077 |
| 110 | 0.105 | 0.114 | 0.356 | 0.178 | 0.070 |
| 100 | 0.098 | 0.110 | 0.341 | 0.164 | 0.064 |
| 90 | 0.092 | 0.106 | 0.333 | 0.153 | 0.060 |
| 80 | 0.090 | 0.102 | 0.320 | 0.141 | 0.055 |
| 70 | 0.088 | 0.098 | 0.300 | 0.135 | 0.054 |
| 60 | 0.087 | 0.088 | 0.290 | 0.128 | 0.052 |
| 50 | 0.084 | 0.084 | 0.290 | 0.119 | 0.048 |
| 40 | 0.082 | 0.082 | 0.290 | 0.107 | 0.047 |
| 30 | 0.078 | 0.078 | 0.260 | 0.099 | 0.045 |
| 25 | 0.077 | 0.077 | 0.260 | 0.091 | 0.043 |
| 20 | 0.076 | 0.076 | 0.230 | 0.085 | 0.043 |
| 15 | 0.073 | 0.073 | 0.230 | 0.081 | 0.042 |
| 10 | 0.071 | 0.071 | 0.230 | 0.073 | 0.039 |
| 9 | 0.071 | 0.071 | 0.230 | 0.071 | 0.039 |
| 8 | 0.071 | 0.071 | 0.230 | 0.071 | 0.038 |
| 7 | 0.071 | 0.071 | 0.230 | 0.071 | 0.038 |
| 6 | 0.071 | 0.071 | 0.230 | 0.068 | 0.038 |
| 5 | 0.071 | 0.071 | 0.230 | 0.065 | 0.038 |
| 4 | 0.070 | 0.070 | 0.230 | 0.062 | 0.038 |
| 3 | 0.070 | 0.070 | 0.230 | 0.060 | 0.038 |
| 2 | 0.068 | 0.068 | 0.230 | 0.054 | 0.038 |
| 1 | 0.066 | 0.066 | 0.230 | 0.049 | 0.037 |
| 0 | 0.065 | 0.065 | 0.180 | 0.036 | 0.036 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Oberharz

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 160 km²
PNP : NN + 97.76 m
Lage: 11.3 km oberhalb der Mündung, links

# Q
m³/s

Pegel : Hoppenstedt Nr. 444210
Gewässer : Ilse
Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.257 | 0.227 | 1.28 | D 1.19 | 2.10 | 0.737 | 0.740 | 0.424 | 0.501 | 0.274 | 0.210 | 0.151 | 0.214 | 0.282 |
| 2. | 0.256 | 0.250 | 3.08 | D 1.18 | 1.66 | 0.621 | 0.735 | 0.226 | 0.312 | 0.275 | 0.214 | 0.151 | 0.243 | 0.266 |
| 3. | 0.273 | 0.274 | 1.87 | D 1.17 | 1.17 | 0.578 | 0.774 | 0.214 | 0.309 | 0.284 | 0.190 | 0.154 | 0.227 | 0.280 |
| 4. | 0.267 | 0.313 | 1.57 | D 1.16 | 0.999 | 0.630 | 0.568 | 0.337 | 0.307 | 0.283 | 0.186 | 0.205 | 0.242 | 0.263 |
| 5. | 0.263 | 0.351 | 3.15 | D 1.15 | 0.913 | 0.574 | 0.601 | 1.50 | 0.446 | 0.259 | 0.192 | 0.716 | 0.245 | 0.275 |
| 6. | 0.260 | 0.340 | 2.89 | D 1.14 | 0.821 | 0.561 | 0.713 | 0.582 | 0.355 | 0.357 | 0.186 | 0.445 | 0.251 | 0.254 |
| 7. | 0.256 | 0.336 | 2.06 | D 1.13 | 0.723 | 0.555 | 0.538 | 0.387 | 0.295 | 0.297 | 0.175 | 0.378 | 0.232 | G 0.269 |
| 8. | 0.238 | 0.361 | 2.44 | D 1.12 | 0.752 | 0.574 | 0.474 | 0.324 | 0.314 | 0.279 | 0.170 | 0.257 | 0.706 | G 0.283 |
| 9. | 0.250 | 0.523 | 2.39 | D 1.12 | 0.707 | 0.574 | 0.422 | 0.276 | 0.298 | 0.292 | 0.170 | 0.211 | 0.338 | 0.300 |
| 10. | 0.247 | 0.549 | 2.63 | D 1.11 | 0.670 | 0.604 | 0.419 | 0.242 | 0.313 | 0.286 | 0.164 | 0.197 | 0.313 | 0.364 |
| 11. | 0.238 | 0.391 | 2.00 | D 1.10 | 0.702 | 0.697 | 0.434 | 0.242 | 0.313 | 0.286 | 0.213 | 0.196 | 0.316 | G 0.287 |
| 12. | 0.240 | 0.355 | 1.95 | D 1.09 | 0.889 | 0.761 | 0.471 | 0.247 | 0.309 | 0.286 | 0.223 | 0.230 | 0.296 | G 0.262 |
| 13. | 0.237 | 0.433 | 2.71 | D 1.08 | 1.18 | 1.00 | 0.413 | 0.274 | 0.340 | 0.271 | 0.178 | 0.192 | 0.279 | G 0.262 |
| 14. | 0.234 | 1.04 | 1.82 | D 1.07 | 1.07 | 0.850 | 0.383 | 0.245 | 0.688 | 0.244 | 0.213 | 0.200 | 0.242 | G 0.254 |
| 15. | 0.231 | 0.794 | 1.44 | D 1.06 | 0.852 | 0.729 | 0.369 | 0.247 | 0.663 | 0.247 | 0.194 | 0.208 | 0.250 | 1.23 |
| 16. | 0.228 | 0.964 | 1.23 | D 0.991 | 0.781 | 0.668 | 0.387 | 0.242 | 0.435 | 0.322 | 0.179 | 0.227 | 0.242 | 1.44 |
| 17. | 0.224 | 1.82 | 1.11 | 0.877 | 0.972 | 0.620 | 0.325 | 0.226 | 0.448 | 0.303 | 0.173 | 0.211 | 0.249 | 1.19 |
| 18. | 0.221 | 0.924 | 0.994 | 0.843 | 1.28 | 0.620 | 0.263 | 0.209 | 0.591 | 0.278 | 0.193 | 0.213 | 0.245 | 0.948 |
| 19. | 0.218 | 0.689 | 1.18 | 1.05 | 1.06 | 0.623 | 0.235 | 0.222 | 0.533 | 0.259 | 0.182 | 0.211 | 0.253 | 0.779 |
| 20. | 0.215 | 0.565 | 1.72 | 0.864 | 0.713 | 0.675 | 0.235 | 0.491 | 0.469 | 0.248 | 0.206 | 0.211 | 0.231 | 0.607 |
| 21. | 0.211 | 0.589 | 1.47 | 0.759 | 0.622 | 0.684 | 0.212 | 0.707 | 0.380 | 0.248 | 0.183 | 0.197 | 0.242 | 0.518 |
| 22. | 0.208 | 0.666 | 1.90 | 0.721 | 0.681 | 0.714 | 0.191 | 0.551 | 0.333 | 0.293 | 0.162 | 0.196 | 0.242 | 0.470 |
| 23. | 0.205 | 1.66 | 3.59 | 0.764 | 0.797 | 0.831 | 0.178 | 0.408 | 0.298 | 0.263 | 0.151 | 0.202 | 0.233 | 1.62 |
| 24. | 0.203 | 2.01 | 2.99 | 1.26 | 0.784 | 0.725 | 0.148 | 0.377 | 0.279 | 0.253 | 0.148 | 0.190 | 0.244 | 4.25 |
| 25. | 0.208 | 1.26 | 2.40 | 2.21 | 0.805 | 0.733 | 0.138 | 0.399 | 0.266 | 0.239 | 0.155 | 0.183 | 0.260 | 3.16 |
| 26. | 0.214 | 1.35 | 2.03 | 1.25 | 0.703 | 0.725 | 0.137 | 0.352 | 0.249 | 0.214 | 0.181 | 0.191 | 0.239 | 2.77 |
| 27. | 0.220 | 2.00 | 1.74 | 0.890 | 0.657 | 0.774 | 0.126 | 0.316 | 0.245 | 0.190 | 0.224 | 0.205 | 0.234 | 2.52 |
| 28. | 0.214 | 1.35 | 1.50 | 0.751 | 0.725 | 0.798 | 0.136 | 0.321 | 0.414 | 0.182 | 0.181 | 0.219 | 0.231 | 1.95 |
| 29. | 0.235 | 0.956 | 1.33 | 1.48 | 0.770 | 0.806 | 0.130 | 0.289 | 0.485 | 0.180 | 0.162 | 0.225 | 0.275 | 1.33 |
| 30. | 0.228 | 1.23 | D 1.24 | | 0.775 | 0.766 | 0.119 | 0.284 | 0.332 | 0.181 | 0.160 | 0.247 | 0.348 | 1.25 |
| 31. | | 0.909 | D 1.19 | | 0.965 | | 0.144 | | 0.282 | 0.193 | | 0.237 | | 1.12 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 18. | 22. | 21. | 7. | 30. | 18. | 27. | 29. | 24. | 1.+ | 1. | 6.+ |
| NQ | 0.203 | 0.227 | 0.994 | 0.721 | 0.622 | 0.555 | 0.119 | 0.209 | 0.245 | 0.180 | 0.148 | 0.151 | 0.214 | 0.254 |
| MQ | 0.233 | 0.822 | 1.96 | 1.09 | 0.913 | 0.694 | 0.360 | 0.372 | 0.381 | 0.260 | 0.184 | 0.234 | 0.272 | 1.00 |
| HQ | 0.293 | 2.81 | 4.70 | 2.80 | 2.41 | 1.20 | 1.07 | 2.13 | 3.11 | 0.832 | 0.698 | 1.52 | 0.940 | 5.43 |
| Tag | 2. | 17. | 5. | 25. | 1. | 13. | 3. | 5. | 5. | 6. | 11. | 5. | 8. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 14 | 33 | 17 | 15 | 11 | 6 | 6 | 6 | 4 | 3 | 4 | 4 | 17 |

| | 1929/2011 | | 1930/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1932 + | 1934 | 1930 | 1933 | 1933 | 1933 + | 1933 + | 1954 | 1968 | 1968 | 1934 | 1949 | 1932 + |
| NQ | 0.050 | 0.100 | 0.070 | 0.080 | 0.120 | 0.130 | 0.090 | 0.080 | 0.030 | 0.060 | 0.050 | 0.060 | 0.050 | 0.100 |
| MNQ | 0.550 | 0.638 | 0.773 | 0.875 | 0.962 | 1.11 | 0.754 | 0.552 | 0.411 | 0.348 | 0.362 | 0.407 | 0.552 | 0.636 |
| MQ | 1.02 | 1.23 | 1.60 | 1.55 | 1.78 | 1.87 | 1.34 | 1.01 | 0.784 | 0.637 | 0.612 | 0.735 | 1.02 | 1.22 |
| MHQ | 4.09 | 4.75 | 5.89 | 4.66 | 5.62 | 4.79 | 4.24 | 4.60 | 3.90 | 2.58 | 3.13 | 3.16 | 4.12 | 4.60 |
| HQ | 24.3 | 28.9 | 23.6 | 29.6 | 28.4 | 34.0 | 29.4 | 31.0 | 50.1 | 29.2 | 31.7 | 30.2 | 24.3 | 28.9 |
| Jahr | 1939 | 1993 | 1938 | 1940 | 1942 | 1994 | 1941 | 1958 | 2002 | 2002 | 2007 | 1998 | 1939 | 1993 |

| | 1929/2011 | | 1930/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 17 | 21 | 27 | 24 | 30 | 30 | 22 | 16 | 13 | 11 | 10 | 12 | 17 | 20 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.119 | am 30.05.2012 | 0.203 | 0.119 | 0.119 | am 30.05.2012 |
| MQ m³/s | 0.626 | | 0.956 | 0.299 | 0.644 | |
| HQ m³/s | 4.70 | am 05.01.2012 bei W= 81 cm | 4.70 | 3.11 | 5.43 | am 24.12.2012 bei W= 85 cm |
| Nq l/(s km²) | 0.744 | | 1.27 | 0.744 | 0.744 | |
| Mq l/(s km²) | 3.91 | | 5.98 | 1.87 | 4.03 | |
| Hq l/(s km²) | 29.4 | | 29.4 | 19.4 | 33.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 123 | | 94 | 30 | 127 | |
| | 1930/2012 (*) 80 Jahre | | | | 1930/2012 | |
| NQ m³/s | 0.030 | am 03.07.1954 | 0.050 | 0.030 | 0.030 | am 03.07.1954 |
| MNQ m³/s | 0.255 | | 0.446 | 0.276 | 0.252 | |
| MQ m³/s | 1.20 | | 1.54 | 0.859 | 1.18 | |
| MHQ m³/s | 14.3 | | 11.1 | 9.48 | 14.3 | |
| HQ m³/s | 50.1 | am 18.07.2002 bei W= 235 cm | 34.0 | 50.1 | 50.1 | am 18.07.2002 bei W= 235 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(s km²) | 1.59 | | 2.79 | 1.72 | 1.58 | |
| Mq l/(s km²) | 7.50 | | 9.62 | 5.37 | 7.38 | |
| MHq l/(s km²) | 89.4 | | 69.4 | 59.2 | 89.4 | |
| | 1930/2012 (*) 80 Jahre | | | | 1930/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 237 | | 151 | 85 | 233 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.030 | 0.188 | 03.07.1954 | 50.1 | 313 | 235 | 18.07.2002 |
| 2 | 0.050 | 0.312 | 24.07.1968 | 34.0 | 212 | 195 | 13.04.1994 |
| 3 | 0.050 | 0.312 | 17.07.1960 | 31.7 | 198 | 212 | 29.09.2007 |
| 4 | 0.050 | 0.312 | 04.11.1949 | 31.0 | 194 | 231 | 28.06.1958 |
| 5 | 0.060 | 0.375 | 22.09.1973 | 30.2 | 189 | 185 | 28.10.1998 |
| 6 | 0.060 | 0.375 | 01.10.1934 | 29.6 | 185 | 225 | 25.02.1940 |
| 7 | 0.080 | 0.500 | 06.08.1963 | 29.4 | 184 | 224 | 30.05.1941 |
| 8 | 0.080 | 0.500 | 20.09.1959 | 28.9 | 181 | 150 | 31.12.1993 |
| 9 | 0.080 | 0.500 | 30.07.1933 | 28.5 | 178 | 177 | 21.07.1997 |
| 10 | 0.080 | 0.500 | 13.08.1932 | 28.4 | 178 | 229 | 18.03.1942 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1930/2012 Obere Hüllwerte | 77 Kalenderjahre Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 3.59 | 4.25 | | | |
| 364 | 3.15 | 3.59 | 42.2 | 8.76 | 1.92 |
| 363 | 3.08 | 3.16 | 24.5 | 7.02 | 1.91 |
| 362 | 2.99 | 3.15 | 14.4 | 6.19 | 1.82 |
| 361 | 2.89 | 3.08 | 13.7 | 5.53 | 1.70 |
| 360 | 2.71 | 2.99 | 11.0 | 5.15 | 1.58 |
| 359 | 2.63 | 2.89 | 10.2 | 4.84 | 1.46 |
| 358 | 2.44 | 2.77 | 9.80 | 4.57 | 1.23 |
| 357 | 2.40 | 2.71 | 8.88 | 4.36 | 1.09 |
| 356 | 2.39 | 2.63 | 8.88 | 4.17 | 1.02 |
| 350 | 2.01 | 2.10 | 7.02 | 3.51 | 0.820 |
| 340 | 1.66 | 1.72 | 6.24 | 2.87 | 0.450 |
| 330 | 1.33 | 1.44 | 5.38 | 2.56 | 0.300 |
| 320 | 1.19 | 1.23 | 4.68 | 2.26 | 0.290 |
| 300 | 1.05 | 1.08 | 3.64 | 1.83 | 0.260 |
| 270 | 0.775 | 0.775 | 3.02 | 1.44 | 0.230 |
| 240 | 0.684 | 0.684 | 2.78 | 1.16 | 0.210 |
| 210 | 0.533 | 0.491 | 2.56 | 0.942 | 0.190 |
| 183 | 0.377 | 0.355 | 2.27 | 0.791 | 0.180 |
| 150 | 0.292 | 0.287 | 1.91 | 0.670 | 0.170 |
| 130 | 0.266 | 0.271 | 1.74 | 0.591 | 0.140 |
| 120 | 0.256 | 0.260 | 1.66 | 0.551 | 0.130 |
| 110 | 0.248 | 0.249 | 1.50 | 0.535 | 0.120 |
| 100 | 0.239 | 0.245 | 1.28 | 0.501 | 0.120 |
| 90 | 0.230 | 0.243 | 1.23 | 0.462 | 0.110 |
| 80 | 0.222 | 0.232 | 1.17 | 0.421 | 0.110 |
| 70 | 0.214 | 0.222 | 1.17 | 0.401 | 0.100 |
| 60 | 0.210 | 0.212 | 1.12 | 0.361 | 0.100 |
| 50 | 0.202 | 0.202 | 1.07 | 0.321 | 0.100 |
| 40 | 0.192 | 0.192 | 1.02 | 0.288 | 0.100 |
| 30 | 0.183 | 0.183 | 0.970 | 0.254 | 0.100 |
| 25 | 0.180 | 0.180 | 0.920 | 0.229 | 0.100 |
| 20 | 0.173 | 0.173 | 0.920 | 0.211 | 0.090 |
| 15 | 0.162 | 0.162 | 0.840 | 0.191 | 0.090 |
| 10 | 0.154 | 0.154 | 0.830 | 0.162 | 0.080 |
| 9 | 0.151 | 0.151 | 0.790 | 0.155 | 0.080 |
| 8 | 0.151 | 0.151 | 0.780 | 0.141 | 0.080 |
| 7 | 0.148 | 0.148 | 0.780 | 0.131 | 0.060 |
| 6 | 0.144 | 0.144 | 0.780 | 0.131 | 0.060 |
| 5 | 0.138 | 0.138 | 0.780 | 0.123 | 0.060 |
| 4 | 0.137 | 0.137 | 0.780 | 0.114 | 0.060 |
| 3 | 0.136 | 0.136 | 0.740 | 0.102 | 0.060 |
| 2 | 0.130 | 0.130 | 0.740 | 0.091 | 0.050 |
| 1 | 0.126 | 0.126 | 0.740 | 0.090 | 0.050 |
| 0 | 0.119 | 0.119 | 0.690 | 0.030 | 0.030 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1944-1947 ,1981-1982; AJ 1945 ,1947 ,1982;

Krautwuchs

Landesbetrieb für Hochwasserschutz und Wasserwirtschaft Sachsen-Anhalt

$A_{Eo}$ : 592 $km^2$

PNP : NN + 60.92 m

Lage: 3.6 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Harxbüttel Nr. 4828140

Gewässer : Schunter

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.11 | 0.892 | 3.19 | 3.79 | 4.32 | 1.77 | 1.31 | 1.36 | 1.15 | 1.35 | 1.02 | 0.931 | 1.26 | 1.44 |
| 2. | 1.14 | 0.955 | 3.60 | 3.67 | 3.91 | 1.64 | 1.29 | 1.37 | 1.47 | 1.27 | 1.05 | 0.919 | 1.10 | 1.49 |
| 3. | 1.14 | 1.01 | 5.58 | 3.14 | 3.51 | 1.62 | 1.28 | 1.10 | 1.29 | 1.27 | 0.913 | 0.905 | 1.18 | 1.55 |
| 4. | 1.08 | 1.08 | 5.06 | 2.71 | 3.14 | 1.94 | 1.25 | 1.26 | 1.12 | 1.08 | 0.861 | 1.12 | 1.25 | 1.62 |
| 5. | 1.08 | 1.24 | 6.24 | 2.54 | 2.92 | 2.01 | 1.26 | 1.87 | 1.11 | 1.16 | 0.847 | 1.56 | 1.27 | 1.75 |
| 6. | 1.04 | 1.40 | 11.1 | 2.20 | 2.69 | 1.74 | 1.44 | 1.89 | 4.30 | 1.19 | 0.824 | 1.73 | 1.20 | 1.74 |
| 7. | 1.01 | 1.67 | 12.4 | 2.11 | 2.52 | 1.75 | 1.42 | 1.33 | 5.44 | 1.50 | 0.808 | 1.53 | 1.20 | 1.66 |
| 8. | 1.05 | 2.12 | 11.2 | 2.19 | 2.81 | 1.77 | 1.33 | 1.25 | 5.89 | 1.28 | 0.793 | 1.31 | 1.31 | 1.69 |
| 9. | 1.03 | 2.25 | 9.73 | 2.12 | 2.90 | 1.70 | 1.27 | 1.23 | 6.94 | 1.14 | 0.789 | 1.15 | 1.36 | 1.56 |
| 10. | 0.999 | 1.96 | 8.97 | 2.05 | 2.68 | 1.90 | 1.31 | 1.10 | 4.98 | 1.07 | 0.779 | 1.12 | 1.28 | 1.85 |
| 11. | 1.01 | 1.70 | 7.57 | 1.97 | 2.58 | 1.80 | 1.48 | 1.03 | 3.13 | 1.05 | 0.883 | 1.08 | 1.33 | 2.05 |
| 12. | 0.973 | 1.62 | 5.99 | 1.92 | 2.42 | 1.72 | 1.42 | 0.978 | 3.33 | 1.01 | 1.09 | 1.14 | 1.40 | 2.00 |
| 13. | 0.952 | 1.62 | 5.73 | 1.95 | 2.36 | 2.48 | 1.25 | 1.00 | 3.75 | 0.935 | 1.10 | 1.32 | 1.26 | 1.75 |
| 14. | 0.942 | 1.73 | 5.42 | 2.01 | 2.29 | 2.67 | 1.18 | 0.968 | 4.12 | 0.905 | 0.936 | 1.31 | 1.20 | 1.76 |
| 15. | 0.932 | 1.99 | 4.66 | 2.46 | 2.22 | 2.11 | 1.20 | 0.910 | 5.06 | 0.864 | 0.884 | 1.42 | 1.20 | 2.78 |
| 16. | 0.922 | 2.71 | 3.77 | 2.73 | 2.17 | 1.87 | 1.28 | 0.925 | 4.61 | 1.02 | 0.868 | 1.54 | 1.17 | 5.77 |
| 17. | 0.928 | 5.87 | 3.59 | 2.74 | 2.10 | 1.76 | 1.18 | 0.948 | 3.62 | 1.04 | 0.868 | 1.33 | 1.15 | 6.57 |
| 18. | 0.894 | 7.08 | 3.37 | 3.44 | 2.07 | 1.69 | 1.12 | 0.924 | 3.68 | 0.957 | 0.857 | 1.22 | 1.16 | 6.75 |
| 19. | 0.897 | 4.39 | 3.85 | 3.14 | 2.05 | 1.66 | 1.08 | 0.929 | 4.80 | 0.832 | 0.845 | 1.15 | 1.20 | 6.82 |
| 20. | 0.893 | 3.49 | 7.57 | 3.02 | 1.90 | 1.62 | 1.06 | 0.989 | 4.75 | 0.783 | 0.829 | 1.10 | 1.20 | 5.90 |
| 21. | 0.883 | 3.41 | 10.0 | 2.79 | 1.86 | 1.59 | 1.01 | 1.02 | 3.65 | 0.775 | 0.818 | 1.06 | 1.18 | 4.48 |
| 22. | 0.878 | 3.57 | 10.8 | 2.80 | 1.80 | 1.56 | 0.974 | 1.13 | 2.54 | 0.876 | 0.889 | 1.03 | 1.15 | 3.57 |
| 23. | 0.871 | 4.03 | 13.6 | 3.32 | 1.82 | 1.54 | 0.959 | 0.929 | 2.16 | 0.831 | 0.899 | 1.04 | 1.16 | 4.96 |
| 24. | 0.848 | 4.60 | 18.2 | 4.71 | 1.83 | 1.58 | 0.937 | 0.921 | 1.87 | 0.808 | 0.906 | 1.07 | 1.19 | 10.5 |
| 25. | 0.833 | 4.93 | 18.7 | 6.57 | 1.76 | 1.56 | 0.895 | 1.12 | 1.72 | 0.818 | 0.946 | 1.13 | 1.30 | 11.8 |
| 26. | 0.823 | 3.95 | 13.8 | 6.35 | 1.72 | 1.58 | 0.887 | 1.26 | 1.59 | 0.873 | 0.947 | 1.18 | 1.34 | 9.58 |
| 27. | 0.813 | 3.32 | 8.44 | 5.26 | 1.73 | 1.29 | 0.855 | 1.16 | 1.49 | 0.841 | 0.931 | 1.16 | 1.42 | 6.84 |
| 28. | 0.806 | 2.91 | 6.50 | 4.77 | 1.73 | 1.40 | 0.866 | 1.16 | 1.63 | 0.799 | 1.00 | 1.10 | 1.29 | 5.96 |
| 29. | 0.828 | 2.75 | 5.38 | 4.60 | 1.70 | 1.36 | 0.857 | 1.22 | 1.78 | 0.776 | 1.03 | 1.07 | 1.39 | 4.84 |
| 30. | 0.857 | 3.07 | 4.79 | | 1.78 | 1.35 | 0.845 | 1.08 | 1.65 | 0.759 | 0.948 | 1.12 | 1.42 | 4.23 |
| 31. | | 3.52 | 4.07 | | 1.80 | | 0.907 | | 1.54 | 0.783 | | 1.19 | | 4.10 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 28. | 1. | 1. | 12. | 29. | 27. | 30. | 15. | 5. | 30. | 10. | 3. | 2. | 1. |
| NQ | 0.806 | 0.892 | 3.19 | 1.92 | 1.70 | 1.29 | 0.845 | 0.910 | 1.11 | 0.759 | 0.779 | 0.905 | 1.10 | 1.44 |
| MQ | 0.949 | 2.80 | 7.84 | 3.21 | 2.36 | 1.73 | 1.14 | 1.15 | 3.10 | 0.988 | 0.906 | 1.20 | 1.25 | 4.17 |
| HQ | 1.15 | 9.80 | 20.8 | 7.09 | 4.43 | 3.15 | 1.55 | 2.36 | 8.70 | 1.61 | 1.69 | 1.87 | 1.63 | 12.7 |
| Tag | 2. | 18. | 24. | 25. | 1. | 14. | 11. | 5. | 9. | 7. | 26. | 6. | 27. | 24. |
| $h_N$ mm / $h_A$ mm | 4 | 13 | 35 | 14 | 11 | 8 | 5 | 5 | 14 | 4 | 4 | 5 | 5 | 19 |

| | 1960/2011 | | 1961/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 52 Jahre | | | | | | | | | | | |
| Jahr | 2009 | 1969 | 1970 | 1963 | 1963 | 1991 | 1991 | 2000 | 2000 | 1989 | 1995 | 2009 | 2009 | 1969 |
| NQ | 0.228 | 0.160 | 0.140 | 0.480 | 0.490 | 0.976 | 0.725 | 0.525 | 0.465 | 0.317 | 0.278 | 0.274 | 0.228 | 0.160 |
| MNQ | 1.22 | 1.57 | 2.10 | 2.45 | 2.74 | 2.49 | 1.55 | 1.18 | 0.955 | 0.837 | 0.874 | 0.972 | 1.20 | 1.51 |
| MQ | 2.62 | 4.07 | 5.54 | 5.49 | 6.19 | 4.69 | 2.79 | 2.12 | 1.62 | 1.51 | 1.39 | 1.56 | 2.54 | 3.92 |
| MHQ | 8.19 | 13.6 | 17.0 | 15.9 | 18.7 | 11.5 | 8.96 | 7.48 | 5.11 | 5.64 | 4.49 | 5.26 | 7.86 | 13.3 |
| HQ | 26.9 | 50.3 | 60.3 | 47.2 | 61.7 | 50.9 | 32.4 | 44.4 | 42.7 | 27.4 | 40.4 | 37.0 | 26.9 | 50.3 |
| Jahr | 1998 | 1986 | 2003 | 1970 | 1979 | 1994 | 1961 | 1961 | 2002 | 2007 | 2010 | 1998 | 1998 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 11 | 18 | 25 | 23 | 28 | 21 | 13 | 9 | 7 | 7 | 6 | 7 | 11 | 18 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.759 | am 30.08.2012 | 0.806 | 0.759 | 0.759 | am 30.08.2012 |
| MQ $m^3/s$ | 2.29 | | 3.17 | 1.42 | 2.43 | |
| HQ $m^3/s$ | 20.8 | am 24.01.2012 bei W= 267 cm | 20.8 | 8.70 | 20.8 | am 24.01.2012 bei W= 267 cm |
| Nq $l/(s km^2)$ | 1.28 | | 1.36 | 1.28 | 1.28 | |
| Mq $l/(s km^2)$ | 3.87 | | 5.35 | 2.40 | 4.10 | |
| Hq $l/(s km^2)$ | 35.2 | | 35.2 | 14.7 | 35.2 | |
| $h_N$ mm / $h_A$ mm | 122 | | 84 | 38 | 130 | |
| | 1961/2012 (*) 52 Jahre | | | | 1961/2012 | |
| NQ $m^3/s$ | 0.140 | am 10.01.1970 | 0.140 | 0.274 | 0.140 | am 10.01.1970 |
| MNQ $m^3/s$ | 0.632 | | 1.03 | 0.719 | 0.672 | |
| MQ $m^3/s$ | 3.29 | | 4.77 | 1.83 | 3.27 | |
| MHQ $m^3/s$ | 28.7 | | 27.3 | 13.5 | 29.6 | |
| HQ $m^3/s$ | 61.7 | am 04.03.1979 bei W= 335 cm | 61.7 | 44.4 | 61.7 | am 04.03.1979 bei W= 335 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.07 | | 1.74 | 1.21 | 1.14 | |
| Mq $l/(s km^2)$ | 5.56 | | 8.06 | 3.09 | 5.52 | |
| MHq $l/(s km^2)$ | 48.5 | | 46.1 | 22.8 | 50.0 | |
| $Mh_N$ mm / $Mh_A$ mm | 176 | | 127 | 49 | 175 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.140 | 0.236 | 10.01.1970 | 61.7 | 104 | 335 | 04.03.1979 |
| 2 | 0.228 | 0.385 | 01.11.2009 | 60.8 | 103 | 326 | 13.03.1981 |
| 3 | 0.278 | 0.470 | 01.09.1995 | 60.3 | 102 | 339 | 04.01.2003 |
| 4 | 0.317 | 0.535 | 22.08.1989 | 53.9 | 91.0 | 316 | 01.01.1987 |
| 5 | 0.330 | 0.557 | 02.08.1974 | 52.5 | 88.7 | 307 | 28.01.1994 |
| 6 | 0.335 | 0.566 | 07.09.2001 | 52.4 | 88.5 | 325 | 20.03.1970 |
| 7 | 0.340 | 0.574 | 09.09.1973 | 50.9 | 86.0 | 308 | 15.04.1994 |
| 8 | 0.350 | 0.591 | 15.09.1964 | 50.7 | 85.6 | 326 | 16.01.1968 |
| 9 | 0.369 | 0.623 | 06.09.2003 | 47.2 | 79.7 | 314 | 24.02.1970 |
| 10 | 0.374 | 0.632 | 13.08.1999 | 45.5 | 76.9 | 293 | 20.03.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1961/2012 52 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 18.7 | 18.7 | | | |
| 364 | 18.2 | 18.2 | 57.9 | 28.9 | 6.44 |
| 363 | 13.8 | 13.8 | 51.3 | 24.5 | 6.00 |
| 362 | 13.6 | 13.6 | 49.0 | 22.3 | 5.62 |
| 361 | 12.4 | 12.4 | 49.0 | 20.6 | 4.70 |
| 360 | 11.2 | 11.8 | 43.2 | 18.9 | 4.66 |
| 359 | 11.1 | 11.2 | 43.1 | 17.8 | 4.63 |
| 358 | 10.8 | 11.1 | 43.0 | 16.9 | 4.62 |
| 357 | 10.0 | 10.8 | 40.7 | 16.0 | 4.34 |
| 356 | 9.73 | 10.5 | 40.6 | 15.5 | 4.25 |
| 350 | 6.94 | 8.44 | 31.5 | 12.2 | 3.65 |
| 340 | 5.44 | 6.24 | 23.0 | 9.19 | 3.04 |
| 330 | 4.77 | 5.38 | 18.3 | 7.31 | 2.46 |
| 320 | 4.12 | 4.75 | 17.7 | 6.20 | 2.15 |
| 300 | 3.41 | 3.62 | 13.6 | 4.70 | 1.71 |
| 270 | 2.48 | 2.52 | 9.28 | 3.48 | 1.44 |
| 240 | 1.89 | 1.89 | 7.21 | 2.73 | 1.20 |
| 210 | 1.65 | 1.70 | 5.66 | 2.19 | 1.02 |
| 183 | 1.42 | 1.47 | 4.50 | 1.83 | 0.867 |
| 150 | 1.20 | 1.29 | 3.80 | 1.52 | 0.781 |
| 130 | 1.13 | 1.22 | 3.51 | 1.37 | 0.739 |
| 120 | 1.11 | 1.19 | 3.42 | 1.30 | 0.714 |
| 110 | 1.08 | 1.17 | 3.25 | 1.24 | 0.698 |
| 100 | 1.05 | 1.13 | 3.16 | 1.17 | 0.679 |
| 90 | 1.02 | 1.11 | 3.02 | 1.10 | 0.660 |
| 80 | 0.968 | 1.08 | 2.90 | 1.04 | 0.632 |
| 70 | 0.937 | 1.03 | 2.82 | 0.967 | 0.616 |
| 60 | 0.924 | 0.968 | 2.65 | 0.909 | 0.588 |
| 50 | 0.899 | 0.935 | 2.50 | 0.856 | 0.551 |
| 40 | 0.884 | 0.907 | 2.46 | 0.798 | 0.518 |
| 30 | 0.861 | 0.876 | 2.30 | 0.732 | 0.465 |
| 25 | 0.847 | 0.864 | 2.26 | 0.699 | 0.461 |
| 20 | 0.832 | 0.847 | 2.22 | 0.664 | 0.452 |
| 15 | 0.823 | 0.831 | 2.22 | 0.627 | 0.415 |
| 10 | 0.813 | 0.818 | 2.17 | 0.574 | 0.260 |
| 9 | 0.806 | 0.818 | 2.16 | 0.561 | 0.260 |
| 8 | 0.799 | 0.799 | 2.16 | 0.548 | 0.260 |
| 7 | 0.793 | 0.793 | 2.13 | 0.537 | 0.200 |
| 6 | 0.789 | 0.789 | 2.10 | 0.521 | 0.200 |
| 5 | 0.789 | 0.789 | 2.07 | 0.502 | 0.190 |
| 4 | 0.789 | 0.789 | 2.06 | 0.482 | 0.190 |
| 3 | 0.779 | 0.779 | 2.03 | 0.465 | 0.190 |
| 2 | 0.776 | 0.776 | 2.00 | 0.443 | 0.160 |
| 1 | 0.775 | 0.775 | 1.99 | 0.379 | 0.160 |
| 0 | 0.759 | 0.759 | 1.95 | 0.140 | 0.140 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Ost-Braunschweig

NLWKN

$A_{Eo}$ : 433 $km^2$

PNP : NN + 43.65 m

Lage: 9.4 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Lachendorf Nr. 4836129

Gewässer : Lachte

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.67 | 1.76 | 3.34 | 3.07 | 3.82 | 2.06 | 1.69 | 1.53 | 1.18 | 1.41 | 1.19 | 1.22 | 1.64 | 2.05 |
| 2. | 1.68 | 1.84 | 4.11 | 2.92 | 3.52 | 2.10 | 1.64 | 1.36 | 1.11 | 1.33 | 1.15 | 1.19 | 1.65 | 1.95 |
| 3. | 1.73 | 1.82 | 4.26 | 2.97 | 3.33 | 2.06 | 1.61 | 1.30 | 1.10 | 1.26 | 1.12 | 1.31 | 1.74 | 1.95 |
| 4. | 1.87 | 1.94 | 4.71 | 2.69 | 3.14 | 2.96 | 1.60 | 1.46 | 1.08 | 1.22 | 1.10 | 1.83 | 1.88 | 1.98 |
| 5. | 1.81 | 1.94 | 7.31 | 2.75 | 2.96 | 3.21 | 1.63 | 1.46 | 1.08 | 1.23 | 1.08 | 2.68 | 1.98 | 2.11 |
| 6. | 1.74 | 2.00 | 13.7 | 2.47 | 2.80 | 2.77 | 1.63 | 1.39 | 2.22 | 1.31 | 1.05 | 2.74 | 1.96 | 2.04 |
| 7. | 1.66 | 2.15 | 10.8 | 2.39 | 2.71 | 2.67 | 1.64 | 1.41 | 1.78 | 1.27 | 0.971 | 3.06 | 2.09 | 1.96 |
| 8. | 1.69 | 3.15 | 8.89 | 2.53 | 3.27 | 2.47 | 1.62 | 1.41 | 1.50 | 1.32 | 1.02 | 2.50 | 2.51 | 1.73 |
| 9. | 1.88 | 3.55 | 11.1 | 2.49 | 3.32 | 2.35 | 1.63 | 1.28 | 1.46 | 1.29 | 0.978 | 2.13 | 2.32 | 1.74 |
| 10. | 1.88 | 3.58 | 10.3 | 2.44 | 3.07 | 2.51 | 1.72 | 1.21 | 1.35 | 1.25 | 0.941 | 1.90 | 2.12 | 2.59 |
| 11. | 1.86 | 3.05 | 8.05 | 2.38 | 2.91 | 2.53 | 1.84 | 1.20 | 1.34 | 1.24 | 0.914 | 1.87 | 2.08 | 2.81 |
| 12. | 1.69 | 2.77 | 6.57 | 2.38 | 2.80 | 2.43 | 1.75 | 1.23 | 1.39 | 1.17 | 1.24 | 1.83 | 2.04 | 2.41 |
| 13. | 1.65 | 2.88 | 6.68 | 2.34 | 2.76 | 2.35 | 1.57 | 1.29 | 1.57 | 1.07 | 1.26 | 2.14 | 1.94 | 2.16 |
| 14. | 1.61 | 3.10 | 6.61 | 2.38 | 2.72 | 2.26 | 1.56 | 1.24 | 1.91 | 1.02 | 1.14 | 2.19 | 1.88 | 2.02 |
| 15. | 1.62 | 3.04 | 5.21 | 3.01 | 2.63 | 2.15 | 1.51 | 1.14 | 2.15 | 0.912 | 1.13 | 2.26 | 1.80 | 2.91 |
| 16. | 1.63 | 3.50 | 4.42 | 2.77 | 2.69 | 2.05 | 1.69 | 1.18 | 1.91 | 1.16 | 1.18 | 2.33 | 1.76 | 4.22 |
| 17. | 1.64 | 6.99 | 4.22 | 3.32 | 2.55 | 1.99 | 1.59 | 1.24 | 2.27 | 1.26 | 1.10 | 2.10 | 1.75 | 4.84 |
| 18. | 1.68 | 7.56 | 3.87 | 3.45 | 2.52 | 1.97 | 1.55 | 1.16 | 2.45 | 1.18 | 1.05 | 1.99 | 1.69 | 4.34 |
| 19. | 1.67 | 6.04 | 5.08 | 3.89 | 2.49 | 1.94 | 1.46 | 1.11 | 3.23 | 0.986 | 1.04 | 1.81 | 1.76 | 3.83 |
| 20. | 1.66 | 4.92 | 8.11 | 3.70 | 2.36 | 1.91 | 1.36 | 1.08 | 4.33 | 0.963 | 1.04 | 1.73 | 1.82 | 3.27 |
| 21. | 1.65 | 4.87 | 9.28 | 3.47 | 2.29 | 1.87 | 1.34 | 1.10 | 2.85 | 0.970 | 1.05 | 1.68 | 1.81 | 2.89 |
| 22. | 1.62 | 4.93 | 11.8 | 3.66 | 2.26 | 1.94 | 1.29 | 1.04 | 2.18 | 0.977 | 1.06 | 1.65 | 1.78 | 2.53 |
| 23. | 1.62 | 5.35 | 13.7 | 4.43 | 2.21 | 1.95 | 1.23 | 0.968 | 1.88 | 0.960 | 1.06 | 1.61 | 1.79 | 4.23 |
| 24. | 1.57 | 5.39 | 14.0 | 5.23 | 2.22 | 2.14 | 1.17 | 0.978 | 1.66 | 0.919 | 1.13 | 1.64 | 1.89 | 8.20 |
| 25. | 1.59 | 5.63 | 11.3 | 5.94 | 2.16 | 2.30 | 1.12 | 1.16 | 1.49 | 0.959 | 1.29 | 1.68 | 1.98 | 6.36 |
| 26. | 1.69 | 4.66 | 8.33 | 4.85 | 2.14 | 2.10 | 1.02 | 1.16 | 1.37 | 0.987 | 1.25 | 1.74 | 1.98 | 4.93 |
| 27. | 1.72 | 4.25 | 6.23 | 4.06 | 2.09 | 1.94 | 1.00 | 1.18 | 1.30 | 1.06 | 1.19 | 1.83 | 2.26 | 5.56 |
| 28. | 1.64 | 3.95 | 5.27 | 4.08 | 2.06 | 1.86 | 0.979 | 1.25 | 1.69 | 1.11 | 1.28 | 1.78 | 2.41 | 4.87 |
| 29. | 1.65 | 3.70 | 4.70 | 4.02 | 2.03 | 1.83 | 1.02 | 1.25 | 1.64 | 1.04 | 1.29 | 1.72 | 2.41 | 3.99 |
| 30. | 1.72 | 3.93 | 4.08 | | 2.10 | 1.76 | 1.02 | 1.29 | 1.51 | 1.07 | 1.32 | 1.74 | 2.30 | 3.67 |
| 31. | | 3.97 | 3.42 | | 2.13 | | 1.10 | | 1.50 | 1.16 | | 1.70 | | 3.38 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 1. | 13. | 29. | 30. | 28. | 23. | 5. | 15. | 11. | 2. | 1. | 8. |
| NQ | 1.57 | 1.76 | 3.34 | 2.34 | 2.03 | 1.76 | 0.979 | 0.968 | 1.08 | 0.912 | 0.914 | 1.19 | 1.64 | 1.73 |
| MQ | 1.69 | 3.81 | 7.41 | 3.31 | 2.65 | 2.21 | 1.44 | 1.23 | 1.79 | 1.13 | 1.12 | 1.92 | 1.97 | 3.34 |
| HQ | 1.95 | 8.20 | 14.5 | 6.11 | 3.94 | 3.69 | 1.88 | 1.69 | 5.03 | 1.48 | 1.35 | 3.13 | 2.54 | 8.61 |
| Tag | 11. | 18. | 24. | 25. | 1. | 4. | 11. | 1. | 20. | 1. | 30. | 7. | 7. | 24. |
| $h_N$ mm / $h_A$ mm | 10 | 24 | 46 | 19 | 16 | 13 | 9 | 7 | 11 | 7 | 7 | 12 | 12 | 21 |
| | 1960/2011 | | 1961/2012 52 Jahre | | | | | | | | | | | |
| Jahr | 2006 | 2006 | 1996 | 1996 | 1972 | 2009 | 2009 | 1992 | 1976 | 2009 | 2009 | 2006 | 2006 | 2006 |
| NQ | 1.05 | 1.21 | 0.966 | 0.942 | 1.64 | 1.25 | 0.830 | 0.614 | 0.570 | 0.554 | 0.521 | 0.795 | 1.05 | 1.21 |
| MNQ | 1.83 | 2.01 | 2.28 | 2.43 | 2.47 | 2.16 | 1.60 | 1.31 | 1.17 | 1.13 | 1.24 | 1.55 | 1.81 | 1.98 |
| MQ | 2.67 | 3.50 | 4.00 | 3.85 | 3.85 | 3.14 | 2.22 | 1.82 | 1.68 | 1.58 | 1.69 | 2.11 | 2.63 | 3.45 |
| MHQ | 5.68 | 9.33 | 10.7 | 9.02 | 9.58 | 6.42 | 4.65 | 4.40 | 3.80 | 3.96 | 3.27 | 4.32 | 5.52 | 9.02 |
| HQ | 16.5 | 24.8 | 31.4 | 22.8 | 26.2 | 23.0 | 18.9 | 19.3 | 22.3 | 15.5 | 14.5 | 37.3 | 16.5 | 23.4 |
| Jahr | 1963 | 1960 | 1968 | 1962 | 1981 | 1969 | 1969 | 1984 | 1966 | 1967 | 1967 | 1998 | 1963 | 1967 |
| $Mh_N$ mm / $Mh_A$ mm | 16 | 22 | 25 | 22 | 24 | 19 | 14 | 11 | 10 | 10 | 10 | 13 | 16 | 21 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.912 | am 15.08.2012 | 1.57 | 0.912 | 0.912 | am 15.08.2012 |
| MQ $m^3/s$ | 2.48 | | 3.53 | 1.44 | 2.46 | |
| HQ $m^3/s$ | 14.5 | am 24.01.2012 bei W= 237 cm | 14.5 | 5.03 | 14.5 | am 24.01.2012 bei W= 237 cm |
| Nq $l/(s km^2)$ | 2.11 | | 3.63 | 2.11 | 2.11 | |
| Mq $l/(s km^2)$ | 5.73 | | 8.15 | 3.33 | 5.68 | |
| Hq $l/(s km^2)$ | 33.5 | | 33.5 | 11.6 | 33.5 | |
| $h_N$ mm / $h_A$ mm | 181 | | 128 | 53 | 180 | |
| | 1961/2012 (*) 52 Jahre | | | | 1961/2012 | |
| NQ $m^3/s$ | 0.521 | am 01.09.2009 | 0.942 | 0.521 | 0.521 | am 01.09.2009 |
| MNQ $m^3/s$ | 1.01 | | 1.64 | 1.01 | 1.01 | |
| MQ $m^3/s$ | 2.67 | | 3.50 | 1.85 | 2.66 | |
| MHQ $m^3/s$ | 16.2 | | 15.3 | 8.15 | 16.7 | |
| HQ $m^3/s$ | 37.3 | am 28.10.1998 bei W= 298 cm | 31.4 | 37.3 | 37.3 | am 28.10.1998 bei W= 298 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.33 | | 3.79 | 2.33 | 2.33 | |
| Mq $l/(s km^2)$ | 6.17 | | 8.08 | 4.27 | 6.14 | |
| MHq $l/(s km^2)$ | 37.4 | | 35.3 | 18.8 | 38.6 | |
| $Mh_N$ mm / $Mh_A$ mm | 195 | | 127 | 68 | 194 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.521 | 1.20 | 01.09.2009 | 37.3 | 86.1 | 298 | 28.10.1998 |
| 2 | 0.570 | 1.32 | 16.07.1976 | 31.4 | 72.5 | 266 | 15.01.1968 |
| 3 | 0.581 | 1.34 | 09.08.1992 | 30.4 | 70.2 | 274 | 28.01.1994 |
| 4 | 0.623 | 1.44 | 03.08.2006 | 26.2 | 60.5 | 262 | 12.03.1981 |
| 5 | 0.630 | 1.45 | 12.08.2003 | 24.8 | 57.3 | 238 | 04.12.1960 |
| 6 | 0.630 | 1.45 | 10.08.1975 | 23.7 | 54.7 | 250 | 18.03.1970 |
| 7 | 0.680 | 1.57 | 10.09.1973 | 23.4 | 54.0 | 232 | 24.12.1967 |
| 8 | 0.686 | 1.58 | 05.09.1991 | 23.0 | 53.1 | 240 | 01.04.1969 |
| 9 | 0.687 | 1.59 | 22.07.2010 | 23.0 | 53.1 | 232 | 02.12.1961 |
| 10 | 0.688 | 1.59 | 11.08.2004 | 22.8 | 52.7 | 250 | 13.02.1962 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1961/2012 52 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 14.0 | 14.0 | | | |
| 364 | 14.0 | 14.0 | 24.8 | 14.0 | 4.80 |
| 363 | 14.0 | 14.0 | 23.1 | 12.4 | 4.76 |
| 362 | 11.8 | 11.8 | 19.1 | 11.3 | 4.69 |
| 361 | 11.3 | 11.3 | 19.0 | 10.5 | 4.14 |
| 360 | 11.1 | 11.1 | 16.2 | 9.79 | 3.98 |
| 359 | 10.8 | 10.8 | 14.8 | 9.21 | 3.95 |
| 358 | 10.3 | 10.3 | 14.4 | 8.71 | 3.93 |
| 357 | 9.28 | 9.28 | 14.4 | 8.27 | 3.93 |
| 356 | 8.89 | 8.89 | 14.4 | 7.97 | 3.93 |
| 350 | 6.99 | 6.68 | 12.5 | 6.65 | 3.03 |
| 340 | 5.27 | 5.08 | 9.62 | 5.41 | 2.59 |
| 330 | 4.66 | 4.33 | 8.30 | 4.72 | 2.32 |
| 320 | 4.06 | 3.99 | 7.54 | 4.24 | 2.25 |
| 300 | 3.33 | 3.21 | 6.35 | 3.61 | 2.05 |
| 270 | 2.71 | 2.55 | 5.12 | 3.01 | 1.83 |
| 240 | 2.27 | 2.29 | 4.18 | 2.65 | 1.60 |
| 210 | 2.00 | 2.08 | 3.78 | 2.38 | 1.46 |
| 183 | 1.82 | 1.90 | 3.38 | 2.19 | 1.37 |
| 150 | 1.66 | 1.73 | 3.03 | 1.96 | 1.25 |
| 130 | 1.60 | 1.62 | 2.88 | 1.82 | 1.11 |
| 120 | 1.53 | 1.53 | 2.84 | 1.75 | 1.05 |
| 110 | 1.46 | 1.46 | 2.78 | 1.69 | 0.987 |
| 100 | 1.33 | 1.33 | 2.74 | 1.62 | 0.948 |
| 90 | 1.30 | 1.30 | 2.66 | 1.54 | 0.891 |
| 80 | 1.26 | 1.26 | 2.60 | 1.47 | 0.844 |
| 70 | 1.23 | 1.23 | 2.52 | 1.40 | 0.812 |
| 60 | 1.19 | 1.19 | 2.46 | 1.33 | 0.753 |
| 50 | 1.15 | 1.15 | 2.36 | 1.24 | 0.695 |
| 40 | 1.11 | 1.11 | 2.32 | 1.14 | 0.661 |
| 30 | 1.07 | 1.07 | 2.28 | 1.05 | 0.640 |
| 25 | 1.05 | 1.05 | 2.26 | 0.989 | 0.621 |
| 20 | 1.04 | 1.04 | 2.24 | 0.937 | 0.610 |
| 15 | 0.987 | 0.987 | 2.21 | 0.886 | 0.591 |
| 10 | 0.977 | 0.977 | 2.17 | 0.828 | 0.582 |
| 9 | 0.971 | 0.971 | 2.17 | 0.811 | 0.581 |
| 8 | 0.970 | 0.970 | 2.17 | 0.799 | 0.581 |
| 7 | 0.968 | 0.968 | 2.17 | 0.783 | 0.581 |
| 6 | 0.963 | 0.963 | 2.17 | 0.771 | 0.574 |
| 5 | 0.960 | 0.960 | 2.16 | 0.755 | 0.572 |
| 4 | 0.959 | 0.959 | 2.16 | 0.741 | 0.567 |
| 3 | 0.941 | 0.941 | 2.10 | 0.716 | 0.566 |
| 2 | 0.919 | 0.919 | 2.10 | 0.680 | 0.560 |
| 1 | 0.914 | 0.914 | 2.10 | 0.635 | 0.554 |
| 0 | 0.912 | 0.912 | 2.02 | 0.521 | 0.521 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Ostheide

NLWKN

$A_{Eo}$ : 360 $km^2$

PNP : NN + 60.11 m

Lage: 45.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Peine

Gewässer : Fuhse

Gebiet : Aller

Nr. 4845103

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.559 | 0.750 | 1.60 | 2.18 | 1.70 | 1.09 | 0.757 | 0.942 | 0.687 | 0.451 | 0.791 | 0.517 | 0.720 | 0.617 |
| 2. | 0.566 | 0.760 | 1.84 | 3.55 | 1.69 | 1.06 | 0.739 | 0.613 | 0.626 | 0.448 | 0.503 | 0.539 | 0.713 | 0.650 |
| 3. | 0.571 | 0.797 | 1.88 | 3.06 | 1.66 | 0.997 | 0.851 | 0.628 | 0.607 | 0.425 | 0.475 | 0.551 | 0.745 | 0.675 |
| 4. | 0.559 | 0.854 | 1.94 | 3.05 | 1.62 | 1.29 | 0.726 | 0.800 | 0.586 | 0.411 | 0.476 | 1.04 | 0.777 | 0.702 |
| 5. | 0.545 | 0.969 | 3.11 | 3.06 | 1.57 | 1.08 | 0.720 | 1.14 | 0.595 | 0.425 | 0.477 | 1.26 | 0.736 | 0.726 |
| 6. | 0.530 | 0.931 | 4.30 | 2.89 | 1.49 | 0.995 | 0.844 | 0.715 | 1.11 | 0.531 | 0.467 | 0.931 | 0.725 | 0.669 |
| 7. | 0.547 | 1.06 | 3.66 | 2.58 | 1.46 | 1.03 | 0.721 | 0.671 | 0.749 | 0.433 | 0.485 | 0.872 | 0.804 | 0.673 |
| 8. | 0.541 | 1.14 | 4.17 | 2.55 | 1.76 | 0.964 | 0.672 | 0.688 | 0.735 | 0.416 | 0.495 | 0.713 | 0.761 | 0.671 |
| 9. | 0.529 | 1.10 | 3.84 | 2.18 | 1.56 | 0.968 | 0.697 | 0.710 | 0.718 | 0.421 | 0.491 | 0.655 | 0.696 | 0.703 |
| 10. | 0.544 | 0.979 | 3.54 | 1.91 | 1.56 | 1.03 | 0.730 | 0.583 | 0.588 | 0.399 | 0.497 | 0.651 | 0.707 | 0.902 |
| 11. | 0.527 | 0.903 | 3.00 | 1.77 | 1.52 | 0.980 | 0.886 | 0.585 | 0.593 | 0.388 | 0.688 | 0.653 | 0.736 | 0.894 |
| 12. | 0.520 | 0.938 | 2.72 | 1.70 | 1.46 | 0.942 | 0.687 | 0.626 | 0.745 | 0.377 | 0.878 | 0.761 | 0.685 | 0.758 |
| 13. | 0.513 | 1.02 | 2.72 | 1.72 | 1.44 | 1.42 | 0.644 | 0.710 | 0.821 | 0.371 | 0.573 | 0.921 | 0.635 | 0.749 |
| 14. | 0.532 | 1.10 | 2.68 | 1.82 | 1.42 | 1.05 | 0.637 | 0.598 | 0.835 | 0.366 | 0.555 | 0.773 | 0.631 | 0.795 |
| 15. | 0.516 | 1.23 | 2.36 | 1.77 | 1.38 | 0.962 | 0.659 | 0.609 | 0.795 | 0.387 | 0.570 | 1.17 | 0.627 | 1.35 |
| 16. | 0.538 | 1.49 | 2.25 | 1.20 | 1.37 | 0.932 | 0.941 | 0.644 | 0.663 | 0.488 | 0.547 | 0.959 | 0.615 | 1.19 |
| 17. | 0.588 | 2.37 | 2.12 | 1.20 | 1.32 | 0.901 | 0.666 | 0.656 | 0.706 | 0.428 | 0.531 | 0.841 | 0.632 | 1.11 |
| 18. | 0.606 | 1.56 | 2.05 | 1.23 | 1.30 | 0.940 | 0.640 | 0.613 | 0.766 | 0.397 | 0.508 | 0.781 | 0.643 | 1.17 |
| 19. | 0.633 | 1.36 | 2.75 | 1.30 | 1.27 | 0.970 | 0.646 | 0.649 | 0.866 | 0.387 | 0.492 | 0.765 | 0.665 | 1.08 |
| 20. | 0.628 | 1.32 | 3.60 | 1.22 | 1.23 | 0.891 | 0.623 | 0.697 | 0.774 | 0.383 | 0.473 | 0.717 | 0.635 | 1.01 |
| 21. | 0.626 | 1.35 | 3.66 | 1.19 | 1.21 | 0.917 | 0.623 | 0.838 | 0.634 | 0.380 | 0.451 | 0.730 | 0.627 | 1.01 |
| 22. | 0.631 | 1.39 | 5.15 | 1.20 | 1.18 | 0.941 | 0.609 | 0.643 | 0.577 | 0.401 | 0.449 | 0.706 | 0.646 | 0.990 |
| 23. | 0.641 | 1.48 | 11.0 | 1.30 | 1.17 | 0.900 | 0.633 | 0.611 | 0.562 | 0.377 | 0.457 | 0.692 | 0.620 | 2.71 |
| 24. | 0.663 | 1.53 | 10.8 | 1.47 | 1.15 | 0.882 | 0.758 | 0.622 | 0.544 | 0.390 | 0.485 | 0.713 | 0.675 | 3.04 |
| 25. | 0.666 | 1.54 | 7.12 | 1.65 | 1.12 | 0.884 | 0.580 | 0.820 | 0.530 | 0.454 | 0.510 | 0.749 | 0.694 | 2.01 |
| 26. | 0.690 | 1.44 | 4.74 | 1.69 | 1.12 | 0.848 | 0.561 | 0.873 | 0.499 | 0.457 | 0.507 | 0.702 | 0.668 | 1.78 |
| 27. | 0.703 | 1.38 | 3.76 | 1.64 | 1.13 | 0.825 | 0.560 | 0.654 | 0.481 | 0.477 | 0.522 | 0.690 | 0.700 | 1.75 |
| 28. | 0.703 | 1.34 | 3.14 | 1.73 | 1.12 | 0.813 | 0.551 | 0.724 | 0.544 | 0.434 | 0.530 | 0.689 | 0.665 | 1.65 |
| 29. | 0.706 | 1.35 | 2.72 | 1.76 | 1.11 | 0.789 | 0.551 | 0.641 | 0.492 | 0.432 | 0.518 | 0.679 | 0.665 | 1.47 |
| 30. | 0.728 | 1.72 | 2.42 | | 1.22 | 0.777 | 0.555 | 0.639 | 0.463 | 0.431 | 0.516 | 0.779 | 0.627 | 1.47 |
| 31. | | 1.64 | 2.12 | | 1.16 | | 0.636 | | 0.453 | 0.495 | | 0.783 | | 1.44 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13. | 1. | 1. | 21. | 29. | 30. | 28.+ | 10. | 31. | 14. | 22. | 1. | 16. | 1. |
| NQ | 0.513 | 0.750 | 1.60 | 1.19 | 1.11 | 0.777 | 0.551 | 0.583 | 0.453 | 0.366 | 0.449 | 0.517 | 0.615 | 0.617 |
| MQ | 0.595 | 1.25 | 3.64 | 1.91 | 1.37 | 0.969 | 0.681 | 0.698 | 0.656 | 0.421 | 0.531 | 0.774 | 0.682 | 1.18 |
| HQ | 0.764 | 2.94 | 12.1 | 4.12 | 1.89 | 1.96 | 1.14 | 1.46 | 1.39 | 0.774 | 1.38 | 1.69 | 0.879 | 4.29 |
| Tag | 30. | 17. | 23. | 2. | 8. | 13. | 16. | 5. | 6. | 6. | 11. | 5. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 9 | 27 | 13 | 10 | 7 | 5 | 5 | 5 | 3 | 4 | 6 | 5 | 9 |

| | 1964/2011 | | 1965/2012 48 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1976 | 1977 | 1986 | 1977 | 1984 | 1976 | 1976 | 1995 | 1968 | 1995 | 1975 | 1976 | 1976 |
| NQ | 0.380 | 0.150 | 0.260 | 0.570 | 0.580 | 0.520 | 0.190 | 0.160 | 0.155 | 0.170 | 0.160 | 0.290 | 0.380 | 0.150 |
| MNQ | 0.895 | 1.06 | 1.27 | 1.39 | 1.56 | 1.25 | 0.940 | 0.697 | 0.609 | 0.634 | 0.606 | 0.743 | 0.894 | 1.06 |
| MQ | 1.41 | 1.95 | 2.55 | 2.49 | 2.91 | 2.08 | 1.35 | 1.22 | 1.05 | 1.03 | 0.946 | 1.05 | 1.40 | 1.96 |
| MHQ | 3.07 | 4.94 | 6.72 | 5.72 | 7.07 | 4.68 | 3.23 | 2.93 | 2.61 | 2.50 | 2.28 | 2.45 | 3.06 | 5.00 |
| HQ | 13.7 | 17.8 | 30.8 | 28.7 | 23.5 | 19.7 | 10.5 | 16.5 | 27.5 | 7.78 | 15.7 | 19.8 | 13.7 | 17.8 |
| Jahr | 2007 | 2002 | 2003 | 1970 | 1981 | 1994 | 1965 | 1981 | 2002 | 2002 | 2007 | 2007 | 2007 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 10 | 15 | 19 | 17 | 22 | 15 | 10 | 9 | 8 | 8 | 7 | 8 | 10 | 15 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.366 | am 14.08.2012 | 0.513 | 0.366 | 0.366 | am 14.08.2012 |
| MQ $m^3/s$ | 1.13 | | 1.63 | 0.627 | 1.13 | |
| HQ $m^3/s$ | 12.1 | am 23.01.2012 bei W= 271 cm | 12.1 | 1.69 | 12.1 | am 23.01.2012 bei W= 271 cm |
| Nq $l/(s km^2)$ | 1.02 | | 1.42 | 1.02 | 1.02 | |
| Mq $l/(s km^2)$ | 3.14 | | 4.53 | 1.74 | 3.14 | |
| Hq $l/(s km^2)$ | 33.7 | | 33.7 | 4.70 | 33.7 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 99 | | 71 | 28 | 99 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| NQ $m^3/s$ | 0.150 | am 15.12.1976 | 0.150 | 0.155 | 0.150 | am 15.12.1976 |
| MNQ $m^3/s$ | 0.441 | | 0.766 | 0.476 | 0.465 | |
| MQ $m^3/s$ | 1.67 | | 2.23 | 1.11 | 1.67 | |
| MHQ $m^3/s$ | 12.0 | | 10.8 | 5.48 | 12.3 | |
| HQ $m^3/s$ | 30.8 | am 04.01.2003 bei W= 343 cm | 30.8 | 27.5 | 30.8 | am 04.01.2003 bei W= 343 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.23 | | 2.13 | 1.32 | 1.29 | |
| Mq $l/(s km^2)$ | 4.64 | | 6.19 | 3.08 | 4.64 | |
| MHq $l/(s km^2)$ | 33.3 | | 30.0 | 15.2 | 34.2 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 147 | | 97 | 49 | 147 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.150 | 0.417 | 15.12.1976 | 30.8 | 85.6 | 343 | 04.01.2003 |
| 2 | 0.155 | 0.431 | 25.07.1995 | 28.7 | 79.7 | 336 | 24.02.1970 |
| 3 | 0.170 | 0.472 | 04.08.1968 | 27.5 | 76.4 | 353 | 20.07.2002 |
| 4 | 0.250 | 0.694 | 28.06.1969 | 23.5 | 65.3 | 318 | 13.03.1981 |
| 5 | 0.260 | 0.722 | 17.06.1978 | 22.0 | 61.1 | 302 | 20.03.1970 |
| 6 | 0.283 | 0.786 | 19.07.1986 | 21.8 | 60.6 | 291 | 20.03.1994 |
| 7 | 0.290 | 0.806 | 17.10.1975 | 21.6 | 60.1 | 318 | 10.01.2011 |
| 8 | 0.293 | 0.814 | 28.06.1996 | 20.9 | 58.1 | 306 | 22.01.2008 |
| 9 | 0.304 | 0.844 | 05.07.2005 | 20.6 | 57.2 | 301 | 06.03.1979 |
| 10 | 0.307 | 0.853 | 15.09.2000 | 20.4 | 56.7 | 321 | 17.01.1968 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1965/2012 48 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 11.0 | 11.0 | | | |
| 364 | 10.8 | 10.8 | 30.2 | 15.3 | 2.40 |
| 363 | 7.12 | 7.12 | 26.8 | 12.8 | 2.36 |
| 362 | 5.15 | 5.15 | 24.6 | 10.3 | 2.35 |
| 361 | 4.74 | 4.74 | 22.0 | 8.79 | 2.30 |
| 360 | 4.30 | 4.30 | 19.6 | 8.02 | 2.24 |
| 359 | 4.17 | 4.17 | 18.7 | 7.49 | 2.13 |
| 358 | 3.84 | 3.84 | 18.5 | 6.98 | 1.95 |
| 357 | 3.76 | 3.76 | 16.6 | 6.64 | 1.92 |
| 356 | 3.76 | 3.76 | 15.9 | 6.27 | 1.80 |
| 350 | 3.11 | 3.11 | 13.7 | 5.03 | 1.67 |
| 340 | 2.68 | 2.75 | 8.47 | 3.95 | 1.50 |
| 330 | 2.18 | 2.18 | 6.84 | 3.27 | 1.29 |
| 320 | 1.77 | 1.78 | 6.24 | 2.83 | 1.13 |
| 300 | 1.52 | 1.52 | 5.21 | 2.27 | 1.05 |
| 270 | 1.23 | 1.20 | 3.89 | 1.78 | 0.930 |
| 240 | 1.02 | 0.968 | 3.08 | 1.48 | 0.780 |
| 210 | 0.873 | 0.835 | 2.74 | 1.27 | 0.680 |
| 183 | 0.761 | 0.757 | 2.59 | 1.13 | 0.610 |
| 150 | 0.692 | 0.696 | 2.35 | 0.981 | 0.520 |
| 130 | 0.649 | 0.666 | 2.22 | 0.911 | 0.470 |
| 120 | 0.636 | 0.650 | 2.11 | 0.878 | 0.440 |
| 110 | 0.626 | 0.639 | 2.04 | 0.841 | 0.430 |
| 100 | 0.598 | 0.628 | 1.99 | 0.806 | 0.420 |
| 90 | 0.573 | 0.615 | 1.96 | 0.767 | 0.410 |
| 80 | 0.559 | 0.588 | 1.90 | 0.726 | 0.400 |
| 70 | 0.541 | 0.560 | 1.83 | 0.691 | 0.390 |
| 60 | 0.527 | 0.539 | 1.74 | 0.653 | 0.370 |
| 50 | 0.507 | 0.507 | 1.64 | 0.616 | 0.242 |
| 40 | 0.488 | 0.488 | 1.56 | 0.576 | 0.201 |
| 30 | 0.463 | 0.463 | 1.51 | 0.530 | 0.190 |
| 25 | 0.453 | 0.453 | 1.44 | 0.504 | 0.188 |
| 20 | 0.432 | 0.432 | 1.41 | 0.480 | 0.185 |
| 15 | 0.421 | 0.421 | 1.37 | 0.451 | 0.180 |
| 10 | 0.397 | 0.397 | 1.31 | 0.417 | 0.177 |
| 9 | 0.390 | 0.390 | 1.31 | 0.407 | 0.174 |
| 8 | 0.388 | 0.388 | 1.27 | 0.398 | 0.174 |
| 7 | 0.388 | 0.388 | 1.27 | 0.386 | 0.174 |
| 6 | 0.388 | 0.388 | 1.27 | 0.371 | 0.166 |
| 5 | 0.383 | 0.383 | 1.27 | 0.359 | 0.162 |
| 4 | 0.380 | 0.380 | 1.24 | 0.341 | 0.160 |
| 3 | 0.380 | 0.380 | 1.24 | 0.326 | 0.158 |
| 2 | 0.380 | 0.380 | 1.24 | 0.282 | 0.158 |
| 1 | 0.371 | 0.371 | 1.19 | 0.201 | 0.158 |
| 0 | 0.366 | 0.366 | 1.16 | 0.150 | 0.150 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Börde

NLWKN

$A_{Eo}$ : 180 $km^2$

PNP : NN + 51.06 m

Lage: 31.7 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Aligse Nr. 4854112

Gewässer : Burgdorfer Aue

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.370 | 0.364 | 0.908 | 1.06 | 1.14 | 0.453 | 0.477 | 0.883 | 0.376 | 0.347 | 0.739 | 0.354 | 0.361 | 0.316 |
| 2. | 0.371 | 0.391 | 1.19 | 0.964 | 1.03 | 0.459 | 0.471 | 0.511 | 0.292 | 0.323 | 0.570 | 0.338 | 0.367 | 0.350 |
| 3. | 0.383 | 0.415 | 1.52 | 0.914 | 0.968 | 0.515 | 0.504 | 0.488 | 0.235 | 0.329 | 0.410 | 0.345 | 0.388 | 0.372 |
| 4. | 0.388 | 0.405 | 1.37 | 0.853 | 0.872 | 0.757 | 0.468 | 0.521 | 0.278 | 0.273 | 0.379 | 1.11 | 0.351 | 0.374 |
| 5. | 0.396 | 0.489 | 2.60 | 0.824 | 0.821 | 0.600 | 0.483 | 0.616 | 0.251 | 0.345 | 0.348 | 1.20 | 0.338 | 0.418 |
| 6. | 0.400 | 0.483 | 7.06 | 0.768 | 0.740 | 0.551 | 0.496 | 0.594 | 0.457 | 0.410 | 0.349 | 1.06 | 0.325 | 0.401 |
| 7. | 0.400 | 0.564 | 5.07 | 0.701 | 0.717 | 0.565 | 0.458 | 0.427 | 0.488 | 0.368 | 0.360 | 0.929 | 0.370 | 0.360 |
| 8. | 0.399 | 0.651 | 7.38 | 0.712 | 1.00 | 0.517 | 0.453 | 0.402 | 0.372 | 0.232 | 0.301 | 0.595 | 0.370 | 0.329 |
| 9. | 0.398 | 0.555 | 4.83 | 0.697 | 1.12 | 0.501 | 0.504 | 0.258 | 0.287 | 0.268 | 0.219 | 0.473 | 0.339 | 0.318 |
| 10. | 0.392 | 0.461 | 3.52 | 0.679 | 0.996 | 0.554 | 0.610 | 0.217 | 0.219 | 0.282 | 0.225 | 0.421 | 0.319 | 0.584 |
| 11. | 0.389 | 0.397 | 2.35 | 0.642 | 0.893 | 0.550 | 1.14 | 0.222 | 0.163 | 0.194 | 0.344 | 0.394 | 0.342 | 0.549 |
| 12. | 0.385 | 0.424 | 1.99 | 0.627 | 0.821 | 0.551 | 0.670 | 0.348 | 0.154 | 0.133 | 0.419 | 0.507 | 0.345 | 0.450 |
| 13. | 0.383 | 0.448 | 1.92 | 0.623 | 0.781 | 0.577 | 0.527 | 0.390 | 0.246 | 0.131 | 0.398 | 0.513 | 0.310 | 0.420 |
| 14. | 0.390 | 0.420 | 1.88 | 0.642 | 0.738 | 0.559 | 0.480 | 0.336 | 0.297 | 0.267 | 0.337 | 0.429 | 0.317 | 0.428 |
| 15. | 0.378 | 0.418 | 1.64 | 0.826 | 0.703 | 0.541 | 0.450 | 0.332 | 0.376 | 0.279 | 0.335 | 0.505 | 0.325 | 0.974 |
| 16. | 0.366 | 0.758 | 1.46 | 0.708 | 0.692 | 0.541 | 0.629 | 0.354 | 0.367 | 0.366 | 0.353 | 0.468 | 0.334 | 1.47 |
| 17. | 0.366 | 1.41 | 1.36 | 0.740 | 0.653 | 0.518 | 0.413 | 0.292 | 0.329 | 0.367 | 0.338 | 0.406 | 0.335 | 1.35 |
| 18. | 0.357 | 0.980 | 1.25 | 0.765 | 0.625 | 0.498 | 0.336 | 0.206 | 0.418 | 0.205 | 0.340 | 0.401 | 0.340 | 1.12 |
| 19. | 0.344 | 0.755 | 2.15 | 0.837 | 0.548 | 0.509 | 0.299 | 0.267 | 0.893 | 0.203 | 0.365 | 0.390 | 0.338 | 0.920 |
| 20. | 0.345 | 0.698 | 5.13 | 0.763 | 0.558 | 0.522 | 0.231 | 0.347 | 1.32 | 0.261 | 0.362 | 0.388 | 0.317 | 0.780 |
| 21. | 0.360 | 0.715 | 3.92 | 0.731 | 0.557 | 0.501 | 0.280 | 0.380 | 0.901 | 0.291 | 0.368 | 0.369 | 0.297 | 0.703 |
| 22. | 0.367 | 0.791 | 9.24 | 0.747 | 0.556 | 0.518 | 0.332 | 0.319 | 0.584 | 0.339 | 0.367 | 0.384 | 0.288 | 0.650 |
| 23. | 0.369 | 0.968 | 15.8 | 0.854 | 0.573 | 0.517 | 0.310 | 0.294 | 0.501 | 0.369 | 0.357 | 0.349 | 0.287 | 2.44 |
| 24. | 0.358 | 1.14 | 11.3 | 1.14 | 0.572 | 0.544 | 0.309 | 0.288 | 0.469 | 0.337 | 0.382 | 0.347 | 0.328 | 5.25 |
| 25. | 0.374 | 1.21 | 6.06 | 1.57 | 0.564 | 0.527 | 0.311 | 0.528 | 0.477 | 0.382 | 0.377 | 0.372 | 0.365 | 2.13 |
| 26. | 0.367 | 0.934 | 3.32 | 1.46 | 0.536 | 0.485 | 0.309 | 0.512 | 0.447 | 0.389 | 0.355 | 0.389 | 0.336 | 1.72 |
| 27. | 0.393 | 0.706 | 2.34 | 1.27 | 0.538 | 0.476 | 0.258 | 0.417 | 0.429 | 0.434 | 0.367 | 0.386 | 0.370 | 1.72 |
| 28. | 0.396 | 0.676 | 1.97 | 1.30 | 0.541 | 0.484 | 0.229 | 0.417 | 0.482 | 0.363 | 0.408 | 0.374 | 0.352 | 1.55 |
| 29. | 0.384 | 0.662 | 1.69 | 1.21 | 0.530 | 0.463 | 0.237 | 0.407 | 0.477 | 0.360 | 0.366 | 0.367 | 0.345 | 1.31 |
| 30. | 0.373 | 1.08 | 1.44 | | 0.534 | 0.432 | 0.266 | 0.419 | 0.393 | 0.354 | 0.345 | 0.416 | 0.337 | 1.20 |
| 31. | | 1.10 | 1.24 | | 0.488 | | 0.499 | | 0.372 | 0.566 | | 0.410 | | 1.10 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 19. | 1. | 1. | 13. | 31. | 30. | 28. | 18. | 12. | 13. | 9. | 2. | 23. | 1. |
| NQ | 0.344 | 0.364 | 0.908 | 0.623 | 0.488 | 0.432 | 0.229 | 0.206 | 0.154 | 0.131 | 0.219 | 0.338 | 0.287 | 0.316 |
| MQ | 0.378 | 0.693 | 3.71 | 0.884 | 0.723 | 0.526 | 0.433 | 0.400 | 0.431 | 0.315 | 0.373 | 0.497 | 0.338 | 1.03 |
| HQ | 0.441 | 1.62 | 17.2 | 1.62 | 1.20 | 0.930 | 1.65 | 1.20 | 1.46 | 1.41 | 1.23 | 1.73 | 0.454 | 7.58 |
| Tag | 27. | 17. | 23. | 25. | 9. | 4. | 11. | 1. | 20. | 31. | 1. | 4. | 3. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 10 | 55 | 12 | 11 | 8 | 6 | 6 | 6 | 5 | 5 | 7 | 5 | 15 |

| | 1984/2011 | | 1985/2012 28 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1999 | 2001 | 2005 | 1996 | 1998 | 2011 | 1992 | 2003 | 1989 | 2012 | 1996 | 1999 | 1999 | 2001 |
| NQ | 0.174 | 0.201 | 0.213 | 0.163 | 0.274 | 0.309 | 0.223 | 0.191 | 0.141 | 0.131 | 0.197 | 0.181 | 0.174 | 0.201 |
| MNQ | 0.478 | 0.469 | 0.669 | 0.692 | 0.882 | 0.587 | 0.375 | 0.332 | 0.268 | 0.266 | 0.306 | 0.367 | 0.471 | 0.448 |
| MQ | 1.11 | 1.54 | 2.23 | 1.97 | 2.21 | 1.19 | 0.737 | 0.584 | 0.703 | 0.500 | 0.549 | 0.637 | 1.07 | 1.52 |
| MHQ | 4.04 | 6.87 | 8.74 | 7.13 | 8.17 | 3.64 | 3.30 | 2.35 | 3.07 | 2.68 | 2.51 | 2.78 | 3.83 | 6.98 |
| HQ | 16.1 | 21.5 | 26.5 | 16.7 | 19.3 | 15.3 | 16.2 | 7.07 | 26.2 | 16.0 | 14.7 | 23.9 | 16.1 | 21.5 |
| Jahr | 1998 | 1986 | 2003 | 1987 | 2007 | 1994 | 2002 | 1986 | 2002 | 2002 | 2010 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 16 | 23 | 33 | 27 | 33 | 17 | 11 | 8 | 10 | 7 | 8 | 9 | 15 | 23 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.131 | am 13.08.2012 | 0.344 | 0.131 | 0.131 | am 13.08.2012 |
| MQ $m^3/s$ | 0.783 | | 1.16 | 0.408 | 0.809 | |
| HQ $m^3/s$ | 17.2 | am 23.01.2012 bei W= 210 cm | 17.2 | 1.73 | 17.2 | am 23.01.2012 bei W= 210 cm |
| Nq $l/(s km^2)$ | 0.728 | | 1.91 | 0.728 | 0.728 | |
| Mq $l/(s km^2)$ | 4.35 | | 6.44 | 2.27 | 4.49 | |
| Hq $l/(s km^2)$ | 95.8 | | 95.8 | 9.59 | 95.8 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 138 | | 101 | 36 | 142 | |
| | 1985/2012 (*) 28 Jahre | | | | 1985/2012 | |
| NQ $m^3/s$ | 0.131 | am 13.08.2012 | 0.163 | 0.131 | 0.131 | am 13.08.2012 |
| MNQ $m^3/s$ | 0.210 | | 0.342 | 0.220 | 0.213 | |
| MQ $m^3/s$ | 1.16 | | 1.71 | 0.619 | 1.16 | |
| MHQ $m^3/s$ | 14.9 | | 13.6 | 6.33 | 15.5 | |
| HQ $m^3/s$ | 26.5 | am 03.01.2003 bei W= 239 cm | 26.5 | 26.2 | 26.5 | am 03.01.2003 bei W= 239 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.17 | | 1.90 | 1.22 | 1.18 | |
| Mq $l/(s km^2)$ | 6.44 | | 9.50 | 3.44 | 6.44 | |
| MHq $l/(s km^2)$ | 82.8 | | 75.6 | 35.2 | 86.1 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 204 | | 149 | 55 | 204 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.131 | 0.728 | 13.08.2012 | 26.5 | 147 | 239 | 03.01.2003 |
| 2 | 0.133 | 0.739 | 19.08.1996 | 26.2 | 146 | 238 | 19.07.2002 |
| 3 | 0.141 | 0.783 | 18.07.1989 | 23.9 | 133 | 228 | 28.10.1998 |
| 4 | 0.146 | 0.811 | 10.07.1994 | 22.5 | 125 | 225 | 20.01.2008 |
| 5 | 0.148 | 0.822 | 20.07.1986 | 21.5 | 119 | 210 | 31.12.1986 |
| 6 | 0.163 | 0.906 | 19.08.1995 | 20.0 | 111 | 218 | 09.01.2011 |
| 7 | 0.165 | 0.917 | 21.08.2010 | 19.3 | 107 | 214 | 23.03.2007 |
| 8 | 0.174 | 0.967 | 10.11.1999 | 18.4 | 102 | 201 | 19.03.1994 |
| 9 | 0.175 | 0.972 | 09.11.2004 | 18.3 | 102 | 217 | 12.12.2010 |
| 10 | 0.176 | 0.978 | 24.07.2000 | 17.7 | 98.3 | 213 | 30.12.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1985/2012 28 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 15.8 | 15.8 | | | |
| 364 | 11.3 | 11.3 | 25.1 | 13.0 | 4.99 |
| 363 | 9.24 | 9.24 | 24.7 | 10.8 | 4.86 |
| 362 | 7.38 | 7.38 | 17.3 | 9.11 | 3.53 |
| 361 | 7.06 | 7.06 | 15.0 | 8.01 | 3.31 |
| 360 | 6.06 | 6.06 | 15.0 | 7.31 | 3.22 |
| 359 | 5.13 | 5.25 | 15.0 | 6.63 | 3.18 |
| 358 | 5.07 | 5.13 | 14.6 | 6.16 | 2.81 |
| 357 | 4.83 | 5.07 | 12.8 | 5.85 | 2.63 |
| 356 | 3.92 | 4.83 | 11.5 | 5.48 | 2.61 |
| 350 | 2.15 | 2.35 | 8.58 | 4.44 | 2.17 |
| 340 | 1.52 | 1.69 | 6.12 | 3.38 | 1.64 |
| 330 | 1.24 | 1.36 | 4.99 | 2.74 | 1.31 |
| 320 | 1.10 | 1.21 | 4.15 | 2.29 | 1.15 |
| 300 | 0.854 | 0.908 | 3.09 | 1.67 | 0.852 |
| 270 | 0.692 | 0.701 | 2.30 | 1.11 | 0.659 |
| 240 | 0.556 | 0.556 | 1.76 | 0.818 | 0.469 |
| 210 | 0.505 | 0.505 | 1.31 | 0.661 | 0.384 |
| 183 | 0.469 | 0.459 | 1.11 | 0.573 | 0.329 |
| 150 | 0.406 | 0.398 | 0.905 | 0.492 | 0.295 |
| 130 | 0.390 | 0.374 | 0.811 | 0.449 | 0.277 |
| 120 | 0.384 | 0.369 | 0.789 | 0.429 | 0.269 |
| 110 | 0.376 | 0.366 | 0.702 | 0.411 | 0.262 |
| 100 | 0.369 | 0.355 | 0.660 | 0.394 | 0.258 |
| 90 | 0.367 | 0.348 | 0.635 | 0.376 | 0.251 |
| 80 | 0.358 | 0.342 | 0.604 | 0.360 | 0.242 |
| 70 | 0.349 | 0.338 | 0.562 | 0.346 | 0.237 |
| 60 | 0.345 | 0.332 | 0.535 | 0.331 | 0.227 |
| 50 | 0.335 | 0.318 | 0.519 | 0.316 | 0.220 |
| 40 | 0.301 | 0.299 | 0.511 | 0.298 | 0.218 |
| 30 | 0.280 | 0.280 | 0.505 | 0.279 | 0.211 |
| 25 | 0.268 | 0.268 | 0.501 | 0.267 | 0.206 |
| 20 | 0.261 | 0.261 | 0.493 | 0.257 | 0.200 |
| 15 | 0.232 | 0.232 | 0.483 | 0.245 | 0.194 |
| 10 | 0.222 | 0.222 | 0.474 | 0.230 | 0.178 |
| 9 | 0.222 | 0.222 | 0.472 | 0.224 | 0.178 |
| 8 | 0.217 | 0.217 | 0.469 | 0.220 | 0.169 |
| 7 | 0.206 | 0.206 | 0.469 | 0.217 | 0.160 |
| 6 | 0.205 | 0.205 | 0.469 | 0.214 | 0.155 |
| 5 | 0.203 | 0.203 | 0.462 | 0.209 | 0.154 |
| 4 | 0.194 | 0.194 | 0.458 | 0.204 | 0.152 |
| 3 | 0.163 | 0.163 | 0.457 | 0.198 | 0.149 |
| 2 | 0.154 | 0.154 | 0.452 | 0.189 | 0.146 |
| 1 | 0.133 | 0.133 | 0.448 | 0.178 | 0.133 |
| 0 | 0.131 | 0.131 | 0.437 | 0.131 | 0.131 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Weser- Aller-Geest

NLWKN

$A_{Eo}$ : 738 $km^2$

PNP : NN + 40.05 m

Lage: 13.6 km oberhalb der Mündung links

Q

$m^3/s$

Pegel : Feuerschützenbostel Nr. 4869108

Gewässer : Örtze

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.46 | 4.08 | 9.48 | 7.35 | 8.15 | 4.88 | 4.58 | 4.67 | 4.99 | 3.61 | 3.96 | 3.40 | 3.91 | 4.12 |
| 2. | 4.42 | 4.28 | 9.06 | 6.86 | 7.76 | 4.93 | 4.46 | 4.59 | 4.27 | 3.49 | 3.74 | 3.27 | 3.95 | 4.09 |
| 3. | 4.46 | 4.29 | 10.4 | 6.60 | 7.38 | 5.04 | 4.38 | 4.27 | 3.98 | 3.44 | 3.51 | 3.31 | 4.09 | 4.08 |
| 4. | 4.41 | 4.80 | 10.8 | 6.40 | 7.07 | 6.09 | 4.31 | 4.18 | 3.82 | 3.60 | 3.37 | 4.11 | 4.26 | 4.14 |
| 5. | 4.35 | 4.86 | 14.0 | 6.25 | 6.83 | 6.46 | 4.41 | 4.24 | 3.62 | 3.49 | 3.26 | 5.68 | 4.33 | 4.31 |
| 6. | 4.32 | 5.35 | 20.6 | 6.02 | 6.52 | 5.82 | 4.37 | 4.13 | 3.93 | 3.56 | 3.16 | 6.38 | 4.34 | 4.23 |
| 7. | 4.26 | 5.66 | 21.7 | 5.80 | 6.36 | 5.69 | 4.37 | 4.16 | 3.98 | 3.61 | 3.10 | 7.70 | 4.90 | 3.96 |
| 8. | 4.25 | 7.88 | 19.4 | 5.73 | 7.05 | 5.51 | 4.41 | 4.21 | 3.99 | 3.73 | 3.05 | 6.59 | 5.38 | 3.78 |
| 9. | 4.25 | 10.4 | 19.8 | 5.65 | 7.16 | 5.31 | 4.32 | 4.04 | 3.81 | 3.81 | 3.04 | 5.28 | 5.04 | 3.79 |
| 10. | 4.26 | 10.3 | 19.9 | 5.64 | 6.73 | 5.48 | 4.55 | 3.83 | 3.58 | 3.69 | 3.09 | 4.77 | 4.80 | 5.25 |
| 11. | 4.27 | 8.38 | 16.9 | 5.54 | 6.54 | 5.58 | 5.38 | 3.70 | 3.55 | 3.61 | 2.95 | 4.50 | 4.67 | 5.71 |
| 12. | 4.24 | 6.78 | 14.3 | 5.49 | 6.34 | 5.43 | 5.14 | 3.70 | 3.85 | 3.48 | 3.48 | 4.42 | 4.48 | 5.09 |
| 13. | 4.23 | 6.68 | 13.0 | 5.53 | 6.17 | 5.72 | 4.65 | 3.67 | 4.24 | 3.36 | 3.30 | 4.97 | 4.30 | 4.70 |
| 14. | 4.20 | 7.16 | 13.3 | 5.69 | 5.91 | 5.56 | 4.49 | 3.54 | 4.89 | 3.23 | 3.21 | 5.09 | 4.17 | 4.50 |
| 15. | 4.21 | 7.05 | 12.6 | 6.59 | 5.81 | 5.26 | 4.44 | 3.43 | 5.01 | 3.20 | 3.26 | 4.98 | 4.12 | 5.41 |
| 16. | 4.22 | 7.39 | 9.66 | 6.69 | 5.75 | 5.04 | 4.58 | 3.56 | 4.43 | 3.23 | 3.24 | 4.76 | 4.04 | 6.90 |
| 17. | 4.23 | 11.5 | 8.28 | 7.21 | 5.66 | 5.00 | 4.57 | 3.81 | 4.48 | 3.51 | 3.15 | 4.57 | 4.04 | 7.90 |
| 18. | 4.23 | 14.6 | 7.66 | 7.94 | 5.59 | 4.96 | 4.41 | 3.63 | 5.21 | 3.36 | 3.06 | 4.42 | 4.05 | 7.78 |
| 19. | 4.24 | 13.3 | 8.40 | 8.65 | 5.57 | 4.83 | 4.26 | 3.46 | 7.65 | 3.23 | 3.04 | 4.23 | 4.20 | 7.23 |
| 20. | 4.25 | 10.9 | 12.2 | 9.13 | 5.35 | 4.74 | 4.20 | 3.38 | 8.11 | 3.15 | 3.03 | 4.17 | 4.14 | 6.35 |
| 21. | 4.20 | 9.48 | 15.4 | 8.09 | 5.27 | 4.76 | 4.13 | 3.40 | 6.79 | 3.29 | 3.01 | 4.02 | 4.09 | 5.74 |
| 22. | 4.18 | 9.30 | 18.7 | 8.45 | 5.22 | 4.85 | 3.90 | 3.30 | 5.32 | 3.29 | 2.96 | 3.89 | 4.00 | 5.33 |
| 23. | 4.18 | 9.57 | 22.8 | 9.21 | 5.18 | 4.90 | 3.71 | 3.12 | 4.70 | 3.22 | 2.95 | 3.90 | 3.93 | 6.46 |
| 24. | 4.18 | 9.92 | 23.9 | 10.1 | 5.11 | 5.14 | 3.66 | 3.28 | 4.28 | 3.16 | 3.26 | 3.96 | 4.05 | 10.7 |
| 25. | 4.18 | 10.6 | 20.7 | 11.3 | 5.04 | 5.48 | 3.52 | 3.73 | 3.98 | 3.27 | 3.64 | 4.06 | 4.11 | 11.6 |
| 26. | 4.26 | 9.68 | 16.9 | 11.0 | 5.00 | 5.26 | 3.45 | 4.19 | 3.77 | 3.34 | 3.56 | 4.08 | 4.12 | 9.45 |
| 27. | 4.26 | 8.38 | 13.6 | 9.18 | 4.93 | 5.05 | 3.44 | 3.86 | 3.60 | 3.54 | 3.55 | 4.01 | 4.70 | 8.93 |
| 28. | 4.21 | 7.62 | 11.2 | 8.57 | 4.88 | 4.88 | 3.45 | 4.03 | 3.80 | 3.39 | 3.51 | 3.94 | 4.69 | 8.87 |
| 29. | 4.17 | 7.06 | 9.77 | 8.44 | 4.82 | 4.95 | 3.41 | 3.76 | 3.85 | 3.26 | 3.44 | 3.86 | 4.43 | 7.51 |
| 30. | 4.20 | 7.96 | 8.84 | | 4.89 | 4.74 | 3.38 | 5.76 | 3.77 | 3.22 | 3.42 | 3.93 | 4.27 | 6.84 |
| 31. | | 10.6 | 8.01 | | 4.93 | | 3.54 | | 3.76 | 3.67 | | 3.94 | | 6.44 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 18. | 12. | 29. | 20. | 30. | 23. | 11. | 20. | 11. | 2. | 1. | 8. |
| NQ | 4.17 | 4.08 | 7.66 | 5.49 | 4.82 | 4.74 | 3.38 | 3.12 | 3.55 | 3.15 | 2.95 | 3.27 | 3.91 | 3.78 |
| MQ | 4.26 | 8.25 | 14.2 | 7.42 | 5.97 | 5.24 | 4.19 | 3.89 | 4.48 | 3.42 | 3.28 | 4.52 | 4.32 | 6.17 |
| HQ | 4.49 | 15.1 | 24.7 | 11.7 | 8.30 | 6.92 | 5.85 | 6.65 | 8.24 | 4.02 | 4.00 | 7.88 | 5.41 | 12.2 |
| Tag | 4. | 18. | 24. | 26. | 1. | 5. | 11. | 30. | 20. | 31. | 1. | 7. | 7. | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 15 | 30 | 52 | 25 | 22 | 18 | 15 | 14 | 16 | 12 | 12 | 16 | 15 | 22 |

| | 1960/2011 | | 1961/2012 52 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1997 | 1991 | 1972 | 1972 | 1963 | 1976 | 1992 | 1973 | 1976 | 1973 | 1991 | 1997 | 1997 | 1991 |
| NQ | 3.29 | 3.44 | 3.15 | 2.71 | 3.15 | 3.71 | 2.53 | 2.67 | 2.28 | 2.35 | 2.38 | 2.92 | 3.29 | 3.44 |
| MNQ | 4.44 | 4.88 | 5.35 | 5.48 | 5.52 | 5.00 | 4.21 | 3.66 | 3.40 | 3.35 | 3.55 | 3.94 | 4.41 | 4.83 |
| MQ | 5.88 | 7.35 | 8.04 | 7.74 | 7.53 | 6.50 | 5.30 | 4.68 | 4.52 | 4.35 | 4.41 | 4.82 | 5.82 | 7.27 |
| MHQ | 10.3 | 14.4 | 16.4 | 14.7 | 14.2 | 10.7 | 8.49 | 8.02 | 8.67 | 7.71 | 6.83 | 7.81 | 10.2 | 14.0 |
| HQ | 25.0 | 32.0 | 37.7 | 35.0 | 35.4 | 26.0 | 20.0 | 22.2 | 40.7 | 20.4 | 18.4 | 35.2 | 25.0 | 32.0 |
| Jahr | 1963 | 1961 | 1994 | 1962 | 1970 | 1967 | 1966 | 1966 | 2002 | 1970 | 1968 | 1998 | 1963 | 1961 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 27 | 29 | 26 | 27 | 23 | 19 | 16 | 16 | 16 | 15 | 17 | 20 | 26 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 2.95 | am 11.09.2012 | 4.08 | 2.95 | 2.95 | am 11.09.2012 |
| MQ $m^3/s$ | 5.77 | | 7.59 | 3.97 | 5.60 | |
| HQ $m^3/s$ | 24.7 | am 24.01.2012 bei W= 216 cm | 24.7 | 8.24 | 24.7 | am 24.01.2012 bei W= 216 cm |
| Nq $l/(s km^2)$ | 4.00 | | 5.53 | 4.00 | 4.00 | |
| Mq $l/(s km^2)$ | 7.82 | | 10.3 | 5.38 | 7.59 | |
| Hq $l/(s km^2)$ | 33.5 | | 33.5 | 11.2 | 33.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 247 | | 162 | 86 | 240 | |
| | 1961/2012 (*) 52 Jahre | | | | 1961/2012 | |
| NQ $m^3/s$ | 2.28 | am 12.07.1976 | 2.71 | 2.28 | 2.28 | am 12.07.1976 |
| MNQ $m^3/s$ | 3.12 | | 4.16 | 3.14 | 3.11 | |
| MQ $m^3/s$ | 5.92 | | 7.18 | 4.68 | 5.91 | |
| MHQ $m^3/s$ | 22.3 | | 21.3 | 12.8 | 22.8 | |
| HQ $m^3/s$ | 40.7 | am 20.07.2002 bei W= 246 cm | 37.7 | 40.7 | 40.7 | am 20.07.2002 bei W= 246 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 4.23 | | 5.64 | 4.25 | 4.21 | |
| Mq $l/(s km^2)$ | 8.02 | | 9.73 | 6.34 | 8.01 | |
| MHq $l/(s km^2)$ | 30.2 | | 28.9 | 17.3 | 30.9 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 254 | | 153 | 101 | 253 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.28 | 3.09 | 12.07.1976 | 40.7 | 55.1 | 246 | 20.07.2002 |
| 2 | 2.29 | 3.11 | 22.07.2010 | 37.7 | 51.1 | 224 | 28.01.1994 |
| 3 | 2.35 | 3.18 | 29.08.1973 | 35.4 | 48.0 | 228 | 18.03.1970 |
| 4 | 2.38 | 3.22 | 05.09.1991 | 35.2 | 47.7 | 220 | 29.10.1998 |
| 5 | 2.44 | 3.31 | 12.08.1975 | 35.0 | 47.4 | 222 | 13.02.1962 |
| 6 | 2.45 | 3.31 | 28.07.2006 | 33.8 | 45.8 | 230 | 16.01.1968 |
| 7 | 2.50 | 3.39 | 29.08.2009 | 33.6 | 45.5 | 222 | 21.07.1966 |
| 8 | 2.51 | 3.40 | 03.08.1990 | 33.2 | 45.0 | 235 | 23.01.2008 |
| 9 | 2.53 | 3.43 | 31.05.1992 | 32.0 | 43.4 | 216 | 13.12.1961 |
| 10 | 2.63 | 3.56 | 12.08.2003 | 30.6 | 41.5 | 211 | 10.02.1980 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1961/2012 52 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 23.9 | 23.9 | | | |
| 364 | 22.8 | 22.8 | 38.8 | 23.3 | 9.21 |
| 363 | 21.7 | 21.7 | 32.4 | 20.7 | 9.19 |
| 362 | 20.7 | 20.7 | 29.8 | 19.0 | 8.77 |
| 361 | 20.6 | 20.6 | 29.8 | 17.6 | 8.32 |
| 360 | 19.9 | 19.9 | 28.0 | 16.7 | 8.30 |
| 359 | 19.8 | 19.8 | 26.5 | 15.7 | 8.20 |
| 358 | 19.4 | 19.4 | 25.3 | 15.0 | 8.10 |
| 357 | 18.7 | 18.7 | 24.9 | 14.4 | 7.88 |
| 356 | 18.7 | 18.7 | 24.7 | 14.0 | 7.71 |
| 350 | 13.6 | 13.3 | 21.6 | 12.1 | 6.69 |
| 340 | 10.9 | 10.4 | 18.3 | 10.3 | 6.02 |
| 330 | 9.68 | 8.93 | 17.0 | 9.17 | 5.63 |
| 320 | 8.84 | 8.11 | 14.8 | 8.44 | 5.38 |
| 300 | 7.62 | 6.84 | 12.2 | 7.47 | 5.07 |
| 270 | 6.09 | 5.72 | 10.5 | 6.56 | 4.62 |
| 240 | 5.38 | 5.25 | 8.80 | 5.98 | 4.36 |
| 210 | 4.90 | 4.89 | 7.82 | 5.52 | 4.17 |
| 183 | 4.48 | 4.49 | 7.24 | 5.16 | 4.00 |
| 150 | 4.25 | 4.19 | 6.83 | 4.75 | 3.56 |
| 130 | 4.19 | 4.06 | 6.53 | 4.54 | 3.48 |
| 120 | 4.06 | 3.99 | 6.35 | 4.43 | 3.40 |
| 110 | 3.98 | 3.94 | 6.29 | 4.33 | 3.33 |
| 100 | 3.86 | 3.83 | 6.13 | 4.24 | 3.18 |
| 90 | 3.77 | 3.77 | 6.05 | 4.13 | 3.13 |
| 80 | 3.69 | 3.69 | 5.89 | 4.02 | 3.02 |
| 70 | 3.58 | 3.58 | 5.77 | 3.91 | 2.95 |
| 60 | 3.52 | 3.52 | 5.65 | 3.80 | 2.90 |
| 50 | 3.45 | 3.45 | 5.61 | 3.67 | 2.72 |
| 40 | 3.39 | 3.39 | 5.50 | 3.54 | 2.65 |
| 30 | 3.28 | 3.28 | 5.44 | 3.39 | 2.56 |
| 25 | 3.27 | 3.27 | 5.38 | 3.31 | 2.56 |
| 20 | 3.24 | 3.24 | 5.38 | 3.19 | 2.52 |
| 15 | 3.20 | 3.20 | 5.23 | 3.05 | 2.45 |
| 10 | 3.10 | 3.10 | 5.12 | 2.93 | 2.43 |
| 9 | 3.09 | 3.09 | 5.12 | 2.89 | 2.39 |
| 8 | 3.06 | 3.06 | 4.95 | 2.85 | 2.39 |
| 7 | 3.05 | 3.05 | 4.93 | 2.81 | 2.39 |
| 6 | 3.05 | 3.05 | 4.84 | 2.76 | 2.39 |
| 5 | 3.05 | 3.05 | 4.78 | 2.73 | 2.39 |
| 4 | 3.03 | 3.03 | 4.74 | 2.69 | 2.38 |
| 3 | 3.01 | 3.01 | 4.72 | 2.64 | 2.38 |
| 2 | 2.96 | 2.96 | 4.70 | 2.60 | 2.33 |
| 1 | 2.96 | 2.96 | 4.65 | 2.50 | 2.31 |
| 0 | 2.95 | 2.95 | 4.52 | 2.28 | 2.28 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Südheide

NLWKN

$A_{Eo}$ : 242 $km^2$

PNP : NN + 36.14 m

Lage: 16.3 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Meitze

Gewässer : Wietze

Gebiet : Aller

Nr. 4872119

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.506 | 0.441 | 2.07 | 2.60 | 1.88 | 1.25 | 0.744 | 0.876 | 0.668 | 0.490 | 0.637 | 0.498 | 0.595 | 0.752 |
| 2. | 0.495 | 0.473 | 2.31 | 2.31 | 1.80 | 1.19 | 0.741 | 0.596 | 0.612 | 0.460 | 0.573 | 0.474 | 0.591 | 0.719 |
| 3. | 0.523 | 0.492 | 2.30 | 2.22 | 1.63 | 1.16 | 0.872 | 0.524 | 0.577 | 0.458 | 0.492 | 0.479 | 0.601 | 0.803 |
| 4. | 0.488 | 0.526 | 2.25 | 2.09 | 1.60 | 1.74 | 0.810 | 0.696 | 0.545 | 0.457 | 0.476 | 0.780 | 0.646 | 0.869 |
| 5. | 0.491 | 0.555 | 4.38 | 1.94 | 1.60 | 1.54 | 0.852 | 0.650 | 0.514 | 0.508 | 0.484 | 1.24 | 0.717 | 0.922 |
| 6. | 0.539 | 0.613 | 6.98 | 1.88 | 1.53 | 1.37 | 0.816 | 0.569 | 0.556 | 0.537 | 0.479 | 1.36 | 0.642 | 0.846 |
| 7. | 0.510 | 0.683 | 6.13 | 1.77 | 1.50 | 1.32 | 0.768 | 0.567 | 0.566 | 0.526 | 0.462 | 1.47 | 0.681 | 0.799 |
| 8. | 0.510 | 1.14 | 7.91 | 1.68 | 2.03 | 1.22 | 0.740 | 0.547 | 0.541 | 0.516 | 0.445 | 1.06 | 0.677 | 0.727 |
| 9. | 0.508 | 1.14 | 6.68 | 1.65 | 1.89 | 1.18 | 0.735 | 0.514 | 0.524 | 0.484 | 0.425 | 0.947 | 0.658 | 0.788 |
| 10. | 0.531 | 0.998 | 5.98 | 1.62 | 1.59 | 1.18 | 0.713 | 0.460 | 0.507 | 0.483 | 0.423 | 0.849 | 0.703 | 1.36 |
| 11. | 0.486 | 0.926 | 4.90 | 1.64 | 1.57 | 1.14 | 1.46 | 0.432 | 0.557 | 0.466 | 0.425 | 0.807 | 0.738 | 1.26 |
| 12. | 0.491 | 0.973 | 4.15 | 1.56 | 1.54 | 1.09 | 1.10 | 0.436 | 0.581 | 0.445 | 0.531 | 0.813 | 0.650 | 1.10 |
| 13. | 0.504 | 1.12 | 3.95 | 1.49 | 1.51 | 1.22 | 0.865 | 0.432 | 0.560 | 0.424 | 0.488 | 1.00 | 0.625 | 1.05 |
| 14. | 0.480 | 1.14 | 3.48 | 1.59 | 1.44 | 1.04 | 0.799 | 0.436 | 0.690 | 0.421 | 0.465 | 0.868 | 0.628 | 1.11 |
| 15. | 0.471 | 1.12 | 2.88 | 1.80 | 1.48 | 0.992 | 0.798 | 0.417 | 0.633 | 0.422 | 0.477 | 0.897 | 0.606 | 1.74 |
| 16. | 0.489 | 1.47 | 2.54 | 1.65 | 1.55 | 0.923 | 0.970 | 0.436 | 0.649 | 0.499 | 0.428 | 0.880 | 0.579 | 1.88 |
| 17. | 0.523 | 4.51 | 2.32 | 1.75 | 1.51 | 0.904 | 0.783 | 0.421 | 0.660 | 0.582 | 0.435 | 0.801 | 0.569 | 1.75 |
| 18. | 0.496 | 3.52 | 2.17 | 1.72 | 1.46 | 0.919 | 0.719 | 0.381 | 0.633 | 0.466 | 0.429 | 0.752 | 0.575 | 1.64 |
| 19. | 0.483 | 2.41 | 3.58 | 2.06 | 1.44 | 0.907 | 0.659 | 0.375 | 0.793 | 0.421 | 0.438 | 0.710 | 0.665 | 1.45 |
| 20. | 0.496 | 1.99 | 6.57 | 1.90 | 1.38 | 0.947 | 0.636 | 0.400 | 1.09 | 0.379 | 0.417 | 0.683 | 0.658 | 1.37 |
| 21. | 0.503 | 2.07 | 6.28 | 1.59 | 1.33 | 0.877 | 0.619 | 0.432 | 0.830 | 0.399 | 0.426 | 0.653 | 0.635 | 1.32 |
| 22. | 0.503 | 2.17 | 8.09 | 1.55 | 1.33 | 0.901 | 0.598 | 0.465 | 0.677 | 0.406 | 0.429 | 0.657 | 0.650 | 1.29 |
| 23. | 0.474 | 2.52 | 12.0 | 1.67 | 1.30 | 0.947 | 0.547 | 0.461 | 0.593 | 0.404 | 0.402 | 0.640 | 0.644 | 3.56 |
| 24. | 0.449 | 2.74 | 9.87 | 2.11 | 1.28 | 0.938 | 0.518 | 0.494 | 0.543 | 0.401 | 0.514 | 0.632 | 0.688 | 6.03 |
| 25. | 0.453 | 2.82 | 7.64 | 2.56 | 1.24 | 0.901 | 0.495 | 0.585 | 0.507 | 0.413 | 0.551 | 0.641 | 0.716 | 3.62 |
| 26. | 0.441 | 2.30 | 6.24 | 2.24 | 1.22 | 0.868 | 0.479 | 0.690 | 0.473 | 0.421 | 0.502 | 0.612 | 0.691 | 2.58 |
| 27. | 0.438 | 1.99 | 5.44 | 2.08 | 1.22 | 0.838 | 0.468 | 0.581 | 0.456 | 0.441 | 0.517 | 0.589 | 0.856 | 2.47 |
| 28. | 0.446 | 1.89 | 4.80 | 2.03 | 1.24 | 0.791 | 0.450 | 0.555 | 0.622 | 0.442 | 0.555 | 0.579 | 0.818 | 1.95 |
| 29. | 0.456 | 1.81 | 4.01 | 1.96 | 1.23 | 0.783 | 0.467 | 0.523 | 0.607 | 0.434 | 0.498 | 0.559 | 0.852 | 1.69 |
| 30. | 0.444 | 2.32 | 3.44 | | 1.30 | 0.778 | 0.486 | 0.839 | 0.549 | 0.483 | 0.489 | 0.628 | 0.776 | 1.56 |
| 31. | | 2.11 | 2.96 | | 1.31 | | 0.495 | | 0.561 | 0.503 | | 0.630 | | 1.46 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27. | 1. | 1. | 13. | 26. | 30. | 28. | 19. | 27. | 20. | 23. | 2. | 17. | 2. |
| NQ | 0.438 | 0.441 | 2.07 | 1.49 | 1.22 | 0.778 | 0.450 | 0.375 | 0.456 | 0.379 | 0.402 | 0.474 | 0.569 | 0.719 |
| MQ | 0.488 | 1.64 | 4.98 | 1.89 | 1.48 | 1.06 | 0.716 | 0.526 | 0.609 | 0.458 | 0.477 | 0.780 | 0.671 | 1.63 |
| HQ | 0.671 | 4.80 | 12.7 | 2.75 | 2.23 | 2.26 | 1.89 | 1.04 | 1.31 | 0.728 | 0.728 | 2.06 | 0.934 | 7.31 |
| Tag | 3. | 18. | 23. | 1. | 8. | 4. | 11. | 1. | 20. | 16. | 1. | 6. | 29. | 23. |
| $h_N$ mm / $h_A$ mm | 5 | 18 | 55 | 20 | 16 | 11 | 8 | 6 | 7 | 5 | 5 | 9 | 7 | 18 |

| | 1966/2011 | | 1967/2012 46 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 1970 | 1979 | 1979 | 1984 | 2011 | 1989 | 2001 | 2001 | 2001 | 2009 | 2011 | 2011 |
| NQ | 0.438 | 0.441 | 0.450 | 0.580 | 0.560 | 0.700 | 0.446 | 0.288 | 0.139 | 0.105 | 0.185 | 0.275 | 0.438 | 0.441 |
| MNQ | 0.921 | 1.20 | 1.63 | 1.64 | 1.66 | 1.38 | 0.950 | 0.710 | 0.591 | 0.512 | 0.607 | 0.727 | 0.914 | 1.17 |
| MQ | 1.44 | 2.07 | 2.71 | 2.48 | 2.61 | 2.00 | 1.36 | 1.10 | 0.940 | 0.773 | 0.887 | 0.999 | 1.42 | 2.00 |
| MHQ | 3.09 | 4.89 | 5.93 | 5.20 | 5.52 | 3.84 | 3.15 | 2.59 | 2.19 | 1.90 | 1.91 | 2.13 | 3.05 | 4.89 |
| HQ | 8.40 | 13.6 | 16.5 | 15.7 | 18.8 | 10.5 | 13.1 | 11.5 | 11.5 | 6.96 | 7.65 | 8.02 | 8.40 | 13.6 |
| Jahr | 2010 | 1986 | 1968 | 1970 | 1981 | 1983 | 1984 | 1981 | 1981 | 2010 | 1967 | 1998 | 2010 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 15 | 23 | 30 | 26 | 29 | 21 | 15 | 12 | 10 | 9 | 10 | 11 | 15 | 22 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.375 | am 19.06.2012 | 0.438 | 0.375 | 0.375 | am 19.06.2012 |
| MQ $m^3/s$ | 1.26 | | 1.94 | 0.595 | 1.28 | |
| HQ $m^3/s$ | 12.7 | am 23.01.2012 bei W= 203 cm | 12.7 | 2.06 | 12.7 | am 23.01.2012 bei W= 203 cm |
| Nq $l/(s km^2)$ | 1.55 | | 1.81 | 1.55 | 1.55 | |
| Mq $l/(s km^2)$ | 5.21 | | 8.02 | 2.46 | 5.29 | |
| Hq $l/(s km^2)$ | 52.4 | | 52.4 | 8.52 | 52.4 | |
| $h_N$ mm / $h_A$ mm | 165 | | 126 | 39 | 167 | |
| | 1967/2012 (*) 46 Jahre | | | | 1967/2012 | |
| NQ $m^3/s$ | 0.105 | am 05.08.2001 | 0.438 | 0.105 | 0.105 | am 05.08.2001 |
| MNQ $m^3/s$ | 0.442 | | 0.809 | 0.453 | 0.450 | |
| MQ $m^3/s$ | 1.61 | | 2.22 | 1.01 | 1.60 | |
| MHQ $m^3/s$ | 8.53 | | 8.26 | 4.26 | 8.95 | |
| HQ $m^3/s$ | 18.8 | am 13.03.1981 bei W= 276 cm | 18.8 | 13.1 | 18.8 | am 13.03.1981 bei W= 276 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.83 | | 3.34 | 1.87 | 1.86 | |
| Mq $l/(s km^2)$ | 6.65 | | 9.17 | 4.17 | 6.61 | |
| MHq $l/(s km^2)$ | 35.2 | | 34.1 | 17.6 | 37.0 | |
| $Mh_N$ mm / $Mh_A$ mm | 210 | | 144 | 66 | 209 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.105 | 0.434 | 05.08.2001 | 18.8 | 77.7 | 276 | 13.03.1981 |
| 2 | 0.132 | 0.545 | 31.08.1988 | 16.5 | 68.2 | 270 | 16.01.1968 |
| 3 | 0.159 | 0.657 | 06.08.1990 | 15.7 | 64.9 | 256 | 24.02.1970 |
| 4 | 0.218 | 0.901 | 28.07.2010 | 13.7 | 56.6 | 239 | 01.01.1987 |
| 5 | 0.218 | 0.901 | 11.09.2009 | 13.7 | 56.6 | 233 | 08.02.1980 |
| 6 | 0.235 | 0.971 | 08.08.1996 | 13.1 | 54.1 | 225 | 30.05.1984 |
| 7 | 0.250 | 1.03 | 16.08.1989 | 12.7 | 52.4 | 203 | 23.01.2012 |
| 8 | 0.270 | 1.12 | 13.07.1976 | 12.0 | 49.6 | 214 | 28.01.1994 |
| 9 | 0.308 | 1.27 | 11.09.1991 | 11.9 | 49.3 | 225 | 03.01.2003 |
| 10 | 0.310 | 1.28 | 01.09.2000 | 11.8 | 48.8 | 214 | 19.03.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1967/2012 46 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 12.0 | 12.0 | | | |
| 364 | 9.87 | 9.87 | 15.3 | 8.69 | 3.08 |
| 363 | 8.09 | 8.09 | 14.6 | 7.41 | 2.84 |
| 362 | 7.91 | 7.91 | 12.4 | 6.92 | 2.66 |
| 361 | 7.64 | 7.64 | 11.9 | 6.38 | 2.62 |
| 360 | 6.98 | 6.98 | 11.2 | 6.07 | 2.53 |
| 359 | 6.68 | 6.68 | 9.97 | 5.78 | 2.52 |
| 358 | 6.57 | 6.57 | 9.90 | 5.56 | 2.41 |
| 357 | 6.28 | 6.28 | 9.11 | 5.39 | 2.40 |
| 356 | 6.24 | 6.24 | 8.40 | 5.19 | 2.36 |
| 350 | 4.51 | 4.80 | 7.11 | 4.35 | 2.22 |
| 340 | 2.88 | 2.96 | 6.03 | 3.63 | 1.96 |
| 330 | 2.32 | 2.30 | 5.34 | 3.16 | 1.82 |
| 320 | 2.17 | 2.06 | 4.84 | 2.83 | 1.63 |
| 300 | 1.77 | 1.67 | 4.13 | 2.37 | 1.38 |
| 270 | 1.47 | 1.45 | 3.56 | 1.94 | 1.21 |
| 240 | 1.16 | 1.14 | 3.02 | 1.64 | 0.974 |
| 210 | 0.872 | 0.869 | 2.68 | 1.41 | 0.771 |
| 183 | 0.713 | 0.776 | 2.26 | 1.23 | 0.670 |
| 150 | 0.589 | 0.653 | 2.02 | 1.04 | 0.536 |
| 130 | 0.549 | 0.622 | 1.91 | 0.932 | 0.487 |
| 120 | 0.531 | 0.593 | 1.83 | 0.891 | 0.464 |
| 110 | 0.516 | 0.575 | 1.78 | 0.851 | 0.440 |
| 100 | 0.504 | 0.556 | 1.72 | 0.806 | 0.406 |
| 90 | 0.496 | 0.537 | 1.63 | 0.769 | 0.376 |
| 80 | 0.490 | 0.516 | 1.58 | 0.728 | 0.338 |
| 70 | 0.480 | 0.498 | 1.49 | 0.691 | 0.334 |
| 60 | 0.471 | 0.484 | 1.42 | 0.650 | 0.301 |
| 50 | 0.461 | 0.467 | 1.35 | 0.609 | 0.268 |
| 40 | 0.446 | 0.457 | 1.32 | 0.561 | 0.257 |
| 30 | 0.438 | 0.438 | 1.27 | 0.510 | 0.239 |
| 25 | 0.434 | 0.434 | 1.19 | 0.483 | 0.218 |
| 20 | 0.426 | 0.426 | 1.15 | 0.454 | 0.203 |
| 15 | 0.422 | 0.422 | 1.11 | 0.421 | 0.173 |
| 10 | 0.421 | 0.421 | 1.06 | 0.374 | 0.143 |
| 9 | 0.413 | 0.413 | 1.06 | 0.363 | 0.140 |
| 8 | 0.406 | 0.406 | 1.03 | 0.349 | 0.140 |
| 7 | 0.404 | 0.404 | 1.02 | 0.337 | 0.140 |
| 6 | 0.402 | 0.402 | 1.02 | 0.320 | 0.138 |
| 5 | 0.401 | 0.401 | 1.02 | 0.303 | 0.116 |
| 4 | 0.400 | 0.400 | 1.02 | 0.281 | 0.116 |
| 3 | 0.399 | 0.399 | 1.02 | 0.265 | 0.116 |
| 2 | 0.381 | 0.381 | 1.01 | 0.242 | 0.106 |
| 1 | 0.379 | 0.379 | 1.01 | 0.219 | 0.106 |
| 0 | 0.375 | 0.375 | 1.00 | 0.105 | 0.105 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Weser- Aller-Geest

NLWKN

$A_{Eo}$ : 275.00 km²
PNP : NN+ 196.97 m
Lage : 247.10 km oberhalb der Mündung links

# Q

m³/s

Pegel : Arenshausen Nr. 447000
Gewässer : Leine
Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | K 0.510 | 0.470 | 1.63 | 4.25 | 2.05 | 1.37 | K 1.15 | K 1.15 | 1.05 | 1.15 | 0.720 | 0.550 | K 0.600 | 0.550 |
| 2. | K 0.510 | 0.510 | 3.26 | 3.65 | 2.22 | 1.49 | K 1.15 | K 0.790 | 0.790 | 1.15 | 0.720 | 0.550 | K 0.650 | 0.600 |
| 3. | K 0.510 | 0.510 | 2.73 | R 3.44 | 2.22 | 1.37 | K 1.37 | K 0.860 | 0.790 | 1.05 | 0.720 | 0.550 | K 0.860 | 0.600 |
| 4. | K 0.510 | 0.650 | 2.73 | R 3.08 | 2.05 | 1.63 | K 1.15 | K 0.860 | 0.790 | 0.950 | 0.650 | 0.650 | K 0.860 | 0.550 |
| 5. | K 0.510 | 0.650 | 6.50 | R 2.90 | 2.05 | 1.37 | K 1.49 | K 1.49 | 0.790 | 0.950 | 0.650 | 0.650 | K 0.790 | 0.550 |
| 6. | K 0.470 | 0.550 | 5.70 | R 2.73 | 2.05 | 1.25 | K 1.63 | K 0.790 | 0.790 | 1.63 | 0.650 | 0.720 | K 0.720 | 0.550 |
| 7. | K 0.470 | 0.600 | 5.50 | R 2.39 | 2.05 | 1.25 | K 1.05 | K 0.790 | 0.860 | 0.950 | 0.650 | 0.650 | K 0.720 | 0.550 |
| 8. | K 0.470 | 0.600 | 8.05 | 2.39 | 2.22 | 1.25 | K 1.05 | K 0.720 | 0.950 | 0.860 | 0.650 | 0.600 | K 0.720 | 0.550 |
| 9. | K 0.470 | 0.720 | 6.70 | 2.22 | 2.05 | 1.25 | K 1.05 | K 0.650 | 0.790 | 0.790 | 0.650 | 0.600 | K 0.720 | 0.510 |
| 10. | K 0.430 | 0.600 | 6.30 | 2.05 | 1.91 | 1.25 | K 0.950 | K 0.650 | 0.720 | 0.790 | 0.600 | 0.550 | K 0.790 | 0.550 |
| 11. | K 0.430 | 0.600 | 5.70 | 1.91 | 1.91 | 1.25 | K 1.05 | K 0.650 | 0.720 | 0.790 | 0.720 | 0.550 | K 0.650 | 0.470 |
| 12. | K 0.430 | 0.600 | 5.50 | 1.91 | 1.91 | 1.49 | K 1.15 | K 0.720 | 0.860 | 0.790 | 0.860 | 0.600 | K 0.650 | 0.430 |
| 13. | K 0.430 | 0.550 | 5.90 | 1.77 | 1.77 | 1.49 | K 0.950 | K 0.650 | 1.05 | 0.790 | 0.650 | 0.600 | K 0.600 | 0.430 |
| 14. | K 0.430 | 0.650 | 5.70 | 1.77 | 1.77 | 1.25 | K 0.950 | K 0.650 | 3.65 | 0.790 | 0.650 | 0.600 | K 0.600 | 0.430 |
| 15. | K 0.430 | 0.650 | 4.90 | 2.05 | 1.77 | 1.25 | K 0.950 | K 0.650 | 1.77 | 0.790 | 0.650 | 0.790 | K 0.600 | 1.05 |
| 16. | K 0.430 | 1.49 | 4.25 | 1.77 | 1.77 | 1.25 | K 0.950 | K 0.650 | 1.49 | 0.950 | 0.600 | 0.600 | K 0.600 | 1.05 |
| 17. | K 0.430 | 1.77 | 3.85 | 3.08 | 1.77 | 1.25 | K 0.950 | K 0.650 | 2.90 | 0.790 | 0.600 | 0.600 | K 0.600 | 1.15 |
| 18. | K 0.430 | 1.25 | 3.44 | 2.39 | 1.63 | 1.37 | K 0.950 | K 0.600 | 2.39 | 0.720 | 0.600 | 0.600 | K 0.600 | 1.37 |
| 19. | K 0.430 | 1.25 | 5.10 | 2.39 | 1.63 | 1.37 | K 0.950 | K 0.650 | 2.22 | 0.650 | 0.600 | 0.600 | K 0.600 | 1.25 |
| 20. | K 0.430 | 1.15 | 6.10 | 1.91 | 1.63 | 1.25 | K 0.950 | K 2.73 | 2.05 | 0.650 | 0.550 | K 0.600 | K 0.600 | 1.15 |
| 21. | K 0.430 | 1.25 | 6.50 | 1.77 | 1.49 | 1.25 | K 0.950 | K 1.63 | 1.77 | 0.650 | 0.550 | K 0.600 | K 0.550 | 1.15 |
| 22. | K 0.430 | 1.25 | 9.75 | 1.77 | 1.49 | 1.63 | K 0.950 | K 1.15 | 1.49 | 0.650 | 0.550 | K 0.600 | K 0.550 | 1.37 |
| 23. | K 0.430 | 1.25 | 10.2 | 1.77 | 1.49 | 1.37 | K 0.860 | K 0.950 | 1.37 | 0.650 | 0.550 | K 0.650 | K 0.550 | 5.10 |
| 24. | K 0.430 | 1.63 | 9.50 | 1.77 | 1.49 | 1.37 | K 0.860 | K 0.860 | 1.37 | 0.950 | 0.600 | K 0.650 | K 0.600 | 6.30 |
| 25. | K 0.430 | 1.63 | 8.45 | 2.05 | 1.49 | K 1.25 | K 0.860 | K 1.05 | 1.37 | 1.49 | 0.600 | K 0.650 | K 0.550 | 4.05 |
| 26. | K 0.470 | 1.49 | 7.45 | 2.05 | 1.49 | K 1.25 | K 0.860 | K 0.950 | 1.25 | 1.05 | 0.600 | K 0.650 | K 0.550 | 3.65 |
| 27. | K 0.470 | 1.37 | 6.85 | 1.91 | 1.49 | K 1.25 | K 0.860 | K 0.950 | 1.25 | 1.05 | 0.650 | K 0.650 | K 0.600 | 4.05 |
| 28. | K 0.470 | 1.37 | 6.10 | 1.91 | 1.49 | K 1.15 | K 0.860 | K 0.860 | 1.63 | 0.860 | 0.650 | K 0.720 | K 0.600 | 4.25 |
| 29. | K 0.470 | 1.25 | 5.50 | 2.05 | 1.49 | K 1.15 | K 0.860 | K 0.790 | 1.77 | 0.790 | 0.600 | K 0.650 | K 0.550 | 3.85 |
| 30. | K 0.470 | 2.39 | 4.90 | | 1.49 | K 1.15 | K 0.860 | K 0.790 | 1.37 | 0.790 | 0.550 | K 0.790 | K 0.550 | 3.65 |
| 31. | | 1.91 | 4.45 | | 1.49 | | K 0.860 | | 1.25 | 0.790 | | K 0.650 | | 3.26 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 10.+ | 1. | 1. | 13.+ | 21.+ | 28.+ | 23.+ | 18. | 10.+ | 19.+ | 20.+ | 1.+ | 21.+ | 12.+ |
| NQ | 0.430 | 0.470 | 1.63 | 1.77 | 1.49 | 1.15 | 0.860 | 0.600 | 0.720 | 0.650 | 0.550 | 0.550 | 0.550 | 0.430 |
| MQ | 0.455 | 1.05 | 5.78 | 2.31 | 1.77 | 1.32 | 1.02 | 0.911 | 1.40 | 0.894 | 0.635 | 0.628 | 0.639 | 1.77 |
| HQ | 0.510 | 3.44 | 12.5 | 4.25 | 2.73 | 2.90 | 3.26 | 6.85 | 6.30 | 9.10 | 1.49 | 1.77 | 1.63 | 8.85 |
| Tag | 1. | 16. | 22. | 1. | 8. | 4. | 5. | 20. | 14. | 6. | 12. | 4. | 3. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 10 | 56 | 21 | 17 | 12 | 10 | 9 | 14 | 9 | 6 | 6 | 6 | 17 |

| | 1959/2011 | | 1960/2012 53 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1977 | 1996 | 1963 | 1991+ | 1993 | 2012 | 1990+ | 1990+ | 2010 | 1991 | 2011 | 2012 |
| NQ | 0.400 | 0.400 | 0.600 | 0.880 | 0.940 | 0.950 | 0.520 | 0.600 | 0.650 | 0.550 | 0.260 | 0.370 | 0.430 | 0.430 |
| MNQ | 1.17 | 1.51 | 1.76 | 2.12 | 2.31 | 2.52 | 1.90 | 1.46 | 1.13 | 0.978 | 0.914 | 0.979 | 1.17 | 1.51 |
| MQ | 1.96 | 2.95 | 3.59 | 3.77 | 4.14 | 3.73 | 2.75 | 2.49 | 1.66 | 1.35 | 1.27 | 1.47 | 1.96 | 2.97 |
| MHQ | 5.73 | 10.2 | 11.4 | 11.2 | 10.7 | 8.36 | 7.74 | 11.9 | 5.59 | 5.00 | 5.08 | 4.01 | 5.73 | 10.3 |
| HQ | 30.1 | 50.5 | 46.6 | 36.0 | 36.0 | 41.0 | 29.0 | 92.8 | 21.0 | 33.3 | 30.7 | 16.9 | 30.1 | 50.5 |
| Jahr | 1998 | 1986 | 1987 | 1970 | 1987 | 1983 | 1984 | 1981 | 1972 | 1981 | 1986 | 1986 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 18 | 29 | 35 | 33 | 40 | 35 | 27 | 23 | 16 | 13 | 12 | 14 | 18 | 29 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.430 | am 10.11.2011 | 0.430 | 0.550 | 0.430 | am 12.12.2012 |
| MQ | m³/s | 1.52 | | 2.13 | 0.915 | 1.59 | |
| HQ | m³/s | 12.5 | am 22.01.2012 bei W = 96.0 cm | 12.5 | 9.10 | 12.5 | am 22.01.2012 bei W = 96.0 cm |
| Nq | l/(skm²) | 1.56 | | 1.56 | 2.00 | 1.56 | |
| Mq | l/(skm²) | 5.52 | | 7.73 | 3.33 | 5.79 | |
| Hq | l/(skm²) | 45.5 | | 45.5 | 33.1 | 45.5 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 174 | | 122 | 53 | 183 | |

| | | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.260 | am 09.09.2010 | 0.400 | 0.260 | 0.260 | am 09.09.2010 |
| MNQ | m³/s | 0.704 | | 1.02 | 0.789 | 0.758 | |
| MQ | m³/s | 2.59 | | 3.36 | 1.83 | 2.59 | |
| MHQ | m³/s | 25.6 | | 20.5 | 15.6 | 25.9 | |
| HQ | m³/s | 92.8 | am 04.06.1981 | 50.5 | 92.8 | 92.8 | am 04.06.1981 |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 2.56 | | 3.69 | 2.87 | 2.76 | |
| Mq | l/(skm²) | 9.41 | | 12.2 | 6.66 | 9.42 | |
| MHq | l/(skm²) | 93.0 | | 74.6 | 56.9 | 94.1 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 297 | | 191 | 106 | 297 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.260 | 0.945 | 09.09.2010 | 92.8 | 337 | | 04.06.1981 |
| 2 | 0.370 | 1.35 | 04.10.1991 | 69.7 | 253 | | 02.06.1961 |
| 3 | 0.380 | 1.38 | 21.10.1976 | 52.4 | 191 | | 09.06.1984 |
| 4 | 0.400 | 1.45 | 26.11.1959 | 50.5 | 184 | | 30.12.1986 |
| 5 | 0.430 | 1.56 | 12.12.2012 | 50.1 | 182 | | 19.12.1988 |
| 6 | 0.430 | 1.56 | 10.11.2011 | 46.6 | 169 | | 02.01.1987 |
| 7 | 0.460 | 1.67 | 09.09.1974 | 42.4 | 154 | | 19.06.1969 |
| 8 | 0.470 | 1.71 | 09.09.2009 | 41.0 | 149 | | 20.04.1983 |
| 9 | 0.470 | 1.71 | 31.10.1980 | 40.2 | 146 | | 18.06.1986 |
| 10 | 0.510 | 1.85 | 02.09.1964 | 39.2 | 143 | | 04.12.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1960/2012 53 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 10.2 | 10.2 | 60.8 | 17.2 | 4.40 |
| 363 | 9.75 | 9.75 | 32.6 | 14.1 | 4.19 |
| 362 | 9.50 | 9.50 | 32.6 | 12.5 | 4.19 |
| 361 | 8.45 | 8.45 | 30.0 | 11.6 | 3.95 |
| 360 | 8.05 | 8.05 | 28.2 | 10.9 | 3.13 |
| 359 | 7.45 | 7.45 | 26.4 | 10.2 | 3.13 |
| 358 | 6.85 | 6.85 | 23.8 | 9.65 | 2.74 |
| 357 | 6.70 | 6.70 | 22.6 | 9.20 | 2.74 |
| 356 | 6.50 | 6.50 | 21.8 | 8.75 | 2.55 |
| 350 | 5.70 | 5.90 | 18.2 | 7.22 | 2.55 |
| 340 | 4.25 | 4.90 | 13.6 | 5.90 | 2.37 |
| 330 | 2.90 | 3.65 | 11.6 | 5.16 | 2.19 |
| 320 | 2.39 | 2.90 | 9.51 | 4.64 | 2.03 |
| 300 | 1.91 | 2.05 | 7.19 | 3.86 | 1.77 |
| 270 | 1.63 | 1.63 | 5.74 | 3.04 | 1.37 |
| 240 | 1.37 | 1.37 | 4.88 | 2.55 | 1.25 |
| 210 | 1.25 | 1.25 | 4.61 | 2.12 | 0.950 |
| 183 | 0.950 | 1.05 | 3.63 | 1.86 | 0.790 |
| 150 | 0.860 | 0.860 | 3.20 | 1.55 | 0.720 |
| 130 | 0.790 | 0.790 | 3.00 | 1.41 | 0.720 |
| 120 | 0.720 | 0.790 | 3.00 | 1.32 | 0.650 |
| 110 | 0.720 | 0.720 | 3.00 | 1.26 | 0.650 |
| 100 | 0.650 | 0.650 | 2.81 | 1.20 | 0.650 |
| 90 | 0.650 | 0.650 | 2.81 | 1.16 | 0.650 |
| 80 | 0.650 | 0.650 | 2.62 | 1.10 | 0.600 |
| 70 | 0.600 | 0.650 | 2.62 | 1.05 | 0.600 |
| 60 | 0.600 | 0.600 | 2.44 | 1.00 | 0.600 |
| 50 | 0.600 | 0.600 | 2.44 | 0.950 | 0.550 |
| 40 | 0.550 | 0.600 | 2.26 | 0.900 | 0.550 |
| 30 | 0.510 | 0.600 | 2.26 | 0.860 | 0.510 |
| 25 | 0.510 | 0.550 | 2.26 | 0.820 | 0.470 |
| 20 | 0.470 | 0.550 | 2.09 | 0.770 | 0.470 |
| 15 | 0.470 | 0.550 | 2.09 | 0.720 | 0.430 |
| 10 | 0.430 | 0.550 | 2.09 | 0.650 | 0.430 |
| 9 | 0.430 | 0.550 | 2.09 | 0.650 | 0.430 |
| 8 | 0.430 | 0.550 | 2.09 | 0.650 | 0.430 |
| 7 | 0.430 | 0.550 | 2.09 | 0.610 | 0.430 |
| 6 | 0.430 | 0.550 | 2.09 | 0.600 | 0.430 |
| 5 | 0.430 | 0.550 | 2.09 | 0.600 | 0.430 |
| 4 | 0.430 | 0.550 | 2.09 | 0.580 | 0.430 |
| 3 | 0.430 | 0.510 | 1.93 | 0.550 | 0.390 |
| 2 | 0.430 | 0.470 | 1.93 | 0.520 | 0.390 |
| 1 | 0.430 | 0.430 | 1.93 | 0.470 | 0.370 |
| 0 | 0.430 | 0.430 | 1.77 | 0.260 | 0.260 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
5 Tage Randeis, 139 Tage Verkrautung

Thüringer Landesanstalt für Geologie und Umwelt

$A_{Eo}$ : 633 $km^2$

PNP : NN + 140.43 m

Lage: 227.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Göttingen Nr. 4881142

Gewässer : Leine

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.70 | 1.67 | 3.52 | 5.91 | 3.76 | 2.78 | 2.42 | 2.73 | 3.26 | 2.22 | 1.93 | 1.41 | 1.53 | 1.71 |
| 2. | 1.70 | 1.72 | 4.94 | 5.52 | 3.77 | 2.77 | 2.74 | 2.12 | 2.39 | 2.20 | 1.78 | 1.41 | 1.52 | 1.74 |
| 3. | 1.70 | 1.86 | 5.28 | 5.14 | 3.67 | 2.77 | 2.86 | 2.37 | 2.39 | 2.14 | 1.77 | 1.39 | 1.70 | 1.78 |
| 4. | 1.65 | 1.93 | 4.78 | 4.88 | 3.67 | 3.15 | 2.45 | 2.68 | 2.25 | 1.97 | 1.82 | 1.63 | 1.82 | 1.80 |
| 5. | 1.65 | 2.05 | 9.55 | 4.68 | 3.61 | 2.85 | 2.79 | 3.62 | 2.39 | 2.10 | 1.84 | 1.73 | 1.67 | 1.85 |
| 6. | 1.69 | 1.84 | 8.99 | 4.58 | 3.59 | 2.78 | 3.03 | 2.46 | 2.33 | 2.99 | 1.75 | 1.73 | 1.62 | 1.80 |
| 7. | 1.61 | 1.89 | 8.12 | 4.97 | 3.47 | 2.78 | 2.52 | 2.33 | 2.43 | 2.21 | 1.72 | 1.57 | 1.74 | 1.78 |
| 8. | 1.67 | 1.99 | 11.7 | 4.94 | 3.79 | 2.74 | 2.45 | 2.24 | 2.59 | 2.08 | 1.67 | 1.43 | 1.63 | 1.76 |
| 9. | 1.63 | 2.14 | 10.3 | 4.08 | 3.58 | 2.69 | 2.38 | 2.17 | 2.36 | 2.03 | 1.66 | 1.41 | 1.61 | 1.78 |
| 10. | 1.63 | 1.94 | 9.07 | 4.00 | 3.47 | 2.73 | 2.31 | 2.14 | 2.18 | 2.00 | 1.63 | 1.41 | 1.78 | 2.21 |
| 11. | 1.62 | 1.82 | 8.06 | 3.81 | 3.43 | 2.71 | 2.41 | 2.20 | 2.30 | 2.02 | 2.32 | 1.41 | 1.84 | 2.00 |
| 12. | 1.63 | 1.81 | 7.55 | 3.78 | 3.37 | 2.81 | 2.54 | 2.30 | 2.30 | 1.95 | 1.95 | 1.52 | 1.64 | 1.86 |
| 13. | 1.67 | 1.88 | 8.66 | 3.73 | 3.36 | 3.18 | 2.29 | 2.25 | 2.60 | 2.03 | 1.66 | 1.50 | 1.59 | 1.85 |
| 14. | 1.65 | 2.03 | 8.43 | 3.72 | 3.31 | 2.71 | 2.22 | 2.23 | 5.47 | 1.94 | 1.55 | 1.49 | 1.57 | 1.88 |
| 15. | 1.62 | 2.03 | 7.59 | 3.97 | 3.27 | 2.70 | 2.28 | 2.25 | 3.84 | 1.94 | 1.54 | 1.78 | 1.58 | 3.06 |
| 16. | 1.61 | 2.83 | 6.91 | 3.72 | 3.24 | 2.59 | 2.32 | 2.37 | 3.16 | 1.96 | 1.52 | 1.54 | 1.57 | 3.33 |
| 17. | 1.61 | 3.18 | 6.51 | 4.41 | 3.24 | 2.58 | 2.24 | 2.28 | 4.93 | 1.93 | 1.70 | 1.50 | 1.56 | 3.38 |
| 18. | 1.61 | 2.65 | 6.18 | 4.47 | 3.29 | 2.61 | 2.16 | 2.22 | 4.01 | 1.93 | 1.64 | 1.48 | 1.56 | 3.56 |
| 19. | 1.61 | 2.49 | 7.33 | 4.16 | 3.16 | 2.59 | 2.25 | 2.26 | 3.71 | 1.87 | 1.51 | 1.45 | 1.58 | 3.47 |
| 20. | 1.61 | 2.45 | 9.53 | 3.82 | 3.08 | 2.55 | 2.08 | 5.07 | 3.55 | 1.91 | 1.36 | 1.46 | 1.53 | 3.19 |
| 21. | 1.60 | 2.61 | 9.76 | 3.60 | 2.99 | 2.60 | 1.99 | 3.86 | 3.18 | 1.92 | 1.36 | 1.47 | 1.52 | 3.16 |
| 22. | 1.60 | 2.93 | 15.1 | 3.55 | 2.97 | 3.01 | 1.96 | 3.16 | 3.04 | 1.88 | 1.38 | 1.44 | 1.54 | 3.36 |
| 23. | 1.60 | 2.92 | 16.3 | 3.61 | 2.96 | 2.81 | 1.91 | 2.64 | 2.88 | 1.83 | 1.36 | 1.47 | 1.55 | 8.89 |
| 24. | 1.60 | 3.09 | 14.2 | 3.65 | 2.95 | 2.69 | 1.90 | 2.55 | 2.76 | 1.86 | 1.65 | 1.48 | 1.72 | 12.5 |
| 25. | 1.61 | 3.35 | 11.6 | 3.79 | 2.92 | 2.63 | 1.87 | 2.74 | 2.59 | 1.82 | 1.66 | 1.48 | 1.58 | 7.48 |
| 26. | 1.61 | 3.06 | 10.2 | 3.74 | 2.84 | 2.56 | 1.88 | 2.62 | 2.43 | 1.88 | 1.50 | 1.47 | 1.64 | 6.91 |
| 27. | 1.61 | 2.97 | 9.26 | 3.72 | 2.85 | 2.48 | 1.92 | 2.47 | 2.68 | 2.16 | 1.54 | 1.48 | 1.75 | 7.55 |
| 28. | 1.62 | 2.92 | 8.37 | 3.61 | 2.81 | 2.47 | 1.93 | 2.52 | 3.04 | 2.06 | 1.50 | 1.50 | 1.72 | 8.22 |
| 29. | 1.67 | 2.89 | 7.74 | 3.71 | 2.86 | 2.43 | 1.93 | 2.37 | 2.67 | 1.90 | 1.39 | 1.50 | 1.77 | 6.29 |
| 30. | 1.68 | 4.35 | 7.08 | | 2.86 | 2.41 | 1.94 | 2.30 | 2.49 | 2.22 | 1.40 | 1.56 | 1.73 | 5.59 |
| 31. | | 3.90 | 6.48 | | 2.86 | | 2.70 | | 2.33 | 1.90 | | 1.57 | | 5.23 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23. | 1. | 1. | 22. | 28. | 30. | 25. | 2. | 10. | 25. | 21. | 3. | 21. | 1. |
| NQ | 1.60 | 1.67 | 3.52 | 3.55 | 2.81 | 2.41 | 1.87 | 2.12 | 2.18 | 1.82 | 1.36 | 1.39 | 1.52 | 1.71 |
| MQ | 1.64 | 2.49 | 8.68 | 4.18 | 3.26 | 2.71 | 2.28 | 2.58 | 2.92 | 2.03 | 1.64 | 1.50 | 1.64 | 3.90 |
| HQ | 1.81 | 5.42 | 17.6 | 7.13 | 4.16 | 4.13 | 7.48 | 8.02 | 8.66 | 4.88 | 7.97 | 2.76 | 2.42 | 16.1 |
| Tag | 6. | 30. | 23. | 6. | 18. | 13. | 31. | 20. | 1. | 6. | 11. | 4. | 10. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 11 | 37 | 17 | 14 | 11 | 10 | 11 | 12 | 9 | 7 | 6 | 7 | 17 |

| | 1958/2011 | | 1959/2012 54 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1976 | 1991 | 1977 | 1963 | 1972 | 1960 | 2012 | 1996 | 1977 | 1996 | 1991 | 1991 | 1976 | 1991 |
| NQ | 1.31 | 1.19 | 1.20 | 1.65 | 1.61 | 1.91 | 1.87 | 1.71 | 1.42 | 1.20 | 0.957 | 1.20 | 1.31 | 1.19 |
| MNQ | 2.70 | 3.57 | 4.19 | 4.80 | 4.93 | 5.00 | 3.95 | 3.34 | 2.81 | 2.46 | 2.28 | 2.28 | 2.66 | 3.55 |
| MQ | 4.02 | 6.07 | 7.46 | 7.46 | 8.09 | 6.78 | 5.22 | 4.96 | 3.63 | 3.14 | 2.86 | 3.06 | 3.97 | 6.04 |
| MHQ | 11.5 | 21.1 | 24.3 | 21.9 | 21.7 | 14.3 | 14.8 | 23.8 | 12.6 | 11.3 | 9.20 | 8.43 | 11.4 | 21.1 |
| HQ | 98.0 | 100 | 91.1 | 74.5 | 86.2 | 68.7 | 56.1 | 287 | 50.8 | 69.2 | 90.4 | 59.9 | 98.0 | 100 |
| Jahr | 1998 | 1981+ | 2003 | 1970 | 1994 | 1961 | 1997 | 1981 | 1967 | 1981 | 2007 | 1998 | 1998 | 1981+ |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 16 | 26 | 32 | 30 | 34 | 28 | 22 | 20 | 15 | 13 | 12 | 13 | 16 | 26 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 1.36 | am 20.09.2012 | 1.60 | 1.36 | 1.36 | am 20.09.2012 |
| MQ $m^3/s$ | 2.99 | | 3.84 | 2.16 | 3.11 | |
| HQ $m^3/s$ | 17.6 | am 23.01.2012 bei W= 118 cm | 17.6 | 8.66 | 17.6 | am 23.01.2012 bei W= 118 cm |
| Nq $l/(s km^2)$ | 2.15 | | 2.53 | 2.15 | 2.15 | |
| Mq $l/(s km^2)$ | 4.72 | | 6.07 | 3.41 | 4.91 | |
| Hq $l/(s km^2)$ | 27.8 | | 27.8 | 13.7 | 27.8 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 149 | | 95 | 54 | 155 | |
| | 1959/2012 (*) 54 Jahre | | | | 1959/2012 | |
| NQ $m^3/s$ | 0.957 | am 21.09.1991 | 1.19 | 0.957 | 0.957 | am 21.09.1991 |
| MNQ $m^3/s$ | 1.83 | | 2.53 | 2.07 | 1.95 | |
| MQ $m^3/s$ | 5.22 | | 6.65 | 3.81 | 5.21 | |
| MHQ $m^3/s$ | 54.1 | | 42.7 | 32.0 | 55.2 | |
| HQ $m^3/s$ | 287 | am 04.06.1981 bei W= 384 cm | 100 | 287 | 287 | am 04.06.1981 bei W= 384 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.89 | | 4.00 | 3.27 | 3.08 | |
| Mq $l/(s km^2)$ | 8.25 | | 10.5 | 6.02 | 8.23 | |
| MHq $l/(s km^2)$ | 85.5 | | 67.5 | 50.6 | 87.2 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 261 | | 165 | 96 | 260 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.957 | 1.51 | 21.09.1991 | 287 | 453 | 384 | 04.06.1981 |
| 2 | 1.20 | 1.90 | 18.08.1996 | 127 | 201 | 311 | 02.06.1961 |
| 3 | 1.20 | 1.90 | 07.01.1977 | 100 | 158 | 255 | 31.12.2002 |
| 4 | 1.26 | 1.99 | 21.10.1990 | 100 | 158 | 254 | 05.12.1981 |
| 5 | 1.33 | 2.10 | 14.10.1992 | 98.4 | 155 | 244 | 19.12.1988 |
| 6 | 1.36 | 2.15 | 21.09.2012 | 98.0 | 155 | 249 | 01.11.1998 |
| 7 | 1.42 | 2.24 | 17.07.1977 | 91.1 | 144 | 245 | 03.01.2003 |
| 8 | 1.43 | 2.26 | 17.10.2006 | 90.4 | 143 | 260 | 29.09.2007 |
| 9 | 1.47 | 2.32 | 13.11.1983 | 88.6 | 140 | 250 | 15.01.1968 |
| 10 | 1.49 | 2.35 | 10.12.1959 | 86.7 | 137 | 254 | 02.01.1987 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1959/2012 54 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 16.3 | 16.3 | | | |
| 364 | 15.1 | 15.1 | 189 | 35.8 | 10.6 |
| 363 | 14.2 | 14.2 | 95.7 | 28.6 | 9.90 |
| 362 | 11.7 | 12.5 | 74.3 | 24.9 | 9.36 |
| 361 | 11.6 | 11.7 | 56.7 | 22.2 | 9.09 |
| 360 | 10.3 | 11.6 | 56.5 | 20.8 | 8.90 |
| 359 | 10.2 | 10.3 | 50.1 | 19.3 | 7.30 |
| 358 | 9.76 | 10.2 | 45.3 | 18.3 | 7.23 |
| 357 | 9.55 | 9.76 | 43.1 | 17.4 | 7.20 |
| 356 | 9.53 | 9.55 | 42.1 | 16.6 | 7.10 |
| 350 | 8.37 | 8.66 | 36.7 | 13.4 | 5.30 |
| 340 | 6.48 | 7.48 | 27.4 | 11.1 | 4.90 |
| 330 | 4.97 | 5.59 | 21.1 | 9.57 | 4.60 |
| 320 | 4.08 | 4.93 | 17.4 | 8.64 | 4.35 |
| 300 | 3.72 | 3.76 | 14.8 | 7.36 | 3.41 |
| 270 | 3.18 | 3.33 | 12.2 | 6.06 | 3.05 |
| 240 | 2.83 | 2.88 | 10.6 | 5.07 | 2.75 |
| 210 | 2.61 | 2.63 | 9.08 | 4.37 | 2.52 |
| 183 | 2.42 | 2.42 | 7.85 | 3.87 | 2.28 |
| 150 | 2.23 | 2.23 | 6.84 | 3.33 | 1.91 |
| 130 | 2.05 | 2.02 | 6.57 | 3.05 | 1.76 |
| 120 | 1.95 | 1.95 | 6.50 | 2.94 | 1.72 |
| 110 | 1.93 | 1.91 | 6.44 | 2.82 | 1.69 |
| 100 | 1.89 | 1.87 | 6.29 | 2.72 | 1.64 |
| 90 | 1.83 | 1.82 | 6.19 | 2.59 | 1.56 |
| 80 | 1.73 | 1.76 | 6.07 | 2.50 | 1.48 |
| 70 | 1.68 | 1.71 | 6.00 | 2.40 | 1.46 |
| 60 | 1.64 | 1.65 | 5.88 | 2.30 | 1.40 |
| 50 | 1.62 | 1.59 | 5.76 | 2.19 | 1.35 |
| 40 | 1.61 | 1.55 | 5.53 | 2.09 | 1.34 |
| 30 | 1.51 | 1.51 | 5.34 | 1.97 | 1.31 |
| 25 | 1.51 | 1.51 | 5.22 | 1.92 | 1.29 |
| 20 | 1.49 | 1.49 | 5.09 | 1.85 | 1.28 |
| 15 | 1.46 | 1.46 | 4.91 | 1.77 | 1.27 |
| 10 | 1.43 | 1.43 | 4.78 | 1.69 | 1.22 |
| 9 | 1.43 | 1.43 | 4.77 | 1.68 | 1.21 |
| 8 | 1.43 | 1.43 | 4.76 | 1.66 | 1.21 |
| 7 | 1.43 | 1.43 | 4.72 | 1.63 | 1.21 |
| 6 | 1.40 | 1.40 | 4.71 | 1.60 | 1.20 |
| 5 | 1.40 | 1.40 | 4.70 | 1.56 | 1.20 |
| 4 | 1.40 | 1.40 | 4.65 | 1.52 | 1.15 |
| 3 | 1.38 | 1.38 | 4.55 | 1.48 | 1.14 |
| 2 | 1.38 | 1.38 | 4.28 | 1.42 | 1.11 |
| 1 | 1.38 | 1.38 | 4.26 | 1.33 | 1.07 |
| 0 | 1.36 | 1.36 | 4.00 | 0.957 | 0.957 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Leine

NLWKN

$A_{Eo}$ : 2916 $km^2$

PNP : NN + 94.98 m

Lage: 177.0 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Greene Nr. 4885118

Gewässer : Leine

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 11.5 | 10.1 | 43.8 | 37.4 | 42.5 | 20.0 | 14.6 | 22.2 | 19.7 | 14.3 | 14.8 | 10.2 | 10.9 | 11.5 |
| 2. | 11.4 | 10.6 | 55.2 | 32.0 | 44.4 | 19.1 | 14.6 | 15.0 | 15.4 | 13.9 | 12.5 | 10.4 | 11.2 | 11.6 |
| 3. | 11.5 | 11.1 | 69.6 | 29.2 | 41.5 | 18.9 | 30.0 | 14.5 | 14.3 | 13.6 | 12.0 | 10.2 | 11.4 | 12.1 |
| 4. | 11.5 | 13.4 | 62.4 | 28.1 | 38.8 | 20.0 | 20.9 | 18.1 | 13.4 | 13.1 | 11.8 | 13.0 | 13.1 | 12.1 |
| 5. | 11.5 | 13.3 | 72.8 | 26.6 | 36.6 | 19.4 | 19.0 | 33.3 | 12.8 | 12.6 | 11.7 | 17.6 | 12.9 | 13.9 |
| 6. | 11.5 | 13.7 | 86.1 | 24.9 | 33.8 | 19.0 | 23.9 | 20.6 | 17.6 | 16.3 | 11.4 | 16.5 | 12.0 | 12.7 |
| 7. | 11.4 | 14.7 | 85.8 | 24.0 | 31.5 | 19.0 | 19.4 | 17.5 | 14.8 | 15.2 | 11.1 | 16.2 | 14.7 | 12.1 |
| 8. | 11.5 | 18.6 | 86.5 | 24.1 | 32.7 | 18.6 | 17.6 | 16.3 | 15.5 | 13.1 | 10.9 | 12.8 | 20.7 | 11.2 |
| 9. | 11.3 | 20.0 | 87.3 | 23.8 | 31.6 | 18.1 | 16.4 | 15.0 | 14.5 | 12.7 | 10.8 | 12.2 | 15.6 | 11.1 |
| 10. | 11.2 | 20.4 | 90.2 | 22.7 | 29.3 | 19.1 | 16.5 | 14.4 | 13.4 | 12.3 | 10.5 | 11.7 | 14.6 | 14.4 |
| 11. | 11.1 | 16.4 | 87.6 | 21.9 | 29.0 | 18.9 | 15.8 | 14.2 | 14.1 | 12.3 | 11.2 | 11.5 | 16.8 | 14.8 |
| 12. | 11.0 | 15.1 | 82.3 | 21.4 | 29.3 | 17.8 | 16.6 | 14.7 | 14.9 | 12.1 | 17.9 | 11.6 | 14.4 | 12.4 |
| 13. | 11.0 | 17.6 | 78.8 | 21.8 | 29.4 | 22.9 | 15.2 | 14.5 | 15.8 | 12.0 | 12.1 | 13.4 | 13.6 | 12.0 |
| 14. | 11.2 | 22.1 | 72.2 | 21.9 | 28.6 | 19.2 | 14.8 | 13.9 | 27.5 | 11.7 | 11.3 | 12.4 | 12.9 | 11.8 |
| 15. | 11.1 | 21.8 | 64.1 | 25.3 | 27.4 | 18.0 | 14.8 | 13.7 | 33.1 | 11.6 | 10.9 | 15.4 | 12.6 | 24.0 |
| 16. | 11.1 | 27.8 | 56.5 | 24.4 | 26.5 | 17.3 | 16.5 | 14.3 | 25.8 | 13.7 | 10.6 | 14.7 | 12.4 | 35.1 |
| 17. | 11.2 | 48.6 | 48.8 | 25.6 | 26.6 | 16.9 | 15.2 | 14.7 | 39.2 | 13.7 | 10.4 | 13.0 | 12.0 | 37.1 |
| 18. | 11.2 | 35.2 | 43.5 | 27.5 | 26.6 | 16.7 | 14.4 | 13.6 | 45.7 | 12.4 | 10.7 | 12.5 | 11.8 | 38.8 |
| 19. | 11.1 | 28.9 | 45.7 | 27.0 | 27.2 | 16.6 | 14.2 | 13.2 | 38.0 | 12.2 | 10.6 | 11.8 | 11.7 | 39.7 |
| 20. | 11.0 | 26.4 | 60.7 | 26.0 | 24.4 | 16.4 | 13.8 | 17.5 | 34.6 | 11.8 | 10.4 | 11.5 | 11.4 | 34.0 |
| 21. | 11.0 | 29.5 | 56.4 | 23.4 | 23.6 | 16.3 | 13.4 | 25.1 | 27.5 | 11.8 | 10.0 | 11.2 | 11.3 | 30.2 |
| 22. | 11.0 | 32.2 | 75.0 | 22.5 | 23.1 | 18.0 | 13.0 | 17.0 | 24.1 | 13.2 | 10.2 | 11.1 | 11.1 | 29.3 |
| 23. | 10.8 | 40.8 | 85.9 | 23.5 | 23.1 | 19.3 | 12.5 | 14.7 | 21.6 | 12.4 | 10.1 | 11.0 | 10.9 | 55.3 |
| 24. | 10.6 | 50.3 | 84.4 | 28.4 | 22.4 | 17.4 | 12.4 | 14.0 | 19.4 | 11.8 | 10.3 | 11.0 | 12.7 | 87.2 |
| 25. | 10.6 | 58.8 | 85.1 | 46.1 | 21.8 | 17.0 | 11.9 | 15.3 | 17.8 | 17.9 | 12.1 | 11.0 | 12.0 | 88.8 |
| 26. | 10.5 | 50.7 | 83.5 | 44.8 | 21.1 | 16.2 | 12.0 | 15.0 | 16.5 | 15.6 | 10.6 | 10.8 | 11.5 | 89.7 |
| 27. | 10.5 | 49.1 | 73.2 | 39.7 | 19.9 | 15.7 | 11.8 | 13.8 | 15.7 | 16.0 | 10.8 | 11.0 | 12.5 | 89.4 |
| 28. | 10.4 | 45.6 | 63.4 | 36.9 | 19.5 | 15.3 | 11.9 | 14.3 | 22.2 | 13.4 | 11.2 | 10.6 | 11.9 | 87.9 |
| 29. | 10.3 | 39.4 | 56.9 | 38.4 | 19.1 | 15.2 | 11.9 | 14.2 | 16.8 | 12.6 | 10.6 | 10.5 | 12.0 | 86.4 |
| 30. | 10.2 | 50.4 | 49.5 | | 19.9 | 14.9 | 12.4 | 15.1 | 16.5 | 12.4 | 10.2 | 11.0 | 12.6 | 77.0 |
| 31. | | 52.3 | 43.2 | | 21.2 | | 12.9 | | 14.9 | 15.2 | | 11.3 | | 60.4 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 12. | 29. | 30. | 27. | 19. | 5. | 15. | 21. | 3. | 23. | 9. |
| NQ | 10.2 | 10.1 | 43.2 | 21.4 | 19.1 | 14.9 | 11.8 | 13.2 | 12.8 | 11.6 | 10.0 | 10.2 | 10.9 | 11.1 |
| MQ | 11.0 | 29.2 | 68.9 | 28.3 | 28.1 | 17.9 | 15.5 | 16.3 | 21.1 | 13.3 | 11.3 | 12.2 | 12.8 | 37.5 |
| HQ | 11.9 | 61.4 | 90.8 | 50.1 | 45.8 | 26.9 | 38.4 | 40.5 | 54.8 | 24.4 | 29.6 | 20.2 | 24.1 | 91.2 |
| Tag | 1. | 25. | 10. | 25. | 2. | 13. | 3. | 5. | 17. | 25. | 12. | 4. | 8. | 23. |
| $h_N$ mm / $h_A$ mm | 10 | 27 | 63 | 24 | 26 | 16 | 14 | 14 | 19 | 12 | 10 | 11 | 11 | 34 |
| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
| Jahr | 1976 | 1976 | 1972 | 1972 | 1972 | 1960 | 2012 | 1959 | 1959 | 1947 | 1959 | 1976 | 1976 | 1976 |
| NQ | 8.61 | 7.51 | 6.42 | 7.93 | 10.9 | 12.1 | 11.8 | 9.38 | 8.38 | 8.00 | 7.61 | 7.32 | 8.61 | 7.51 |
| MNQ | 17.5 | 21.2 | 24.9 | 28.5 | 28.6 | 27.9 | 20.2 | 17.9 | 16.0 | 14.9 | 14.4 | 14.9 | 17.4 | 21.0 |
| MQ | 28.4 | 37.9 | 45.4 | 46.9 | 48.6 | 39.3 | 27.6 | 25.0 | 22.7 | 19.9 | 18.9 | 21.5 | 27.7 | 37.9 |
| MHQ | 58.6 | 83.2 | 97.9 | 97.9 | 103 | 61.5 | 49.2 | 52.6 | 46.5 | 39.3 | 38.5 | 42.9 | 55.1 | 83.1 |
| HQ | 339 | 247 | 319 | 900 | 748 | 144 | 111 | 421 | 383 | 111 | 287 | 224 | 339 | 247 |
| Jahr | 1998 | 1986 | 1987 | 1946 | 1947 | 1961 | 1965 | 1981 | 1956 | 2007 | 2007 | 2007 | 1998 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 25 | 35 | 42 | 40 | 45 | 35 | 25 | 22 | 21 | 18 | 17 | 20 | 25 | 35 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 10.0 | am 21.09.2012 | 10.1 | 10.0 | 10.0 | am 21.09.2012 |
| MQ $m^3/s$ | 22.8 | | 30.8 | 15.0 | 23.7 | |
| HQ $m^3/s$ | 90.8 | am 10.01.2012 bei W= 442 cm | 90.8 | 54.8 | 91.2 | am 23.12.2012 bei W= 440 cm |
| Nq $l/(s km^2)$ | 3.43 | | 3.46 | 3.43 | 3.43 | |
| Mq $l/(s km^2)$ | 7.82 | | 10.6 | 5.14 | 8.13 | |
| Hq $l/(s km^2)$ | 31.1 | | 31.1 | 18.8 | 31.3 | |
| $h_N$ mm / $h_A$ mm | 247 | | 166 | 82 | 257 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ $m^3/s$ | 6.42 | am 31.01.1972 | 6.42 | 7.32 | 6.42 | am 31.01.1972 |
| MNQ $m^3/s$ | 11.9 | | 15.4 | 12.8 | 12.5 | |
| MQ $m^3/s$ | 31.8 | | 41.1 | 22.6 | 31.7 | |
| MHQ $m^3/s$ | 175 | | 166 | 81.3 | 175 | |
| HQ $m^3/s$ | 900 | am 09.02.1946 bei W= 741 cm | 900 | 421 | 900 | am 09.02.1946 bei W= 741 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 4.08 | | 5.28 | 4.39 | 4.29 | |
| Mq $l/(s km^2)$ | 10.9 | | 14.1 | 7.75 | 10.9 | |
| MHq $l/(s km^2)$ | 60.0 | | 56.9 | 27.9 | 60.0 | |
| $Mh_N$ mm / $Mh_A$ mm | 345 | | 222 | 123 | 344 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 6.42 | 2.20 | 31.01.1972 | 900 | 309 | 741 | 09.02.1946 |
| 2 | 7.32 | 2.51 | 11.10.1976 | 748 | 257 | 725 | 15.03.1947 |
| 3 | 7.35 | 2.52 | 18.10.1959 | 421 | 144 | 712 | 05.06.1981 |
| 4 | 8.00 | 2.74 | 31.08.1947 | 383 | 131 | 676 | 17.07.1956 |
| 5 | 8.60 | 2.95 | 12.10.1991 | 364 | 125 | 665 | 13.03.1981 |
| 6 | 8.61 | 2.95 | 16.09.1973 | 353 | 121 | 680 | 19.03.1942 |
| 7 | 8.75 | 3.00 | 28.09.1964 | 339 | 116 | 671 | 01.11.1998 |
| 8 | 9.15 | 3.14 | 06.08.1996 | 319 | 109 | 663 | 01.01.1987 |
| 9 | 9.21 | 3.16 | 23.09.1974 | 287 | 98.4 | 653 | 30.09.2007 |
| 10 | 9.33 | 3.20 | 31.10.1979 | 270 | 92.6 | 658 | 06.11.1940 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 72 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 90.2 | 90.2 | | | |
| 364 | 87.6 | 89.7 | 900 | 183 | 55.6 |
| 363 | 87.3 | 89.4 | 395 | 150 | 53.9 |
| 362 | 86.5 | 88.8 | 328 | 133 | 47.5 |
| 361 | 86.1 | 87.9 | 274 | 120 | 46.3 |
| 360 | 85.9 | 87.6 | 268 | 111 | 41.8 |
| 359 | 85.8 | 87.3 | 233 | 105 | 41.0 |
| 358 | 85.1 | 87.2 | 220 | 99.3 | 40.5 |
| 357 | 84.4 | 86.5 | 203 | 96.9 | 40.5 |
| 356 | 83.5 | 86.4 | 194 | 94.1 | 40.5 |
| 350 | 72.2 | 83.5 | 163 | 83.6 | 37.3 |
| 340 | 55.2 | 63.4 | 134 | 70.4 | 33.0 |
| 330 | 46.1 | 48.8 | 116 | 60.3 | 30.8 |
| 320 | 40.8 | 41.5 | 96.2 | 53.7 | 29.0 |
| 300 | 30.0 | 31.6 | 81.5 | 45.1 | 25.0 |
| 270 | 24.9 | 24.9 | 65.8 | 36.7 | 19.8 |
| 240 | 20.4 | 20.6 | 54.6 | 31.2 | 16.6 |
| 210 | 17.8 | 17.6 | 48.0 | 27.2 | 14.9 |
| 183 | 16.3 | 15.8 | 42.3 | 24.1 | 14.1 |
| 150 | 14.8 | 14.7 | 39.0 | 20.9 | 11.9 |
| 130 | 13.9 | 13.9 | 36.9 | 19.4 | 11.2 |
| 120 | 13.6 | 13.6 | 35.6 | 18.8 | 10.7 |
| 110 | 13.1 | 13.1 | 34.3 | 18.0 | 10.4 |
| 100 | 12.5 | 12.7 | 32.9 | 17.3 | 9.99 |
| 90 | 12.2 | 12.5 | 31.8 | 16.5 | 9.81 |
| 80 | 11.9 | 12.2 | 30.6 | 15.9 | 9.52 |
| 70 | 11.6 | 12.1 | 29.8 | 15.3 | 9.37 |
| 60 | 11.5 | 11.9 | 29.0 | 14.7 | 8.80 |
| 50 | 11.3 | 11.7 | 28.4 | 14.1 | 8.63 |
| 40 | 11.1 | 11.4 | 27.8 | 13.5 | 8.63 |
| 30 | 10.9 | 11.2 | 27.0 | 12.9 | 8.38 |
| 25 | 10.7 | 11.1 | 26.4 | 12.5 | 8.12 |
| 20 | 10.7 | 10.9 | 25.7 | 12.1 | 8.12 |
| 15 | 10.6 | 10.7 | 25.2 | 11.7 | 8.12 |
| 10 | 10.5 | 10.6 | 24.7 | 11.1 | 7.72 |
| 9 | 10.4 | 10.5 | 24.6 | 11.0 | 7.72 |
| 8 | 10.4 | 10.5 | 24.6 | 10.8 | 7.72 |
| 7 | 10.3 | 10.5 | 24.3 | 10.6 | 7.72 |
| 6 | 10.3 | 10.3 | 24.2 | 10.4 | 7.72 |
| 5 | 10.3 | 10.3 | 23.5 | 10.2 | 7.72 |
| 4 | 10.3 | 10.3 | 23.3 | 9.92 | 7.67 |
| 3 | 10.3 | 10.3 | 23.1 | 9.59 | 7.55 |
| 2 | 10.2 | 10.3 | 22.9 | 9.23 | 7.51 |
| 1 | 10.2 | 10.1 | 22.8 | 8.41 | 7.51 |
| 0 | 10.0 | 10.0 | 22.5 | 6.42 | 6.42 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Leine

Odertalsperre seit 1934 Sösetalsperre seit 1931

RB Salzderhelden seit 1985

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 3463 $km^2$

PNP : NN + 68.46 m

Lage: 130.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Poppenburg Nr. 4885154

Gewässer : Leine

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 11.9 | 9.39 | 46.3 | 44.1 | 43.2 | 20.5 | 15.1 | 20.0 | 16.3 | 13.3 | 12.8 | 8.82 | 9.67 | 9.93 |
| 2. | 11.6 | 9.90 | 51.1 | 38.7 | 44.9 | 19.4 | 15.1 | 16.1 | 15.3 | 12.9 | 11.7 | 8.96 | 9.60 | 9.51 |
| 3. | 11.6 | 10.8 | 68.6 | 35.3 | 43.3 | 19.0 | 26.1 | 13.8 | 13.0 | 12.4 | 10.3 | 9.15 | 10.2 | 9.98 |
| 4. | 11.8 | 12.0 | 65.5 | 33.3 | 40.5 | 19.2 | 24.2 | 17.7 | 12.3 | 12.0 | 10.3 | 11.6 | 11.0 | 10.2 |
| 5. | 11.6 | 13.1 | 83.3 | 31.7 | 38.2 | 20.0 | 19.8 | 30.0 | 11.8 | 11.7 | 10.4 | 17.2 | 11.6 | 12.1 |
| 6. | 11.5 | 13.4 | 91.7 | 29.8 | 35.9 | 18.5 | 23.7 | 24.0 | 15.3 | 13.8 | 10.1 | 15.9 | 10.7 | 11.0 |
| 7. | 11.4 | 14.7 | 89.4 | 27.0 | 33.4 | 18.8 | 21.1 | 17.4 | 13.2 | 16.3 | 9.72 | 16.0 | 11.6 | 10.1 |
| 8. | 11.3 | 18.3 | 91.8 | 27.6 | 34.4 | 18.3 | 18.6 | 15.5 | 14.8 | 12.3 | 9.46 | 12.7 | 19.5 | 9.49 |
| 9. | 11.4 | 20.7 | 90.4 | 27.8 | 34.3 | 17.9 | 18.0 | 14.2 | 13.6 | 11.9 | 9.43 | 10.6 | 15.4 | 8.88 |
| 10. | 11.3 | 22.1 | 91.2 | 26.5 | 31.5 | 18.4 | 18.3 | 13.1 | 12.2 | 11.3 | 9.24 | 10.5 | 13.3 | 11.8 |
| 11. | 11.3 | 18.0 | 88.5 | 25.6 | 30.5 | 18.8 | 17.6 | 12.8 | 12.3 | 11.2 | 9.76 | 10.0 | 14.8 | 14.3 |
| 12. | 11.0 | 16.2 | 84.6 | 24.8 | 30.5 | 18.1 | 16.7 | 13.2 | 14.1 | 11.2 | 16.6 | 10.0 | 14.1 | 10.7 |
| 13. | 10.9 | 17.9 | 79.8 | 24.2 | 30.5 | 23.0 | 16.1 | 13.3 | 14.1 | 10.9 | 11.4 | 11.3 | 12.1 | 10.1 |
| 14. | 10.9 | 22.2 | 76.1 | 24.5 | 29.9 | 20.6 | 15.0 | 12.6 | 20.4 | 10.7 | 10.3 | 10.9 | 11.4 | 9.78 |
| 15. | 10.8 | 24.6 | 68.1 | 26.5 | 28.8 | 18.4 | 14.9 | 12.4 | 33.5 | 10.5 | 9.90 | 12.7 | 11.1 | 19.9 |
| 16. | 10.7 | 27.3 | 60.8 | 27.9 | 27.7 | 17.6 | 16.6 | 12.6 | 25.6 | 11.4 | 9.44 | 13.6 | 10.9 | 34.7 |
| 17. | 10.7 | 51.9 | 53.4 | 26.7 | 27.5 | 16.9 | 15.7 | 13.4 | 29.1 | 12.8 | 9.01 | 11.8 | 10.5 | 36.4 |
| 18. | 10.6 | 40.9 | 47.8 | 30.0 | 27.3 | 16.7 | 14.7 | 12.4 | 45.9 | 10.8 | 9.48 | 10.8 | 10.4 | 36.1 |
| 19. | 10.6 | 32.6 | 49.6 | 29.5 | 27.9 | 16.3 | 14.2 | 11.8 | 37.5 | 10.3 | 9.59 | 10.3 | 10.2 | 38.9 |
| 20. | 10.5 | 28.8 | 68.4 | 29.5 | 25.7 | 15.9 | 14.1 | 12.7 | 34.4 | 10.3 | 9.60 | 9.90 | 10.1 | 34.7 |
| 21. | 10.3 | 30.8 | 67.2 | 26.2 | 24.4 | 16.1 | 13.5 | 24.2 | 28.0 | 9.88 | 9.14 | 9.70 | 9.57 | 30.5 |
| 22. | 10.4 | 33.9 | 78.7 | 25.0 | 23.7 | 17.0 | 13.2 | 16.0 | 24.0 | 10.1 | 9.05 | 9.60 | 9.48 | 29.5 |
| 23. | 10.2 | 40.8 | 97.5 | 25.7 | 23.4 | 19.2 | 12.6 | 13.8 | 21.3 | 10.9 | 9.11 | 9.42 | 9.25 | 45.7 |
| 24. | 9.94 | 47.3 | 92.1 | 29.2 | 23.1 | 17.7 | 12.5 | 12.9 | 19.1 | 9.88 | 9.34 | 9.40 | 10.2 | 85.8 |
| 25. | 9.91 | 57.4 | 92.0 | 44.0 | 22.3 | 17.2 | 12.1 | 13.7 | 17.3 | 13.4 | 10.8 | 9.56 | 10.8 | 82.8 |
| 26. | 9.68 | 51.8 | 88.5 | 47.9 | 21.4 | 16.4 | 11.8 | 13.7 | 15.9 | 14.9 | 9.92 | 9.24 | 9.96 | 84.8 |
| 27. | 9.67 | 48.2 | 81.4 | 42.9 | 20.6 | 15.9 | 11.8 | 12.7 | 14.5 | 13.9 | 9.43 | 9.34 | 10.3 | 85.9 |
| 28. | 9.82 | 46.0 | 70.9 | 40.1 | 19.7 | 15.6 | 11.0 | 12.5 | 20.2 | 12.6 | 10.1 | 9.17 | 10.3 | 85.0 |
| 29. | 9.60 | 40.9 | 63.5 | 39.7 | 19.3 | 15.3 | 11.5 | 12.7 | 16.9 | 10.8 | 9.70 | 9.01 | 10.1 | 82.4 |
| 30. | 9.60 | 48.3 | 56.8 | | 19.6 | 15.3 | 11.7 | 14.2 | 15.6 | 10.6 | 9.22 | 9.27 | 10.6 | 78.3 |
| 31. | | 57.8 | 49.9 | | 21.3 | | 12.0 | | 13.9 | 12.9 | | 10.0 | | 63.4 |

## Hauptwerte

| | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 1. | 13. | 29. | 29. | 28. | 19. | 5. | 21. | 17. | 1. | 23. | 9. |
| NQ | 9.60 | 9.39 | 46.3 | 24.2 | 19.3 | 15.3 | 11.0 | 11.8 | 11.8 | 9.88 | 9.01 | 8.82 | 9.25 | 8.88 |
| MQ | 10.7 | 29.9 | 73.7 | 31.4 | 29.2 | 17.9 | 15.8 | 15.2 | 19.7 | 11.9 | 10.1 | 10.9 | 11.3 | 35.6 |
| HQ | 13.2 | 61.6 | 100 | 50.7 | 46.2 | 25.4 | 37.7 | 39.2 | 50.9 | 20.3 | 25.1 | 18.5 | 21.6 | 88.6 |
| Tag | 7. | 31. | 5. | 25. | 2. | 13. | 3. | 5. | 18. | 25. | 12. | 5. | 8. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 23 | 57 | 23 | 23 | 13 | 12 | 11 | 15 | 9 | 8 | 8 | 8 | 28 |

| | 1952/2011 | | 1953/2012 | | | | | | | 60 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 1959 | 1954 | 1954 | 1972 | 1954 | 1954 | 1954 | 1954 | 1990 | 1991 | 1991 | 1991 | 2012 |
| NQ | 9.08 | 9.12 | 9.28 | 9.28 | 12.1 | 11.6 | 8.32 | 7.75 | 8.32 | 7.16 | 7.71 | 8.73 | 9.08 | 8.88 |
| MNQ | 19.3 | 24.3 | 30.3 | 33.9 | 33.7 | 32.8 | 23.4 | 20.3 | 17.8 | 16.5 | 15.8 | 16.3 | 18.8 | 23.9 |
| MQ | 31.4 | 44.4 | 54.8 | 54.1 | 56.6 | 46.1 | 32.4 | 28.9 | 25.7 | 21.9 | 21.0 | 23.6 | 30.5 | 44.1 |
| MHQ | 62.5 | 99.5 | 115 | 102 | 107 | 72.6 | 59.3 | 61.2 | 52.4 | 42.6 | 40.6 | 47.4 | 61.2 | 99.5 |
| HQ | 427 | 331 | 372 | 268 | 381 | 192 | 168 | 436 | 340 | 137 | 197 | 281 | 427 | 331 |
| Jahr | 1998 | 1986 | 1987 | 1970 | 1981 | 1994 | 2004 | 1981 | 1956 | 2007 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 24 | 34 | 42 | 39 | 44 | 35 | 25 | 22 | 20 | 17 | 16 | 18 | 23 | 34 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 8.82 | am 01.10.2012 | 9.39 | 8.82 | 8.82 | am 01.10.2012 |
| MQ $m^3/s$ | 23.1 | | 32.4 | 13.9 | 23.6 | |
| HQ $m^3/s$ | 100 | am 05.01.2012 bei W= 298 cm | 100 | 50.9 | 100 | am 05.01.2012 bei W= 298 cm |
| Nq $l/(s km^2)$ | 2.55 | | 2.71 | 2.55 | 2.55 | |
| Mq $l/(s km^2)$ | 6.67 | | 9.36 | 4.01 | 6.81 | |
| Hq $l/(s km^2)$ | 29.0 | | 29.0 | 14.7 | 29.0 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 211 | | 147 | 64 | 216 | |
| | 1953/2012 (*) 60 Jahre | | | | 1953/2012 | |
| NQ $m^3/s$ | 7.16 | am 12.08.1990 | 9.08 | 7.16 | 7.16 | am 12.08.1990 |
| MNQ $m^3/s$ | 12.6 | | 17.2 | 13.7 | 13.2 | |
| MQ $m^3/s$ | 36.7 | | 47.9 | 25.6 | 36.6 | |
| MHQ $m^3/s$ | 178 | | 168 | 95.6 | 183 | |
| HQ $m^3/s$ | 436 | am 06.06.1981 bei W= 485 cm | 427 | 436 | 436 | am 06.06.1981 bei W= 485 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.64 | | 4.97 | 3.96 | 3.81 | |
| Mq $l/(s km^2)$ | 10.6 | | 13.8 | 7.39 | 10.6 | |
| MHq $l/(s km^2)$ | 51.4 | | 48.5 | 27.6 | 52.8 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 335 | | 218 | 118 | 334 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 7.16 | 2.07 | 12.08.1990 | 436 | 126 | 485 | 06.06.1981 |
| 2 | 7.71 | 2.23 | 15.09.1991 | 427 | 123 | 471 | 02.11.1998 |
| 3 | 7.75 | 2.24 | 21.06.1954 | 381 | 110 | 446 | 13.03.1981 |
| 4 | 8.82 | 2.55 | 01.10.2012 | 372 | 107 | 451 | 01.01.1987 |
| 5 | 8.90 | 2.57 | 15.09.1964 | 345 | 99.6 | 448 | 03.01.2003 |
| 6 | 9.12 | 2.63 | 16.12.1959 | 340 | 98.2 | 440 | 18.07.1956 |
| 7 | 9.28 | 2.68 | 07.01.1954 | 320 | 92.4 | 393 | 21.12.1965 |
| 8 | 9.39 | 2.71 | 01.12.2011 | 296 | 85.5 | 402 | 06.03.1956 |
| 9 | 9.58 | 2.77 | 01.02.1972 | 268 | 77.4 | 415 | 25.02.1970 |
| 10 | 9.61 | 2.78 | 10.09.1996 | 260 | 75.1 | 410 | 01.02.1995 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1953/2012 60 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 97.5 | 97.5 | | | |
| 364 | 92.1 | 92.1 | 427 | 199 | 65.2 |
| 363 | 92.0 | 92.0 | 417 | 173 | 64.5 |
| 362 | 91.8 | 91.8 | 367 | 161 | 54.1 |
| 361 | 91.7 | 91.7 | 340 | 149 | 53.0 |
| 360 | 91.2 | 91.2 | 278 | 141 | 50.1 |
| 359 | 90.4 | 90.4 | 262 | 133 | 44.5 |
| 358 | 89.4 | 89.4 | 244 | 126 | 43.5 |
| 357 | 89.4 | 89.4 | 225 | 122 | 42.1 |
| 356 | 89.4 | 89.4 | 223 | 117 | 41.8 |
| 350 | 76.1 | 83.3 | 183 | 99.8 | 39.2 |
| 340 | 57.4 | 68.4 | 151 | 83.4 | 35.5 |
| 330 | 47.9 | 49.9 | 133 | 71.3 | 33.4 |
| 320 | 43.2 | 43.3 | 117 | 63.6 | 31.5 |
| 300 | 32.6 | 33.4 | 102 | 53.1 | 26.7 |
| 270 | 26.2 | 26.2 | 85.4 | 43.2 | 24.0 |
| 240 | 20.7 | 20.2 | 65.6 | 36.4 | 19.4 |
| 210 | 17.9 | 17.3 | 56.4 | 31.3 | 17.2 |
| 183 | 16.0 | 15.4 | 48.9 | 27.6 | 14.7 |
| 150 | 13.5 | 13.4 | 44.8 | 23.5 | 13.2 |
| 130 | 12.8 | 12.7 | 42.5 | 21.5 | 12.5 |
| 120 | 12.5 | 12.4 | 41.1 | 20.4 | 12.2 |
| 110 | 12.0 | 11.9 | 39.2 | 19.5 | 11.8 |
| 100 | 11.8 | 11.5 | 37.7 | 18.6 | 11.5 |
| 90 | 11.5 | 11.1 | 36.8 | 17.8 | 11.0 |
| 80 | 11.0 | 10.9 | 35.6 | 17.0 | 10.8 |
| 70 | 10.9 | 10.5 | 34.3 | 16.2 | 10.4 |
| 60 | 10.6 | 10.3 | 33.5 | 15.4 | 10.3 |
| 50 | 10.2 | 10.2 | 33.1 | 14.7 | 9.88 |
| 40 | 9.91 | 9.90 | 32.2 | 13.9 | 9.74 |
| 30 | 9.68 | 9.67 | 30.9 | 13.1 | 9.45 |
| 25 | 9.67 | 9.49 | 30.6 | 12.7 | 9.30 |
| 20 | 9.44 | 9.44 | 30.4 | 12.3 | 9.21 |
| 15 | 9.39 | 9.40 | 29.9 | 11.8 | 8.41 |
| 10 | 9.27 | 9.22 | 29.4 | 11.3 | 8.16 |
| 9 | 9.22 | 9.17 | 29.4 | 11.0 | 8.16 |
| 8 | 9.17 | 9.15 | 29.4 | 10.9 | 8.16 |
| 7 | 9.15 | 9.14 | 28.9 | 10.7 | 8.16 |
| 6 | 9.14 | 9.11 | 28.8 | 10.6 | 8.16 |
| 5 | 9.11 | 9.05 | 28.8 | 10.4 | 7.91 |
| 4 | 9.05 | 9.05 | 28.8 | 10.2 | 7.91 |
| 3 | 9.05 | 9.05 | 28.7 | 9.91 | 7.91 |
| 2 | 9.05 | 8.96 | 28.7 | 9.56 | 7.66 |
| 1 | 8.96 | 8.88 | 28.3 | 9.05 | 7.66 |
| 0 | 8.82 | 8.82 | 28.0 | 7.16 | 7.16 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Leine
Odertalsperre seit 1934 Sösetalsperre seit 1931
RB Salzderhelden seit 1985

NLWKN

$A_{Eo}$ : 5304 km²
PNP : NN + 43.81 m
Lage: 87.1 km oberhalb der Mündung, links

# Q
m³/s

Pegel : Herrenhausen Nr. 48800108
Gewässer : Leine
Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 16.7 | 15.3 | 69.1 | 67.5 | 58.0 | 31.5 | 22.1 | 26.4 | 20.4 | 20.1 | 21.0 | 13.4 | 16.3 | 17.7 |
| 2. | 17.6 | 16.0 | 69.0 | 60.2 | 60.2 | 29.7 | 21.5 | 26.2 | 26.2 | 19.8 | 18.7 | 13.7 | 16.0 | 16.8 |
| 3. | 16.2 | 17.1 | 87.8 | 53.8 | 60.3 | 28.9 | 26.7 | 21.7 | 19.9 | 18.7 | 16.0 | 13.9 | 16.7 | 17.3 |
| 4. | 16.5 | 19.4 | 91.7 | 50.8 | 57.0 | 30.4 | 35.9 | 26.3 | 19.8 | 18.3 | 15.3 | 23.8 | 17.1 | 17.9 |
| 5. | 16.1 | 21.7 | 106 | 48.4 | 54.4 | 30.5 | 28.0 | 38.0 | 18.1 | 18.5 | 15.2 | 27.6 | 18.0 | 19.2 |
| 6. | 16.3 | 22.1 | 144 | 45.2 | 51.5 | 28.4 | 29.9 | 39.7 | 22.9 | 19.4 | 15.4 | 27.8 | 17.9 | 20.4 |
| 7. | 16.8 | 24.6 | 136 | 39.9 | 48.6 | 28.8 | 30.7 | 27.4 | 23.9 | 22.4 | 14.8 | 25.6 | 17.4 | 18.1 |
| 8. | 15.7 | 29.5 | 135 | 43.0 | 50.2 | 28.4 | 26.7 | 24.5 | 23.3 | 18.7 | 14.4 | 20.9 | 22.6 | 17.3 |
| 9. | 16.8 | 31.5 | 134 | 42.0 | 51.5 | 27.4 | 25.4 | 22.6 | 21.7 | 18.3 | 14.2 | 17.7 | 23.7 | 17.1 |
| 10. | 16.0 | 32.3 | 131 | 40.8 | 47.8 | 28.1 | 28.4 | 20.5 | 20.2 | 17.0 | 13.9 | 16.8 | 20.2 | 21.9 |
| 11. | 16.0 | 28.1 | 127 | 39.3 | 45.8 | 28.8 | 32.0 | 19.2 | 18.5 | 16.5 | 16.5 | 16.2 | 20.5 | 24.4 |
| 12. | 15.8 | 25.2 | 120 | 37.8 | 45.2 | 28.9 | 25.1 | 19.9 | 22.4 | 16.3 | 20.7 | 16.6 | 21.0 | 20.9 |
| 13. | 15.8 | 26.5 | 115 | 37.3 | 44.9 | 32.8 | 24.6 | 22.5 | 23.3 | 15.9 | 19.3 | 17.0 | 18.9 | 19.1 |
| 14. | 15.7 | 31.4 | 108 | 37.2 | 44.3 | 33.4 | 22.8 | 19.8 | 26.1 | 15.8 | 15.9 | 17.5 | 17.7 | 18.8 |
| 15. | 15.9 | 37.4 | 98.2 | 39.3 | 42.9 | 28.9 | 23.5 | 19.2 | 40.2 | 15.5 | 15.3 | 18.8 | 17.2 | 27.9 |
| 16. | 15.8 | 42.2 | 89.9 | 40.9 | 41.7 | 27.7 | 25.8 | 19.0 | 36.5 | 18.2 | 14.8 | 21.1 | 17.1 | 48.5 |
| 17. | 15.8 | 73.2 | 78.7 | 38.2 | 40.8 | 26.6 | 24.8 | 19.8 | 35.1 | 18.5 | 14.2 | 18.5 | 16.9 | 51.6 |
| 18. | 15.8 | 66.3 | 71.2 | 42.1 | 40.7 | 26.6 | 22.7 | 18.8 | 58.8 | 16.4 | 14.0 | 17.0 | 16.7 | 49.3 |
| 19. | 15.7 | 50.8 | 73.4 | 43.0 | 40.5 | 25.9 | 21.9 | 18.4 | 55.8 | 15.2 | 14.2 | 16.4 | 17.0 | 51.8 |
| 20. | 15.7 | 44.5 | 97.6 | 43.2 | 39.4 | 26.0 | 21.7 | 18.5 | 50.1 | 15.1 | 14.4 | 15.7 | 16.5 | 47.9 |
| 21. | 15.6 | 43.3 | 106 | 38.6 | 37.1 | 25.4 | 21.0 | 28.4 | 41.1 | 14.7 | 13.5 | 15.2 | 16.2 | 43.0 |
| 22. | 15.6 | 48.3 | 120 | 36.9 | 36.3 | 26.9 | 20.3 | 25.3 | 34.5 | 14.7 | 13.6 | 15.0 | 15.9 | 40.9 |
| 23. | 15.2 | 55.0 | 151 | 37.0 | 35.8 | 27.9 | 19.4 | 21.1 | 31.3 | 15.9 | 13.9 | 14.6 | 15.8 | 59.1 |
| 24. | 15.3 | 62.9 | 155 | 40.0 | 35.4 | 27.8 | 19.3 | 19.7 | 28.6 | 15.3 | 14.5 | 14.6 | 16.1 | 109 |
| 25. | 15.3 | 72.5 | 143 | 52.0 | 34.5 | 26.0 | 18.5 | 23.2 | 26.0 | 16.3 | 15.0 | 14.7 | 18.1 | 107 |
| 26. | 15.3 | 70.4 | 131 | 63.4 | 33.6 | 25.2 | 18.1 | 22.1 | 24.5 | 22.0 | 15.4 | 14.7 | 16.9 | 105 |
| 27. | 15.3 | 63.7 | 120 | 59.0 | 31.7 | 24.3 | 17.8 | 20.0 | 23.4 | 19.0 | 14.5 | 14.6 | 16.9 | 104 |
| 28. | 15.4 | 62.1 | 105 | 56.0 | 30.1 | 23.5 | 17.0 | 18.7 | 25.8 | 18.7 | 14.4 | 14.6 | 17.6 | 105 |
| 29. | 15.4 | 57.7 | 93.1 | 55.4 | 29.4 | 22.7 | 17.4 | 21.4 | 28.1 | 16.0 | 14.5 | 14.4 | 16.9 | 99.6 |
| 30. | 15.5 | 62.5 | 84.9 | | 30.3 | 22.4 | 17.3 | 22.5 | 22.8 | 15.9 | 13.9 | 15.2 | 17.4 | 96.9 |
| 31. | | 79.4 | 75.5 | | 31.6 | | 20.1 | | 22.1 | 21.2 | | 16.1 | | 85.6 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23. | 1. | 2. | 22. | 29. | 30. | 28. | 19. | 5. | 21.+ | 21. | 1. | 23. | 2. |
| NQ | 15.2 | 15.3 | 69.0 | 36.9 | 29.4 | 22.4 | 17.0 | 18.4 | 18.1 | 14.7 | 13.5 | 13.4 | 15.8 | 16.8 |
| MQ | 15.9 | 43.0 | 109 | 45.8 | 43.0 | 27.7 | 23.4 | 23.0 | 28.8 | 17.6 | 15.4 | 17.4 | 17.8 | 48.4 |
| HQ | 20.0 | 82.4 | 162 | 71.7 | 64.0 | 36.2 | 48.4 | 51.0 | 69.0 | 46.9 | 30.3 | 40.6 | 32.8 | 117 |
| Tag | 2. | 31. | 24. | 1. | 2. | 13. | 11. | 5. | 18. | 31. | 11. | 4. | 8. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 22 | 55 | 22 | 22 | 14 | 12 | 11 | 15 | 9 | 8 | 9 | 9 | 24 |
| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
| Jahr | 1959 | 1959 | 1972 | 1972 | 1972 | 1960 | 1960 | 1959 | 1959 | 1947 | 1947 | 1947 | 1959 | 1959 |
| NQ | 10.3 | 9.40 | 11.2 | 12.3 | 15.7 | 14.8 | 15.0 | 11.4 | 10.5 | 9.60 | 9.30 | 8.90 | 10.3 | 9.40 |
| MNQ | 25.5 | 32.0 | 39.6 | 45.2 | 45.7 | 43.6 | 30.5 | 26.4 | 23.1 | 21.0 | 20.2 | 20.9 | 25.3 | 31.8 |
| MQ | 42.4 | 60.8 | 75.7 | 78.6 | 80.7 | 64.5 | 43.8 | 38.1 | 34.2 | 29.3 | 27.1 | 31.5 | 42.0 | 60.6 |
| MHQ | 86.4 | 127 | 154 | 150 | 161 | 106 | 82.4 | 77.1 | 70.4 | 60.0 | 53.8 | 64.8 | 85.7 | 127 |
| HQ | 462 | 382 | 531 | 1050 | 746 | 305 | 225 | 250 | 360 | 184 | 233 | 371 | 462 | 382 |
| Jahr | 1998 | 1954 | 2003 | 1946 | 1947 | 1994 | 2002 | 1981 | 1956 | 2007 | 2007 | 2007 | 1998 | 1954 |
| | 1940/2011 | | 1941/2012 | | | | | | 72 Jahre | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 21 | 31 | 38 | 37 | 41 | 32 | 22 | 19 | 17 | 15 | 13 | 16 | 21 | 31 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 13.4 | am 01.10.2012 | 15.2 | 13.4 | 13.4 | am 01.10.2012 |
| MQ m³/s | 34.2 | | 47.6 | 20.9 | 34.8 | |
| HQ m³/s | 162 | am 24.01.2012 bei W= 491 cm | 162 | 69.0 | 162 | am 24.01.2012 bei W= 491 cm |
| Nq l/(s km²) | 2.53 | | 2.87 | 2.53 | 2.53 | |
| Mq l/(s km²) | 6.45 | | 8.98 | 3.95 | 6.56 | |
| Hq l/(s km²) | 30.5 | | 30.5 | 13.0 | 30.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 203 | | 141 | 63 | 208 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| NQ m³/s | 8.90 | am 06.10.1947 | 9.40 | 8.90 | 8.90 | am 06.10.1947 |
| MNQ m³/s | 16.0 | | 21.9 | 17.5 | 16.6 | |
| MQ m³/s | 50.3 | | 67.0 | 33.9 | 49.4 | |
| MHQ m³/s | 251 | | 242 | 119 | 254 | |
| HQ m³/s | 1050 | am 10.02.1946 bei W= 644 cm | 1050 | 371 | 1050 | am 10.02.1946 bei W= 644 cm |
| $HQ_1$ m³/s | 183 | | 168 | 84.0 | 183 | |
| $HQ_5$ m³/s | 337 | | 328 | 169 | 337 | |
| MNq l/(s km²) | 3.02 | | 4.13 | 3.30 | 3.13 | |
| Mq l/(s km²) | 9.48 | | 12.6 | 6.39 | 9.31 | |
| MHq l/(s km²) | 47.3 | | 45.6 | 22.4 | 47.9 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 299 | | 199 | 102 | 295 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 8.90 | 1.68 | 06.10.1947 | 1050 | 198 | 644 | 10.02.1946 |
| 2 | 9.40 | 1.77 | 17.12.1959 | 748 *) | 141 | 578 | 16.03.1947 |
| 3 | 10.5 | 1.98 | 31.12.1976 | 583 | 110 | 589 | 13.03.1981 |
| 4 | 11.2 | 2.11 | 16.09.1991 | 468 | 88.2 | 588 | 02.01.1987 |
| 5 | 11.2 | 2.11 | 18.01.1972 | 468 | 88.2 | 538 | 21.03.1942 |
| 6 | 11.5 | 2.17 | 13.10.1991 | 462 | 87.1 | 587 | 03.11.1998 |
| 7 | 11.7 | 2.21 | 10.09.1996 | 413 | 77.9 | 565 | 24.02.1970 |
| 8 | 12.0 | 2.26 | 23.06.1954 | 388 | 73.2 | 560 | 16.01.1968 |
| 9 | 12.0 | 2.26 | 11.10.1949 | 382 *) | 72.0 | 516 | 30.12.1954 |
| 10 | 12.1 | 2.28 | 09.07.1976 | 372 | 70.1 | 541 | 16.01.1948 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 155 | 155 | | | |
| 364 | 151 | 151 | 924 | 280 | 98.0 |
| 363 | 144 | 144 | 724 | 246 | 88.7 |
| 362 | 143 | 143 | 570 | 220 | 82.0 |
| 361 | 136 | 136 | 406 | 206 | 77.3 |
| 360 | 135 | 135 | 406 | 198 | 75.7 |
| 359 | 134 | 134 | 404 | 189 | 74.6 |
| 358 | 134 | 134 | 317 | 183 | 71.5 |
| 357 | 131 | 131 | 304 | 176 | 68.8 |
| 356 | 127 | 127 | 280 | 169 | 67.7 |
| 350 | 108 | 108 | 251 | 145 | 63.5 |
| 340 | 79.4 | 97.6 | 213 | 120 | 54.0 |
| 330 | 67.5 | 73.4 | 194 | 103 | 50.2 |
| 320 | 59.0 | 59.0 | 167 | 89.7 | 43.3 |
| 300 | 48.3 | 48.4 | 146 | 74.8 | 37.2 |
| 270 | 38.6 | 38.6 | 114 | 59.2 | 28.2 |
| 240 | 30.5 | 29.9 | 89.8 | 49.2 | 24.5 |
| 210 | 26.9 | 26.3 | 75.5 | 41.7 | 19.9 |
| 183 | 24.5 | 23.4 | 69.3 | 36.4 | 15.9 |
| 150 | 21.2 | 21.0 | 63.7 | 31.0 | 13.6 |
| 130 | 19.7 | 19.7 | 60.3 | 28.4 | 13.2 |
| 120 | 19.0 | 18.9 | 58.7 | 27.1 | 12.7 |
| 110 | 18.7 | 18.7 | 56.3 | 25.7 | 12.3 |
| 100 | 17.7 | 18.2 | 55.1 | 24.5 | 12.1 |
| 90 | 17.0 | 17.6 | 52.6 | 23.3 | 11.9 |
| 80 | 16.4 | 17.2 | 51.0 | 22.3 | 11.9 |
| 70 | 16.1 | 16.9 | 49.6 | 21.3 | 11.4 |
| 60 | 15.9 | 16.4 | 48.0 | 20.5 | 11.4 |
| 50 | 15.6 | 16.0 | 46.8 | 19.4 | 11.2 |
| 40 | 15.4 | 15.5 | 44.9 | 18.3 | 11.0 |
| 30 | 15.1 | 15.1 | 43.6 | 17.3 | 11.0 |
| 25 | 14.8 | 14.8 | 42.9 | 16.7 | 10.8 |
| 20 | 14.7 | 14.7 | 42.1 | 16.0 | 10.5 |
| 15 | 14.5 | 14.5 | 40.6 | 15.4 | 10.5 |
| 10 | 14.4 | 14.4 | 39.0 | 14.5 | 10.5 |
| 9 | 14.2 | 14.2 | 38.7 | 14.2 | 10.3 |
| 8 | 14.0 | 14.0 | 38.0 | 14.0 | 10.3 |
| 7 | 14.0 | 14.0 | 37.8 | 13.7 | 10.3 |
| 6 | 14.0 | 14.0 | 36.5 | 13.3 | 10.3 |
| 5 | 14.0 | 14.0 | 36.5 | 13.0 | 10.1 |
| 4 | 13.9 | 13.9 | 36.4 | 12.7 | 9.60 |
| 3 | 13.7 | 13.7 | 36.4 | 12.2 | 9.60 |
| 2 | 13.6 | 13.6 | 36.2 | 11.7 | 9.30 |
| 1 | 13.5 | 13.5 | 35.2 | 11.1 | 9.10 |
| 0 | 13.4 | 13.4 | 34.8 | 8.90 | 8.90 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1940; AJ 1941;

HQ1, HQ5: Jahresreihe 1941/2012
Extremwerte ab 1941
*) eisbeeinflusst
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 6443 km²
PNP : NN + 20.99 m
Lage: 6.2 km oberhalb der Mündung, rechts

# Q
m³/s

Pegel : Schwarmstedt Nr. 48800301
Gewässer : Leine
Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 17.0 | 14.6 | 80.3 | 90.6 | 66.7 | 39.6 | 27.0 | 26.1 | 26.8 | 25.1 | 23.6 | 10.9 | 14.6 | 17.0 |
| 2. | 16.7 | 15.0 | 74.0 | 80.0 | 67.7 | 38.4 | 26.4 | 30.5 | 24.3 | 22.9 | 22.9 | 10.2 | 14.5 | 17.0 |
| 3. | 17.3 | 16.3 | 83.2 | 72.6 | 68.6 | 37.5 | 26.8 | 27.5 | 26.8 | 22.1 | 18.3 | 10.7 | 14.6 | 16.9 |
| 4. | 16.2 | 18.3 | 92.6 | 67.1 | 67.6 | 38.0 | 33.3 | 26.8 | 22.2 | 20.9 | 15.4 | 14.1 | 15.6 | 17.5 |
| 5. | 16.3 | 20.1 | 103 | 63.7 | 65.0 | 40.9 | 36.6 | 30.4 | 20.5 | 20.8 | 14.3 | 33.9 | 16.5 | 18.6 |
| 6. | 15.5 | 23.2 | 133 | 60.7 | 62.7 | 38.6 | 32.7 | 40.4 | 22.2 | 21.2 | 13.7 | 32.1 | 17.7 | 20.3 |
| 7. | 15.8 | 24.9 | 147 | 56.7 | 60.0 | 36.6 | 34.1 | 38.9 | 25.7 | 22.3 | 13.5 | 35.1 | 17.5 | 20.6 |
| 8. | 16.1 | 32.5 | 152 | 54.3 | 59.9 | 36.3 | 33.8 | 30.8 | 27.3 | 24.4 | 12.6 | 29.1 | 17.4 | 18.4 |
| 9. | 15.4 | 35.2 | 155 | 54.9 | 62.6 | 35.2 | 30.8 | 27.7 | 26.6 | 20.6 | 12.1 | 22.6 | 22.4 | 17.7 |
| 10. | 16.4 | 35.4 | 154 | 53.6 | 61.3 | 34.8 | 30.4 | 25.3 | 24.1 | 19.9 | 11.8 | 18.4 | 22.7 | 20.9 |
| 11. | 15.3 | 34.4 | 149 | 51.8 | 58.1 | 35.2 | 36.5 | 23.2 | 22.5 | 18.3 | 11.8 | 16.7 | 20.2 | 27.6 |
| 12. | 15.6 | 30.7 | 143 | 50.4 | 56.3 | 35.2 | 38.8 | 22.0 | 21.9 | 17.2 | 16.3 | 16.0 | 20.5 | 27.2 |
| 13. | 15.3 | 28.9 | 139 | 49.1 | 55.5 | 35.9 | 30.8 | 22.9 | 25.0 | 16.7 | 20.8 | 18.1 | 20.8 | 23.9 |
| 14. | 15.3 | 30.9 | 134 | 48.8 | 54.8 | 39.4 | 29.1 | 24.1 | 26.7 | 15.9 | 17.6 | 17.4 | 18.2 | 21.5 |
| 15. | 16.1 | 35.1 | 125 | 49.5 | 53.9 | 38.2 | 27.7 | 21.7 | 29.8 | 15.6 | 14.7 | 17.8 | 17.0 | 24.6 |
| 16. | 15.7 | 39.5 | 113 | 51.8 | 52.8 | 34.5 | 29.5 | 21.5 | 40.3 | 16.3 | 13.6 | 20.0 | 16.3 | 39.5 |
| 17. | 15.6 | 56.9 | 103 | 51.4 | 51.7 | 33.2 | 30.3 | 21.5 | 38.3 | 20.8 | 12.6 | 20.7 | 16.2 | 53.1 |
| 18. | 15.4 | 76.5 | 90.7 | 51.0 | 50.9 | 32.2 | 28.3 | 21.7 | 40.0 | 19.2 | 11.9 | 18.1 | 15.9 | 56.1 |
| 19. | 15.3 | 68.9 | 85.0 | 54.1 | 50.3 | 31.6 | 26.7 | 20.4 | 57.4 | 15.7 | 11.6 | 16.0 | 16.1 | 54.6 |
| 20. | 15.3 | 58.8 | 101 | 55.7 | 49.7 | 32.1 | 25.8 | 19.7 | 59.1 | 14.2 | 11.5 | 15.5 | 16.1 | 55.3 |
| 21. | 15.2 | 53.6 | 128 | 53.9 | 48.1 | 31.2 | 25.5 | 20.6 | 53.0 | 13.9 | 11.4 | 14.1 | 15.5 | 52.0 |
| 22. | 15.2 | 53.4 | 141 | 50.7 | 46.3 | 31.2 | 24.4 | 29.3 | 44.5 | 13.2 | 10.6 | 13.6 | 15.0 | 48.0 |
| 23. | 14.9 | 58.5 | 156 | 50.0 | 45.4 | 32.0 | 23.7 | 26.1 | 38.2 | 12.9 | 10.4 | 13.3 | 14.7 | 51.3 |
| 24. | 14.7 | 63.5 | 175 | 52.3 | 44.7 | 33.0 | 22.7 | 22.4 | 34.9 | 14.0 | 11.8 | 12.7 | 15.0 | 90.0 |
| 25. | 14.7 | 71.1 | 184 | 60.2 | 43.9 | 32.5 | 22.0 | 22.8 | 32.2 | 13.6 | 13.6 | 12.7 | 15.9 | 116 |
| 26. | 14.6 | 76.5 | 179 | 68.5 | 42.6 | 31.0 | 20.9 | 28.0 | 29.9 | 15.7 | 13.4 | 13.3 | 17.7 | 116 |
| 27. | 14.6 | 74.0 | 163 | 72.7 | 41.6 | 30.2 | 20.0 | 24.5 | 28.1 | 21.4 | 14.0 | 12.8 | 17.1 | 112 |
| 28. | 14.7 | 67.3 | 149 | 69.5 | 39.3 | 29.3 | 19.4 | 22.5 | 28.4 | 18.8 | 13.0 | 12.4 | 17.2 | 113 |
| 29. | 14.9 | 65.4 | 135 | 67.4 | 37.9 | 28.5 | 18.5 | 21.3 | 30.7 | 17.5 | 12.3 | 12.3 | 17.5 | 109 |
| 30. | 14.7 | 65.8 | 119 | | 37.9 | 27.6 | 18.8 | 27.4 | 29.5 | 15.5 | 12.0 | 12.8 | 16.7 | 104 |
| 31. | | 74.8 | 104 | | 38.7 | | 19.2 | | 26.6 | 15.0 | | 15.2 | | 99.7 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26.+ | 1. | 2. | 14. | 29.+ | 30. | 29. | 20. | 5. | 23. | 23. | 2. | 2. | 3. |
| NQ | 14.6 | 14.6 | 74.0 | 48.8 | 37.9 | 27.6 | 18.5 | 19.7 | 20.5 | 12.9 | 10.4 | 10.2 | 14.5 | 16.9 |
| MQ | 15.5 | 45.8 | 129 | 59.1 | 53.0 | 34.3 | 27.4 | 25.6 | 31.7 | 18.1 | 14.1 | 17.4 | 17.1 | 50.9 |
| HQ | 18.2 | 80.1 | 186 | 96.7 | 68.9 | 41.7 | 45.3 | 45.2 | 59.7 | 27.0 | 30.3 | 39.1 | 25.1 | 120 |
| Tag | 3. | 31. | 25. | 1. | 3. | 5. | 11. | 6. | 20. | 1. | 1. | 5. | 9. | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 19 | 54 | 23 | 22 | 14 | 11 | 10 | 13 | 8 | 6 | 7 | 7 | 21 |

| | 1940/2011 | | 1941/2012 | | | | | | | 72 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1959 + | 1977 | 1954 | 1960 | 1960 | 1954 | 1954 | 1954 | 2012 | 1947 | 1949 | 1959 + | |
| NQ | 10.2 | 14.6 | 16.0 | 19.6 | 21.6 | 18.1 | 17.2 | 14.0 | 14.0 | 12.9 | 10.4 | 8.50 | 10.2 | 14.6 |
| MNQ | 31.5 | 40.1 | 50.5 | 58.2 | 57.1 | 55.0 | 38.2 | 32.9 | 29.3 | 26.4 | 25.2 | 25.7 | 31.2 | 39.7 |
| MQ | 50.5 | 72.8 | 94.2 | 97.0 | 98.9 | 80.6 | 53.5 | 46.3 | 41.9 | 35.6 | 32.1 | 36.8 | 50.1 | 72.5 |
| MHQ | 89.3 | 133 | 171 | 173 | 184 | 125 | 88.3 | 79.4 | 75.4 | 58.7 | 52.1 | 65.2 | 88.4 | 132 |
| HQ | 518 | 334 | 574 | 1200 | 894 | 310 | 229 | 288 | 494 | 154 | 155 | 286 | 518 | 334 |
| Jahr | 1998 | 1965 | 2003 | 1946 | 1947 | 1988 | 1961 | 1981 | 1956 | 2002 | 2007 | 1998 | 1998 | 1965 |

| | 1940/2011 | | 1941/2012 | | | | | | | 72 Jahre | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 20 | 30 | 39 | 38 | 41 | 32 | 22 | 19 | 17 | 15 | 13 | 15 | 20 | 30 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 10.2 | am 02.10.2012 | 14.6 | 10.2 | 10.2 | am 02.10.2012 |
| MQ m³/s | 39.3 | | 56.4 | 22.4 | 39.9 | |
| HQ m³/s | 186 | am 25.01.2012 bei W= 458 cm | 186 | 59.7 | 186 | am 25.01.2012 bei W= 458 cm |
| Nq l/(s km²) | 1.58 | | 2.27 | 1.58 | 1.58 | |
| Mq l/(s km²) | 6.10 | | 8.75 | 3.48 | 6.19 | |
| Hq l/(s km²) | 28.9 | | 28.9 | 9.27 | 28.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 192 | | 138 | 55 | 196 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| NQ m³/s | 8.50 | am 05.10.1947 | 10.2 | 8.50 | 8.50 | am 05.10.1947 |
| MNQ m³/s | 20.4 | | 27.7 | 22.0 | 21.2 | |
| MQ m³/s | 61.3 | | 82.0 | 40.9 | 60.2 | |
| MHQ m³/s | 280 | | 272 | 127 | 282 | |
| HQ m³/s | 1200 | am 11.02.1946 bei W= 612 cm | 1200 | 494 | 1200 | am 11.02.1946 bei W= 612 cm |
| $HQ_1$ m³/s | 205 | | 178 | 87.1 | 205 | |
| $HQ_5$ m³/s | 373 | | 365 | 176 | 373 | |
| MNq l/(s km²) | 3.17 | | 4.30 | 3.41 | 3.29 | |
| Mq l/(s km²) | 9.51 | | 12.7 | 6.35 | 9.34 | |
| MHq l/(s km²) | 43.5 | | 42.2 | 19.7 | 43.8 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 300 | | 200 | 101 | 295 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 8.50 | 1.32 | 05.10.1947 | 1200 | 186 | 612 | 11.02.1946 |
| 2 | 10.2 | 1.58 | 02.10.2012 | 894*) | 139 | 438 | 16.03.1947 |
| 3 | 10.2 | 1.58 | 10.11.1949 | 727 | 113 | 590 | 14.03.1981 |
| 4 | 13.1 | 2.03 | 09.11.1959 | 574 | 89.1 | 586 | 05.01.2003 |
| 5 | 14.0 | 2.17 | 29.06.1954 | 571 | 88.6 | 589 | 03.01.1987 |
| 6 | 14.9 | 2.31 | 06.10.2011 | 542 | 84.1 | 573 | 25.02.1970 |
| 7 | 15.3 | 2.37 | 23.09.1991 | 518 | 80.4 | 577 | 04.11.1998 |
| 8 | 15.3 | 2.37 | 21.12.1953 | 494 | 76.7 | 566 | 20.07.1956 |
| 9 | 15.5 | 2.41 | 08.11.1976 | 491 | 76.2 | 566 | 18.01.1968 |
| 10 | 16.1 | 2.50 | 31.07.1960 | 460 | 71.4 | 561 | 06.03.1956 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse m³/s: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 184 | 184 | | | |
| 364 | 179 | 179 | 910 | 315 | 104 |
| 363 | 175 | 175 | 690 | 276 | 94.7 |
| 362 | 163 | 163 | 652 | 259 | 89.7 |
| 361 | 156 | 156 | 528 | 244 | 87.2 |
| 360 | 155 | 155 | 441 | 232 | 87.2 |
| 359 | 154 | 154 | 425 | 222 | 82.6 |
| 358 | 152 | 152 | 419 | 214 | 81.7 |
| 357 | 152 | 152 | 404 | 207 | 78.5 |
| 356 | 149 | 149 | 338 | 201 | 77.5 |
| 350 | 134 | 134 | 322 | 174 | 67.1 |
| 340 | 92.6 | 109 | 272 | 148 | 58.8 |
| 330 | 74.8 | 90.0 | 235 | 130 | 55.6 |
| 320 | 67.6 | 68.5 | 206 | 114 | 51.2 |
| 300 | 58.1 | 56.1 | 177 | 93.4 | 42.3 |
| 270 | 49.5 | 49.1 | 152 | 73.0 | 34.7 |
| 240 | 37.5 | 37.5 | 136 | 59.7 | 28.6 |
| 210 | 32.0 | 31.0 | 108 | 50.5 | 22.8 |
| 183 | 28.3 | 27.4 | 91.4 | 44.0 | 20.3 |
| 150 | 24.1 | 23.2 | 77.3 | 37.5 | 17.7 |
| 130 | 21.9 | 21.7 | 72.0 | 34.1 | 16.7 |
| 120 | 20.9 | 20.9 | 70.1 | 32.5 | 16.4 |
| 110 | 20.0 | 20.2 | 69.3 | 31.0 | 16.2 |
| 100 | 18.4 | 18.6 | 66.2 | 29.7 | 16.1 |
| 90 | 17.2 | 17.8 | 64.1 | 28.4 | 15.6 |
| 80 | 16.2 | 17.4 | 62.4 | 27.2 | 15.1 |
| 70 | 15.7 | 16.5 | 60.1 | 26.2 | 14.6 |
| 60 | 15.4 | 16.0 | 57.6 | 25.1 | 14.1 |
| 50 | 14.9 | 15.2 | 56.0 | 23.9 | 13.6 |
| 40 | 14.2 | 14.2 | 54.1 | 22.9 | 13.0 |
| 30 | 13.6 | 13.6 | 52.4 | 21.4 | 12.3 |
| 25 | 13.2 | 13.2 | 51.1 | 20.5 | 12.3 |
| 20 | 12.8 | 12.8 | 50.2 | 19.4 | 12.0 |
| 15 | 12.4 | 12.4 | 48.4 | 18.6 | 11.8 |
| 10 | 11.9 | 11.9 | 46.2 | 17.6 | 11.5 |
| 9 | 11.9 | 11.9 | 45.7 | 17.3 | 11.5 |
| 8 | 11.8 | 11.8 | 45.4 | 17.0 | 11.5 |
| 7 | 11.6 | 11.6 | 44.9 | 16.7 | 11.5 |
| 6 | 11.5 | 11.5 | 44.2 | 16.3 | 11.5 |
| 5 | 11.4 | 11.4 | 43.8 | 15.7 | 11.4 |
| 4 | 10.9 | 10.9 | 43.3 | 15.3 | 10.9 |
| 3 | 10.7 | 10.7 | 43.0 | 14.7 | 10.7 |
| 2 | 10.6 | 10.6 | 43.0 | 13.9 | 10.6 |
| 1 | 10.4 | 10.4 | 42.6 | 12.6 | 10.2 |
| 0 | 10.2 | 10.2 | 42.2 | 8.50 | 8.50 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1940; AJ 1941;

HQ1, HQ5: Jahresreihe 1941/2012
Extremwerte ab 1941
*) durch Eisstau
eisfrei

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 895 $km^2$

PNP : NN + 130.43 m

Lage: 15.5 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Berka R Nr. 4882173

Gewässer : Rhume

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 3.84 | 3.59 | 17.8 | 11.4 | 22.3 | 7.72 | 4.94 | 6.29 | 4.34 | 4.39 | 4.69 | 3.04 | 3.58 | 4.47 |
| 2. | 3.80 | 3.83 | 30.0 | 10.3 | 23.1 | 7.26 | 4.98 | 4.47 | 4.08 | 4.23 | 3.59 | 3.04 | 3.63 | 4.51 |
| 3. | 3.77 | 4.01 | 29.9 | 9.28 | 21.2 | 7.12 | 10.4 | 4.54 | 4.10 | 4.18 | 3.52 | 2.97 | 3.95 | 4.53 |
| 4. | 3.76 | 4.97 | 25.3 | 9.29 | 19.6 | 7.55 | 7.03 | 5.17 | 3.95 | 4.07 | 3.45 | 3.60 | 4.37 | 4.66 |
| 5. | 3.83 | 4.88 | 29.3 | 8.87 | 18.0 | 7.13 | 6.70 | 8.87 | 3.90 | 4.01 | 3.31 | 4.98 | 4.27 | 4.78 |
| 6. | 3.88 | 4.62 | 30.8 | 8.11 | 15.7 | 7.40 | 7.81 | 5.66 | 4.14 | 5.16 | 3.26 | 4.55 | 4.26 | 4.62 |
| 7. | 3.81 | 4.80 | 27.3 | 7.58 | 14.3 | 7.42 | 6.54 | 5.00 | 3.89 | 4.35 | 3.18 | 4.55 | 7.56 | 4.54 |
| 8. | 3.80 | 5.57 | 30.2 | 8.04 | 14.1 | 7.22 | 5.89 | 4.76 | 4.00 | 4.09 | 3.15 | 3.78 | 7.86 | 4.30 |
| 9. | 3.72 | 7.53 | 31.2 | 7.96 | 13.2 | 7.02 | 5.60 | 4.44 | 3.96 | 3.99 | 3.15 | 3.58 | 5.93 | 4.50 |
| 10. | 3.67 | 7.39 | 32.8 | 8.01 | 12.4 | 7.58 | 5.73 | 4.31 | 3.82 | 3.97 | 3.04 | 3.44 | 5.69 | 5.27 |
| 11. | 3.68 | 6.47 | 27.9 | 7.60 | 12.7 | 6.99 | 5.36 | 4.30 | 3.83 | 3.92 | 3.39 | 3.45 | 6.29 | 5.12 |
| 12. | 3.60 | 6.15 | 26.5 | 7.42 | 13.0 | 6.63 | 5.67 | 4.29 | 4.03 | 3.81 | 4.09 | 3.45 | 5.40 | 4.83 |
| 13. | 3.55 | 7.32 | 28.2 | 7.79 | 13.1 | 7.37 | 5.08 | 4.30 | 4.13 | 3.77 | 3.35 | 4.11 | 4.91 | 4.83 |
| 14. | 3.58 | 8.83 | 23.9 | 7.80 | 12.5 | 6.88 | 4.87 | 4.16 | 8.00 | 3.73 | 3.18 | 3.75 | 4.79 | 4.81 |
| 15. | 3.57 | 8.65 | 21.0 | 8.62 | 11.7 | 6.51 | 4.86 | 4.16 | 7.82 | 3.71 | 3.18 | 4.33 | 4.67 | 9.44 |
| 16. | 3.56 | 10.8 | 18.9 | 8.47 | 11.4 | 6.32 | 5.15 | 4.23 | 6.36 | 3.91 | 3.12 | 4.30 | 4.50 | 11.3 |
| 17. | 3.54 | 14.0 | 17.2 | 10.3 | 11.7 | 6.04 | 4.94 | 4.24 | 13.4 | 3.86 | 3.07 | 3.98 | 4.41 | 11.8 |
| 18. | 3.49 | 11.8 | 15.7 | 9.66 | 11.9 | 5.96 | 4.63 | 3.99 | 12.4 | 3.78 | 3.13 | 3.83 | 4.39 | 14.4 |
| 19. | 3.52 | 10.9 | 17.6 | 10.1 | 11.6 | 5.80 | 4.53 | 4.02 | 10.7 | 3.72 | 3.18 | 3.62 | 4.32 | 14.1 |
| 20. | 3.54 | 10.8 | 20.2 | 9.47 | 10.4 | 5.67 | 4.38 | 6.06 | 9.62 | 3.62 | 3.09 | 3.62 | 4.21 | 12.5 |
| 21. | 3.54 | 11.3 | 19.0 | 8.78 | 9.87 | 5.65 | 4.27 | 5.90 | 8.21 | 3.64 | 3.07 | 3.61 | 4.20 | 11.9 |
| 22. | 3.50 | 12.0 | 24.7 | 8.50 | 9.78 | 6.21 | 4.15 | 4.76 | 7.54 | 4.02 | 3.08 | 3.44 | 4.11 | 11.2 |
| 23. | 3.62 | 17.8 | 35.6 | 9.10 | 9.64 | 6.67 | 4.09 | 4.30 | 6.85 | 3.60 | 3.08 | 3.49 | 4.11 | 27.3 |
| 24. | 3.57 | 24.9 | 32.9 | 15.1 | 9.34 | 6.06 | 4.10 | 4.16 | 6.03 | 3.71 | 3.13 | 3.51 | 4.39 | 68.8 |
| 25. | 3.51 | 25.5 | 28.4 | 25.6 | 9.01 | 5.76 | 4.11 | 4.41 | 5.62 | 4.88 | 3.31 | 3.52 | 4.46 | 44.8 |
| 26. | 3.49 | 24.1 | 23.9 | 21.6 | 8.66 | 5.50 | 4.08 | 4.41 | 5.11 | 4.22 | 3.11 | 3.43 | 4.25 | 36.9 |
| 27. | 3.38 | 25.2 | 20.7 | 18.6 | 7.84 | 5.34 | 4.05 | 4.24 | 4.94 | 4.31 | 3.38 | 3.49 | 4.49 | 34.8 |
| 28. | 3.40 | 22.0 | 18.4 | 17.5 | 7.48 | 5.23 | 4.06 | 4.32 | 5.43 | 3.76 | 3.36 | 3.41 | 4.45 | 31.8 |
| 29. | 3.50 | 18.7 | 16.9 | 20.3 | 7.27 | 5.10 | 4.02 | 4.23 | 5.03 | 3.60 | 3.17 | 3.39 | 4.50 | 24.7 |
| 30. | 3.50 | 19.0 | 15.5 | | 8.20 | 5.02 | 3.97 | 4.12 | 4.87 | 3.62 | 3.09 | 3.66 | 4.60 | 21.0 |
| 31. | | 17.3 | 13.9 | | 8.50 | | 4.20 | | 4.60 | 4.04 | | 3.64 | | 18.3 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27. | 1. | 31. | 12. | 29. | 30. | 30. | 18. | 10. | 29. | 10. | 3. | 1. | 8. |
| NQ | 3.38 | 3.59 | 13.9 | 7.42 | 7.27 | 5.02 | 3.97 | 3.99 | 3.82 | 3.60 | 3.04 | 2.97 | 3.58 | 4.30 |
| MQ | 3.62 | 11.8 | 24.2 | 11.1 | 12.6 | 6.47 | 5.17 | 4.74 | 5.96 | 3.99 | 3.30 | 3.70 | 4.75 | 15.2 |
| HQ | 4.22 | 29.1 | 37.3 | 28.0 | 25.2 | 8.30 | 14.4 | 11.9 | 18.9 | 6.65 | 6.64 | 7.38 | 11.2 | 77.7 |
| Tag | 1. | 24. | 2. | 25. | 2. | 4. | 3. | 5. | 17. | 31. | 1. | 5. | 7. | 24. |
| $h_N$ mm / $h_A$ mm | 10 | 35 | 72 | 31 | 38 | 19 | 15 | 14 | 18 | 12 | 10 | 11 | 14 | 45 |

| | 1955/2011 | | 1956/2012 – 57 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1959 | 1972 | 1963 | 1963 | 1960 | 2011 | 2011 | 1996 | 1978 | 1991 | 2012 | 1983 | 1959 |
| NQ | 3.29 | 3.25 | 2.68 | 3.70 | 3.85 | 4.49 | 3.96 | 3.68 | 2.94 | 2.93 | 2.93 | 2.97 | 3.29 | 3.25 |
| MNQ | 6.73 | 8.09 | 9.24 | 10.1 | 10.4 | 9.60 | 7.28 | 6.35 | 5.89 | 5.69 | 5.50 | 5.68 | 6.67 | 8.01 |
| MQ | 10.7 | 14.2 | 16.2 | 15.4 | 16.9 | 14.1 | 10.1 | 9.01 | 8.22 | 7.43 | 7.44 | 8.26 | 10.6 | 14.2 |
| MHQ | 26.9 | 39.4 | 43.6 | 33.2 | 38.2 | 27.1 | 20.9 | 26.1 | 19.2 | 18.8 | 18.5 | 20.7 | 26.9 | 40.2 |
| HQ | 133 | 125 | 145 | 121 | 153 | 86.4 | 60.7 | 217 | 76.3 | 128 | 144 | 131 | 133 | 125 |
| Jahr | 1998 | 1988 | 2008 | 1970 | 1981 | 1994 | 1965 | 1981 | 1956 | 2007 | 2007 | 1998 | 1998 | 1988 |
| $Mh_N$ mm / $Mh_A$ mm | 31 | 42 | 48 | 43 | 51 | 41 | 30 | 26 | 25 | 22 | 22 | 25 | 31 | 42 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 2.97 | am 03.10.2012 | 3.38 | 2.97 | 2.97 | am 03.10.2012 |
| MQ $m^3/s$ | 8.07 | | 11.7 | 4.48 | 8.45 | |
| HQ $m^3/s$ | 37.3 | am 02.01.2012 bei W= 326 cm | 37.3 | 18.9 | 77.7 | am 24.12.2012 bei W= 403 cm |
| Nq $l/(s km^2)$ | 3.32 | | 3.78 | 3.32 | 3.32 | |
| Mq $l/(s km^2)$ | 9.02 | | 13.1 | 5.01 | 9.44 | |
| Hq $l/(s km^2)$ | 41.6 | | 41.6 | 21.1 | 86.9 | |
| $h_N$ mm / $h_A$ mm | 285 | | 206 | 80 | 299 | |
| | 1956/2012 (*) 57 Jahre | | | | 1956/2012 | |
| NQ $m^3/s$ | 2.68 | am 19.01.1972 | 2.68 | 2.93 | 2.68 | am 19.01.1972 |
| MNQ $m^3/s$ | 4.46 | | 6.00 | 4.76 | 4.58 | |
| MQ $m^3/s$ | 11.5 | | 14.6 | 8.42 | 11.5 | |
| MHQ $m^3/s$ | 76.1 | | 69.0 | 42.6 | 76.4 | |
| HQ $m^3/s$ | 217 | am 04.06.1981 bei W= 550 cm | 153 | 217 | 217 | am 04.06.1981 bei W= 550 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 4.98 | | 6.70 | 5.32 | 5.12 | |
| Mq $l/(s km^2)$ | 12.8 | | 16.3 | 9.41 | 12.8 | |
| MHq $l/(s km^2)$ | 85.0 | | 77.1 | 47.6 | 85.4 | |
| $Mh_N$ mm / $Mh_A$ mm | 406 | | 257 | 150 | 406 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 2.68 | 2.99 | 19.01.1972 | 217 | 242 | 550 | 04.06.1981 |
| 2 | 2.93 | 3.27 | 10.09.1991 | 153 | 171 | 496 | 12.03.1981 |
| 3 | 2.93 | 3.27 | 23.08.1978 | 145 | 162 | 469 | 22.01.2008 |
| 4 | 2.94 | 3.28 | 28.07.1996 | 144 | 161 | 488 | 29.09.2007 |
| 5 | 2.97 | 3.32 | 03.10.2012 | 133 | 149 | 461 | 01.11.1998 |
| 6 | 3.04 | 3.40 | 23.08.1983 | 131 | 146 | 460 | 28.10.1998 |
| 7 | 3.12 | 3.49 | 27.09.1976 | 131 | 146 | 453 | 30.01.1995 |
| 8 | 3.25 | 3.63 | 14.12.1959 | 128 | 143 | 468 | 22.08.2007 |
| 9 | 3.28 | 3.66 | 26.01.1996 | 125 | 140 | 456 | 19.12.1988 |
| 10 | 3.38 | 3.77 | 27.11.2011 | 122 | 136 | 444 | 24.12.1967 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1956/2012 57 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 35.6 | 68.8 | | | |
| 364 | 32.9 | 44.8 | 145 | 68.1 | 19.4 |
| 363 | 32.8 | 36.9 | 138 | 55.2 | 18.4 |
| 362 | 31.2 | 35.6 | 126 | 49.3 | 17.5 |
| 361 | 30.8 | 34.8 | 122 | 44.8 | 17.3 |
| 360 | 30.2 | 32.9 | 119 | 41.9 | 16.7 |
| 359 | 30.0 | 32.8 | 104 | 39.3 | 15.9 |
| 358 | 29.9 | 31.8 | 93.9 | 36.9 | 15.9 |
| 357 | 29.3 | 31.2 | 73.1 | 35.4 | 15.9 |
| 356 | 28.4 | 30.8 | 72.4 | 34.1 | 15.5 |
| 350 | 25.5 | 28.2 | 52.7 | 28.6 | 14.3 |
| 340 | 22.0 | 24.7 | 42.8 | 23.4 | 12.4 |
| 330 | 18.9 | 19.6 | 34.7 | 20.5 | 11.6 |
| 320 | 17.2 | 17.2 | 30.2 | 18.6 | 10.8 |
| 300 | 11.8 | 12.4 | 26.1 | 16.0 | 8.74 |
| 270 | 8.78 | 8.78 | 19.9 | 13.5 | 7.30 |
| 240 | 7.39 | 7.37 | 17.6 | 11.7 | 6.52 |
| 210 | 5.89 | 5.76 | 16.2 | 10.2 | 5.20 |
| 183 | 4.97 | 5.00 | 15.1 | 9.00 | 4.84 |
| 150 | 4.31 | 4.49 | 13.5 | 7.84 | 4.45 |
| 130 | 4.12 | 4.32 | 12.7 | 7.23 | 4.21 |
| 120 | 4.06 | 4.25 | 12.2 | 6.95 | 4.10 |
| 110 | 4.00 | 4.18 | 11.9 | 6.71 | 4.06 |
| 100 | 3.89 | 4.12 | 11.8 | 6.48 | 3.96 |
| 90 | 3.82 | 4.06 | 11.5 | 6.25 | 3.90 |
| 80 | 3.73 | 4.00 | 11.2 | 5.99 | 3.84 |
| 70 | 3.64 | 3.89 | 11.0 | 5.76 | 3.81 |
| 60 | 3.60 | 3.75 | 10.7 | 5.51 | 3.75 |
| 50 | 3.55 | 3.63 | 10.5 | 5.29 | 3.62 |
| 40 | 3.50 | 3.58 | 10.1 | 5.01 | 3.52 |
| 30 | 3.40 | 3.43 | 9.93 | 4.71 | 3.43 |
| 25 | 3.36 | 3.36 | 9.73 | 4.55 | 3.36 |
| 20 | 3.26 | 3.26 | 9.52 | 4.36 | 3.18 |
| 15 | 3.17 | 3.17 | 9.45 | 4.17 | 3.15 |
| 10 | 3.11 | 3.11 | 9.23 | 3.96 | 3.11 |
| 9 | 3.11 | 3.11 | 9.23 | 3.89 | 3.09 |
| 8 | 3.11 | 3.11 | 9.23 | 3.86 | 3.09 |
| 7 | 3.09 | 3.09 | 9.07 | 3.81 | 3.08 |
| 6 | 3.09 | 3.09 | 8.99 | 3.74 | 3.08 |
| 5 | 3.08 | 3.08 | 8.98 | 3.71 | 3.08 |
| 4 | 3.08 | 3.08 | 8.80 | 3.63 | 3.08 |
| 3 | 3.07 | 3.07 | 8.79 | 3.56 | 3.04 |
| 2 | 3.07 | 3.07 | 8.74 | 3.49 | 3.04 |
| 1 | 3.07 | 3.07 | 8.73 | 3.32 | 2.94 |
| 0 | 2.97 | 2.97 | 8.56 | 2.68 | 2.68 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Rhume
Odertalsperre seit 1934

NLWKN

$A_{Eo}$ : 1176 $km^2$

PNP : NN + 113.85 m

Lage: 5.1 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Northeim Nr. 4882198

Gewässer : Rhume

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.14 | 6.09 | 24.6 | 16.8 | 26.8 | 11.0 | 7.67 | 9.58 | 8.08 | 6.91 | 6.32 | 4.33 | 6.31 | 7.28 |
| 2. | 6.15 | 6.44 | 39.0 | 14.1 | 27.9 | 10.5 | 7.63 | 7.22 | 6.88 | 6.75 | 4.89 | 4.38 | 6.43 | 7.32 |
| 3. | 6.10 | 6.54 | 40.3 | 13.0 | 25.3 | 10.2 | 17.3 | 7.29 | 6.77 | 6.52 | 4.73 | 4.38 | 6.74 | 7.38 |
| 4. | 6.08 | 7.48 | 35.2 | 12.9 | 23.1 | 10.7 | 10.7 | 8.24 | 6.57 | 6.39 | 4.57 | 5.36 | 7.22 | 7.53 |
| 5. | 6.16 | 7.46 | 40.5 | 12.4 | 21.4 | 10.2 | 10.1 | 14.3 | 6.83 | 6.17 | 4.42 | 7.29 | 7.13 | 7.83 |
| 6. | 6.18 | 7.58 | 42.1 | 11.6 | 19.5 | 10.1 | 11.3 | 9.18 | 9.30 | 8.00 | 4.24 | 6.68 | 7.09 | 7.51 |
| 7. | 6.14 | 7.99 | 37.8 | 11.1 | 17.8 | 10.1 | 9.66 | 8.14 | 7.00 | 6.96 | 4.14 | 6.62 | 10.7 | 7.39 |
| 8. | 6.06 | 8.88 | 40.8 | 11.4 | 18.1 | 10.3 | 8.85 | 7.83 | 6.93 | 6.30 | 4.07 | 5.56 | 11.6 | 7.04 |
| 9. | 5.99 | 10.8 | 41.8 | 11.2 | 17.0 | 10.3 | 8.42 | 7.42 | 6.79 | 6.24 | 3.98 | 5.42 | 8.93 | 7.24 |
| 10. | 5.94 | 10.8 | 44.0 | 11.2 | 16.0 | 10.5 | 8.49 | 7.25 | 6.69 | 6.20 | 3.86 | 5.25 | 8.57 | 8.09 |
| 11. | 5.88 | 9.55 | 38.6 | 11.3 | 16.3 | 9.89 | 8.09 | 7.10 | 6.66 | 6.14 | 4.20 | 5.25 | 9.31 | 7.97 |
| 12. | 5.92 | 9.16 | 35.9 | 10.7 | 16.7 | 9.52 | 8.45 | 7.11 | 6.95 | 5.95 | 5.49 | 5.48 | 8.26 | 7.52 |
| 13. | 5.79 | 10.4 | 38.2 | 10.8 | 16.9 | 10.3 | 7.77 | 6.83 | 7.35 | 5.88 | 4.21 | 6.21 | 7.83 | 7.60 |
| 14. | 5.81 | 12.2 | 34.2 | 10.7 | 16.2 | 9.70 | 7.53 | 6.41 | 14.1 | 5.75 | 4.00 | 5.80 | 7.70 | 7.51 |
| 15. | 5.79 | 12.0 | 30.6 | 11.6 | 15.3 | 9.30 | 7.54 | 6.39 | 14.7 | 5.68 | 3.84 | 6.86 | 7.52 | 14.4 |
| 16. | 5.76 | 15.7 | 27.6 | 11.2 | 15.0 | 9.02 | 7.99 | 6.50 | 12.6 | 5.96 | 3.71 | 6.94 | 7.32 | 17.6 |
| 17. | 5.71 | 20.8 | 25.5 | 13.2 | 15.3 | 8.76 | 7.55 | 6.50 | 23.4 | 5.82 | 3.53 | 6.51 | 7.19 | 18.8 |
| 18. | 5.70 | 17.4 | 23.6 | 12.3 | 15.6 | 8.68 | 7.24 | 6.40 | 21.5 | 5.45 | 3.38 | 6.27 | 7.18 | 23.1 |
| 19. | 5.71 | 15.5 | 26.0 | 12.7 | 15.4 | 8.55 | 7.10 | 6.40 | 19.2 | 5.31 | 3.42 | 6.00 | 7.06 | 22.3 |
| 20. | 5.67 | 15.2 | 29.4 | 11.9 | 14.0 | 8.37 | 6.87 | 8.72 | 16.4 | 5.26 | 3.45 | 5.89 | 6.94 | 19.2 |
| 21. | 5.62 | 16.1 | 26.0 | 11.2 | 13.5 | 8.32 | 6.98 | 8.85 | 13.4 | 5.29 | 3.46 | 5.96 | 6.88 | 17.6 |
| 22. | 5.70 | 17.5 | 33.7 | 10.9 | 13.4 | 8.91 | 6.90 | 7.38 | 11.7 | 5.85 | 3.62 | 5.72 | 6.82 | 16.5 |
| 23. | 5.71 | 25.8 | 45.6 | 11.7 | 13.1 | 9.44 | 6.85 | 6.78 | 10.6 | 5.08 | 3.63 | 5.98 | 6.83 | 38.3 |
| 24. | 5.71 | 34.8 | 43.3 | 18.0 | 12.6 | 8.81 | 6.78 | 6.67 | 9.36 | 5.04 | 3.70 | 6.10 | 7.26 | 94.1 |
| 25. | 5.72 | 35.0 | 39.4 | 31.0 | 12.3 | 8.60 | 6.68 | 7.09 | 8.68 | 6.46 | 4.08 | 6.15 | 7.26 | 63.2 |
| 26. | 5.83 | 32.2 | 33.8 | 26.9 | 11.9 | 8.32 | 6.64 | 6.97 | 8.08 | 5.71 | 3.86 | 6.04 | 7.06 | 49.3 |
| 27. | 5.88 | 32.9 | 29.5 | 22.9 | 10.9 | 8.15 | 6.60 | 6.74 | 7.84 | 5.92 | 4.26 | 6.12 | 7.39 | 45.4 |
| 28. | 6.00 | 29.1 | 26.2 | 21.1 | 10.8 | 7.98 | 6.60 | 6.82 | 8.84 | 5.17 | 4.30 | 6.04 | 7.31 | 41.2 |
| 29. | 6.06 | 24.7 | 23.9 | 23.9 | 10.4 | 7.86 | 6.51 | 6.68 | 7.97 | 5.00 | 4.25 | 5.97 | 7.43 | 32.6 |
| 30. | 5.98 | 25.9 | 22.0 | | 11.4 | 7.78 | 6.42 | 6.62 | 7.73 | 4.96 | 4.19 | 6.39 | 7.50 | 27.8 |
| 31. | | 23.4 | 20.1 | | 11.7 | | 6.69 | | 7.23 | 5.26 | | 6.41 | | 24.3 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 21. | 1. | 31. | 12. | 29. | 30. | 30. | 15. | 4. | 30. | 18. | 1. | 1. | 8. |
| NQ | 5.62 | 6.09 | 20.1 | 10.7 | 10.4 | 7.78 | 6.42 | 6.39 | 6.57 | 4.96 | 3.38 | 4.33 | 6.31 | 7.04 |
| MQ | 5.90 | 16.6 | 33.5 | 14.5 | 16.2 | 9.34 | 8.06 | 7.51 | 10.2 | 5.92 | 4.13 | 5.92 | 7.63 | 21.6 |
| HQ | 7.70 | 38.9 | 48.7 | 33.5 | 29.7 | 11.4 | 26.3 | 19.5 | 31.1 | 11.4 | 8.07 | 10.2 | 15.3 | 103 |
| Tag | 1. | 24. | 23. | 25. | 2. | 4. | 3. | 5. | 17. | 6. | 1. | 6. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 13 | 38 | 76 | 31 | 37 | 21 | 18 | 17 | 23 | 13 | 9 | 13 | 17 | 49 |

| | 1993/2011 | | 1994/2012 19 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 1996 | 1996 | 1996 | 2011 | 2011 | 2009+ | 2012 | 2012 | 2012 | 2011 | 2011 |
| NQ | 5.62 | 6.09 | 6.40 | 5.85 | 6.56 | 7.24 | 5.97 | 5.49 | 5.30 | 4.96 | 3.38 | 4.33 | 5.62 | 6.09 |
| MNQ | 10.0 | 10.9 | 14.2 | 15.1 | 15.7 | 12.5 | 9.79 | 8.03 | 7.31 | 7.14 | 7.39 | 8.04 | 9.88 | 10.9 |
| MQ | 16.4 | 18.3 | 25.4 | 24.0 | 26.4 | 18.1 | 12.9 | 10.3 | 9.92 | 9.22 | 10.7 | 11.7 | 16.2 | 18.1 |
| MHQ | 43.5 | 48.1 | 71.0 | 55.6 | 63.0 | 37.9 | 30.7 | 23.7 | 24.7 | 26.4 | 31.4 | 31.5 | 42.8 | 48.0 |
| HQ | 158 | 121 | 153 | 93.5 | 148 | 140 | 73.1 | 46.7 | 66.3 | 163 | 168 | 141 | 158 | 121 |
| Jahr | 1998 | 2002 | 1995 | 2002 | 2000 | 1994 | 2004 | 2006 | 2002 | 2007 | 2007 | 1998 | 1998 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 36 | 42 | 58 | 51 | 60 | 40 | 29 | 23 | 23 | 21 | 24 | 27 | 36 | 41 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 3.38 | am 18.09.2012 | 5.62 | 3.38 | 3.38 | am 18.09.2012 |
| MQ $m^3/s$ | 11.5 | | 16.1 | 6.97 | 12.1 | |
| HQ $m^3/s$ | 48.7 | am 23.01.2012 bei W= 152 cm | 48.7 | 31.1 | 103 | am 24.12.2012 bei W= 258 cm |
| Nq $l/(s km^2)$ | 2.87 | | 4.78 | 2.87 | 2.87 | |
| Mq $l/(s km^2)$ | 9.78 | | 13.7 | 5.93 | 10.3 | |
| Hq $l/(s km^2)$ | 41.4 | | 41.4 | 26.4 | 87.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 309 | | 215 | 94 | 325 | |

| | 1994/2012 (*) 19 Jahre | | | | 1994/2012 | |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 3.38 | am 18.09.2012 | 5.62 | 3.38 | 3.38 | am 18.09.2012 |
| MNQ $m^3/s$ | 6.31 | | 8.78 | 6.38 | 6.35 | |
| MQ $m^3/s$ | 16.1 | | 21.4 | 10.8 | 16.1 | |
| MHQ $m^3/s$ | 108 | | 101 | 52.4 | 115 | |
| HQ $m^3/s$ | 168 | am 30.09.2007 bei W= 326 cm | 158 | 168 | 168 | am 30.09.2007 bei W= 326 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 5.37 | | 7.47 | 5.43 | 5.40 | |
| Mq $l/(s km^2)$ | 13.7 | | 18.2 | 9.18 | 13.7 | |
| MHq $l/(s km^2)$ | 91.8 | | 85.9 | 44.6 | 97.8 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 433 | | 286 | 146 | 433 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 3.38 | 2.88 | 18.09.2012 | 168 | 143 | 326 | 30.09.2007 |
| 2 | 5.24 | 4.45 | 03.08.2011 | 163 | 138 | 328 | 22.08.2007 |
| 3 | 5.30 | 4.51 | 06.07.2009 | 158 | 134 | 309 | 01.11.1998 |
| 4 | 5.32 | 4.52 | 25.08.2001 | 153 | 130 | 287 | 30.01.1995 |
| 5 | 5.34 | 4.54 | 26.07.2006 | 148 | 126 | 283 | 09.03.2000 |
| 6 | 5.54 | 4.71 | 22.09.2003 | 146 | 124 | 283 | 04.01.2003 |
| 7 | 5.57 | 4.74 | 20.07.2005 | 145 | 124 | 301 | 13.11.2010 |
| 8 | 5.63 | 4.79 | 22.09.1997 | 140 | 119 | 284 | 14.04.1994 |
| 9 | 5.72 | 4.86 | 28.06.1996 | 139 | 119 | 293 | 15.01.2011 |
| 10 | 5.85 | 4.97 | 10.02.1996 | 139 | 118 | 291 | 22.01.2008 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1994/2012 19 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 45.6 | 94.1 | | | |
| 364 | 44.0 | 63.2 | 140 | 110 | 31.6 |
| 363 | 43.3 | 49.3 | 131 | 86.4 | 26.2 |
| 362 | 42.1 | 45.6 | 125 | 76.2 | 25.7 |
| 361 | 41.8 | 45.4 | 125 | 69.7 | 25.3 |
| 360 | 40.8 | 44.0 | 109 | 63.9 | 24.9 |
| 359 | 40.5 | 43.3 | 108 | 59.1 | 24.5 |
| 358 | 40.3 | 42.1 | 90.6 | 54.5 | 23.9 |
| 357 | 39.4 | 41.8 | 88.6 | 52.4 | 23.6 |
| 356 | 39.0 | 41.2 | 85.7 | 49.4 | 23.0 |
| 350 | 35.0 | 38.6 | 73.0 | 41.8 | 20.7 |
| 340 | 29.4 | 31.0 | 63.7 | 34.8 | 17.9 |
| 330 | 25.8 | 26.2 | 51.9 | 30.3 | 16.1 |
| 320 | 23.1 | 23.4 | 42.5 | 27.1 | 15.3 |
| 300 | 16.4 | 16.9 | 34.2 | 22.9 | 13.3 |
| 270 | 12.4 | 12.4 | 27.0 | 18.5 | 9.92 |
| 240 | 10.6 | 10.6 | 24.4 | 15.5 | 8.54 |
| 210 | 8.84 | 8.72 | 22.0 | 13.3 | 8.04 |
| 183 | 7.83 | 7.84 | 20.1 | 11.7 | 7.72 |
| 150 | 6.90 | 7.28 | 18.6 | 10.3 | 7.15 |
| 130 | 6.66 | 6.97 | 17.8 | 9.53 | 6.84 |
| 120 | 6.52 | 6.87 | 17.1 | 9.21 | 6.76 |
| 110 | 6.40 | 6.79 | 16.7 | 8.92 | 6.69 |
| 100 | 6.17 | 6.67 | 16.2 | 8.65 | 6.52 |
| 90 | 6.09 | 6.52 | 15.6 | 8.33 | 6.30 |
| 80 | 5.99 | 6.40 | 15.3 | 8.03 | 6.16 |
| 70 | 5.89 | 6.17 | 14.8 | 7.74 | 6.09 |
| 60 | 5.75 | 5.97 | 14.3 | 7.49 | 5.96 |
| 50 | 5.68 | 5.72 | 13.5 | 7.24 | 5.72 |
| 40 | 5.29 | 5.29 | 12.4 | 6.95 | 5.29 |
| 30 | 4.89 | 4.89 | 10.9 | 6.67 | 4.89 |
| 25 | 4.42 | 4.42 | 10.1 | 6.44 | 4.38 |
| 20 | 4.24 | 4.24 | 9.88 | 6.22 | 4.24 |
| 15 | 4.08 | 4.08 | 9.61 | 6.05 | 4.08 |
| 10 | 3.98 | 3.98 | 9.25 | 5.86 | 3.86 |
| 9 | 3.84 | 3.84 | 9.23 | 5.82 | 3.84 |
| 8 | 3.71 | 3.71 | 9.21 | 5.78 | 3.71 |
| 7 | 3.70 | 3.70 | 9.15 | 5.73 | 3.70 |
| 6 | 3.63 | 3.63 | 9.12 | 5.71 | 3.63 |
| 5 | 3.62 | 3.62 | 9.09 | 5.64 | 3.62 |
| 4 | 3.53 | 3.53 | 9.07 | 5.56 | 3.53 |
| 3 | 3.46 | 3.46 | 9.05 | 5.45 | 3.46 |
| 2 | 3.45 | 3.45 | 9.00 | 5.26 | 3.45 |
| 1 | 3.42 | 3.42 | 8.98 | 4.21 | 3.42 |
| 0 | 3.38 | 3.38 | 8.84 | 3.38 | 3.38 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Rhume

Einflüsse: Odertalsperre seit 1934 Sösetalsperre seit 1931

NLWKN

$A_{Eo}$ : 44.5 $km^2$

PNP : NN + 338.35 m

Lage: 20.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Pionierbrücke Nr. 4882161

Gewässer : Sieber

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.618 | 0.401 | 4.91 | 1.16 | 5.97 | 1.35 | 0.577 | 0.936 | 0.586 | 0.698 | 0.684 | 0.302 | 0.539 | 0.745 |
| 2. | 0.597 | 0.510 | 11.4 | 1.06 | 5.01 | 1.17 | 0.571 | 0.601 | 0.549 | 0.659 | 0.403 | 0.284 | 0.658 | 0.738 |
| 3. | 0.586 | 1.00 | 7.16 | 0.955 | 4.17 | 1.12 | 1.45 | 0.589 | 0.523 | 0.629 | 0.355 | 0.278 | 0.968 | 0.714 |
| 4. | 0.579 | 1.64 | 5.87 | 0.857 | 3.68 | 1.16 | 0.818 | 0.837 | 0.499 | 0.600 | 0.351 | 2.33 | 0.908 | 0.737 |
| 5. | 0.568 | 0.983 | 6.68 | 0.769 | 3.22 | 1.07 | 0.777 | 2.26 | 0.470 | 0.585 | 0.351 | 1.53 | 1.01 | 0.714 |
| 6. | 0.542 | 0.785 | 5.90 | 0.735 | 2.64 | 0.983 | 1.02 | 0.924 | 0.490 | 0.784 | 0.339 | 1.72 | 0.882 | 0.673 |
| 7. | 0.511 | 0.859 | 5.00 | 0.714 | 2.31 | 0.961 | 0.782 | 0.800 | 0.474 | 0.612 | 0.325 | 1.23 | 4.77 | 0.666 |
| 8. | 0.506 | 1.25 | 5.14 | 0.693 | 2.21 | 0.885 | 0.649 | 0.725 | 0.490 | 0.554 | 0.321 | 0.845 | 2.67 | 0.649 |
| 9. | 0.478 | 3.64 | 4.95 | 0.677 | 1.99 | 0.880 | 0.655 | 0.647 | 0.470 | 0.520 | 0.312 | 0.709 | 1.96 | 0.632 |
| 10. | 0.468 | 2.48 | 6.24 | 0.663 | 1.97 | 1.66 | 0.750 | 0.602 | 0.511 | 0.497 | 0.297 | 0.626 | 1.77 | 0.651 |
| 11. | 0.461 | 1.88 | 4.83 | 0.648 | 2.63 | 1.21 | 0.666 | 0.576 | 0.474 | 0.478 | 0.362 | 0.582 | 1.94 | 0.643 |
| 12. | 0.454 | 2.28 | 6.84 | 0.634 | 3.16 | 1.04 | 0.714 | 0.568 | 0.621 | 0.457 | 0.457 | 0.708 | 1.48 | 0.622 |
| 13. | 0.445 | 3.01 | 5.77 | 0.620 | 3.18 | 1.41 | 0.626 | 0.554 | 1.25 | 0.436 | 0.377 | 0.877 | 1.31 | 0.611 |
| 14. | 0.440 | 3.79 | 4.11 | 0.621 | 2.68 | 1.14 | 0.578 | 0.545 | 3.19 | 0.417 | 0.347 | 0.730 | 1.20 | 0.608 |
| 15. | 0.435 | 3.08 | 3.27 | 0.728 | 2.29 | 0.971 | 0.573 | 0.530 | 2.01 | 0.406 | 0.360 | 1.36 | 1.10 | 3.55 |
| 16. | 0.431 | 3.23 | 2.72 | 0.727 | 2.62 | 0.913 | 0.689 | 0.579 | 1.74 | 0.456 | 0.342 | 1.04 | 1.01 | 3.49 |
| 17. | 0.422 | 3.36 | 2.35 | 0.894 | 3.09 | 0.885 | 0.752 | 0.560 | 6.20 | 0.422 | 0.324 | 0.809 | 0.943 | 3.15 |
| 18. | 0.419 | 2.72 | 2.06 | 0.967 | 3.16 | 0.852 | 0.594 | 0.507 | 3.73 | 0.398 | 0.309 | 0.734 | 0.899 | 3.63 |
| 19. | 0.416 | 2.36 | 2.15 | 1.43 | 2.56 | 0.806 | 0.547 | 0.495 | 3.06 | 0.387 | 0.314 | 0.665 | 0.851 | 3.26 |
| 20. | 0.406 | 2.08 | 2.24 | 1.05 | 2.05 | 0.783 | 0.514 | 0.696 | 2.42 | 0.381 | 0.313 | 0.620 | 0.802 | 2.74 |
| 21. | 0.399 | 1.93 | 2.19 | 0.908 | 2.11 | 0.764 | 0.512 | 0.733 | 1.91 | 0.370 | 0.297 | 0.594 | 0.760 | 2.38 |
| 22. | 0.390 | 1.91 | 2.97 | 0.879 | 2.20 | 0.826 | 0.522 | 0.585 | 1.60 | 0.399 | 0.291 | 0.584 | 0.715 | 2.09 |
| 23. | 0.382 | 5.33 | 4.68 | 1.22 | 2.07 | 0.991 | 0.540 | 0.523 | 1.39 | 0.366 | 0.284 | 0.539 | 0.690 | 8.26 |
| 24. | 0.379 | 7.10 | 3.87 | 4.68 | 1.95 | 0.931 | 0.511 | 0.528 | 1.24 | 0.372 | 0.294 | 0.518 | 0.939 | 14.5 |
| 25. | 0.376 | 5.91 | 2.99 | 6.11 | 1.81 | 0.830 | 0.491 | 0.687 | 1.12 | 0.605 | 0.302 | 0.510 | 0.849 | 10.1 |
| 26. | 0.392 | 7.21 | 2.50 | 3.92 | 1.61 | 0.736 | 0.479 | 0.673 | 1.01 | 0.506 | 0.290 | 0.512 | 0.759 | 9.33 |
| 27. | 0.423 | 7.70 | 2.14 | 3.10 | 1.50 | 0.679 | 0.469 | 0.591 | 0.935 | 0.644 | 0.470 | 0.492 | 0.921 | 10.2 |
| 28. | 0.506 | 5.72 | 1.86 | 2.98 | 1.45 | 0.651 | 0.458 | 0.698 | 0.913 | 0.418 | 0.499 | 0.473 | 0.844 | 6.30 |
| 29. | 0.425 | 4.50 | 1.69 | 5.01 | 1.35 | 0.624 | 0.448 | 0.583 | 0.894 | 0.355 | 0.384 | 0.470 | 0.855 | 4.43 |
| 30. | 0.408 | 3.72 | 1.52 | | 1.95 | 0.599 | 0.437 | 0.540 | 0.826 | 0.342 | 0.329 | 0.508 | 0.808 | 3.73 |
| 31. | | 2.98 | 1.27 | | 1.71 | | 0.512 | | 0.751 | 0.391 | | 0.532 | | 3.16 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 1. | 31. | 13. | 29. | 30. | 30. | 19. | 5.+ | 30. | 23. | 3. | 1. | 14. |
| NQ | 0.376 | 0.401 | 1.27 | 0.620 | 1.35 | 0.599 | 0.437 | 0.495 | 0.470 | 0.342 | 0.284 | 0.278 | 0.539 | 0.608 |
| MQ | 0.462 | 3.08 | 4.11 | 1.57 | 2.59 | 0.963 | 0.635 | 0.689 | 1.37 | 0.489 | 0.356 | 0.765 | 1.19 | 3.35 |
| HQ | 0.633 | 7.97 | 14.1 | 8.90 | 6.63 | 1.91 | 2.48 | 4.60 | 10.3 | 1.22 | 1.19 | 8.45 | 6.85 | 17.4 |
| Tag | 1. | 24. | 2. | 25. | 1. | 10. | 3. | 5. | 17. | 31. | 1. | 4. | 7. | 24. |
| $h_N$ mm / $h_A$ mm | 27 | 185 | 247 | 88 | 156 | 56 | 38 | 40 | 82 | 29 | 21 | 46 | 69 | 202 |
| | 1929/2011 | | 1930/2012 83 Jahre | | | | | | | | | | | |
| Jahr | 1949 | 1959 | 1940 | 1940 | 1932 | 1958 | 2011 | 2003 | 1994 | 2003 | 2003 | 1959 | 1949 | 1959 |
| NQ | 0.160 | 0.200 | 0.130 | 0.130 | 0.140 | 0.150 | 0.190 | 0.130 | 0.143 | 0.094 | 0.116 | 0.120 | 0.160 | 0.200 |
| MNQ | 0.656 | 0.670 | 0.698 | 0.702 | 0.808 | 0.982 | 0.494 | 0.397 | 0.406 | 0.405 | 0.434 | 0.474 | 0.652 | 0.665 |
| MQ | 1.76 | 2.06 | 2.08 | 1.86 | 2.16 | 2.36 | 1.09 | 0.876 | 1.02 | 0.910 | 1.01 | 1.28 | 1.76 | 2.06 |
| MHQ | 9.31 | 10.6 | 11.8 | 7.91 | 9.02 | 8.04 | 4.79 | 6.16 | 6.09 | 6.85 | 6.06 | 7.21 | 9.37 | 10.6 |
| HQ | 41.6 | 31.0 | 87.0 | 54.0 | 45.6 | 29.2 | 18.8 | 42.4 | 27.1 | 56.4 | 34.7 | 50.0 | 41.6 | 31.0 |
| Jahr | 1939 | 1967+ | 1932 | 1946 | 1981 | 1994 | 1931 | 1981 | 1942 | 1930 | 2007 | 1935 | 1939 | 1967+ |
| $Mh_N$ mm / $Mh_A$ mm | 103 | 124 | 125 | 105 | 130 | 137 | 66 | 51 | 61 | 55 | 59 | 77 | 103 | 124 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.278 | am 03.10.2012 | 0.376 | 0.278 | 0.278 | am 03.10.2012 |
| MQ $m^3/s$ | 1.43 | | 2.15 | 0.719 | 1.51 | |
| HQ $m^3/s$ | 14.1 | am 02.01.2012 bei W= 74 cm | 14.1 | 10.3 | 17.4 | am 24.12.2012 bei W= 84 cm |
| Nq $l/(s km^2)$ | 6.25 | | 8.45 | 6.25 | 6.25 | |
| Mq $l/(s km^2)$ | 32.1 | | 48.3 | 16.2 | 33.9 | |
| Hq $l/(s km^2)$ | 317 | | 317 | 231 | 391 | |
| $h_N$ mm / $h_A$ mm | 1016 | | 760 | 257 | 1073 | |
| | 1930/2012 (*) 83 Jahre | | | | 1930/2012 | |
| NQ $m^3/s$ | 0.094 | am 17.08.2003 | 0.130 | 0.094 | 0.094 | am 17.08.2003 |
| MNQ $m^3/s$ | 0.249 | | 0.393 | 0.271 | 0.258 | |
| MQ $m^3/s$ | 1.54 | | 2.05 | 1.03 | 1.54 | |
| MHQ $m^3/s$ | 24.0 | | 21.4 | 15.2 | 24.2 | |
| HQ $m^3/s$ | 87.0 | am 04.01.1932 bei W= 160 cm | 87.0 | 56.4 | 87.0 | am 04.01.1932 bei W= 160 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 5.60 | | 8.83 | 6.09 | 5.80 | |
| Mq $l/(s km^2)$ | 34.6 | | 46.1 | 23.1 | 34.6 | |
| MHq $l/(s km^2)$ | 539 | | 481 | 342 | 544 | |
| $Mh_N$ mm / $Mh_A$ mm | 1094 | | 724 | 368 | 1094 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.118 | 2.65 | 17.08.2003 | 87.0 | 1960 | 160 | 04.01.1932 |
| 2 | 0.120 | 2.70 | 11.10.1959 | 56.4 | 1270 | 126 | 16.08.1930 |
| 3 | 0.126 | 2.83 | 10.09.1982 | 54.0 | 1210 | 144 | 08.02.1946 |
| 4 | 0.130 | 2.92 | 01.02.1940 | 50.0 | 1120 | 120 | 28.10.1935 |
| 5 | 0.130 | 2.92 | 17.01.1940 | 45.6 | 1020 | 132 | 12.03.1981 |
| 6 | 0.140 | 3.15 | 05.08.1932 | 42.4 | 953 | 127 | 04.06.1981 |
| 7 | 0.140 | 3.15 | 03.03.1932 | 41.6 | 935 | 130 | 30.11.1939 |
| 8 | 0.140 | 3.15 | 21.02.1932 | 40.8 | 917 | 136 | 28.10.1998 |
| 9 | 0.140 | 3.15 | 21.06.1930 | 40.0 | 899 | 150 | 13.01.1948 |
| 10 | 0.140 | 3.15 | 12.02.1930 | 39.4 | 885 | 108 | 16.02.1935 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1930/2012 83 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 11.4 | 14.5 | | | |
| 364 | 7.70 | 11.4 | 40.8 | 13.7 | 4.14 |
| 363 | 7.21 | 10.2 | 36.3 | 11.3 | 3.78 |
| 362 | 7.16 | 10.1 | 21.6 | 9.76 | 3.60 |
| 361 | 7.10 | 9.33 | 19.2 | 8.70 | 3.60 |
| 360 | 6.84 | 8.26 | 17.3 | 7.96 | 3.60 |
| 359 | 6.68 | 7.16 | 16.7 | 7.48 | 3.42 |
| 358 | 6.24 | 6.84 | 16.7 | 6.99 | 3.42 |
| 357 | 6.20 | 6.68 | 13.1 | 6.65 | 3.24 |
| 356 | 6.11 | 6.30 | 13.1 | 6.39 | 3.24 |
| 350 | 5.72 | 5.87 | 9.08 | 5.12 | 2.60 |
| 340 | 4.83 | 4.77 | 7.33 | 4.02 | 2.15 |
| 330 | 3.64 | 3.63 | 5.88 | 3.41 | 1.85 |
| 320 | 3.09 | 3.18 | 4.80 | 2.93 | 1.56 |
| 300 | 2.33 | 2.33 | 3.80 | 2.33 | 1.18 |
| 270 | 1.69 | 1.66 | 3.04 | 1.75 | 0.850 |
| 240 | 1.06 | 1.07 | 2.42 | 1.37 | 0.700 |
| 210 | 0.852 | 0.894 | 2.16 | 1.11 | 0.480 |
| 183 | 0.725 | 0.769 | 1.85 | 0.918 | 0.420 |
| 150 | 0.621 | 0.679 | 1.57 | 0.750 | 0.360 |
| 130 | 0.582 | 0.632 | 1.43 | 0.661 | 0.300 |
| 120 | 0.560 | 0.612 | 1.38 | 0.625 | 0.300 |
| 110 | 0.530 | 0.591 | 1.26 | 0.589 | 0.300 |
| 100 | 0.514 | 0.577 | 1.23 | 0.561 | 0.300 |
| 90 | 0.507 | 0.545 | 1.19 | 0.521 | 0.240 |
| 80 | 0.479 | 0.522 | 1.10 | 0.501 | 0.240 |
| 70 | 0.468 | 0.508 | 1.05 | 0.457 | 0.240 |
| 60 | 0.437 | 0.491 | 0.970 | 0.430 | 0.224 |
| 50 | 0.417 | 0.469 | 0.919 | 0.401 | 0.200 |
| 40 | 0.392 | 0.417 | 0.880 | 0.361 | 0.188 |
| 30 | 0.372 | 0.372 | 0.880 | 0.334 | 0.164 |
| 25 | 0.360 | 0.360 | 0.790 | 0.311 | 0.147 |
| 20 | 0.347 | 0.347 | 0.790 | 0.301 | 0.138 |
| 15 | 0.324 | 0.324 | 0.700 | 0.280 | 0.130 |
| 10 | 0.309 | 0.309 | 0.660 | 0.241 | 0.116 |
| 9 | 0.309 | 0.309 | 0.630 | 0.241 | 0.113 |
| 8 | 0.309 | 0.309 | 0.630 | 0.234 | 0.107 |
| 7 | 0.302 | 0.302 | 0.580 | 0.231 | 0.104 |
| 6 | 0.302 | 0.302 | 0.580 | 0.223 | 0.102 |
| 5 | 0.294 | 0.294 | 0.580 | 0.211 | 0.102 |
| 4 | 0.291 | 0.291 | 0.580 | 0.202 | 0.102 |
| 3 | 0.290 | 0.290 | 0.580 | 0.181 | 0.102 |
| 2 | 0.290 | 0.290 | 0.580 | 0.172 | 0.098 |
| 1 | 0.290 | 0.290 | 0.580 | 0.154 | 0.095 |
| 0 | 0.278 | 0.278 | 0.481 | 0.094 | 0.094 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Oberharz

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 129 $km^2$

PNP : NN + 179.62 m

Lage: 1.2 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Hattorf Nr. 4882168

Gewässer : Sieber

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.106 | 0.023 | 7.39 | 1.93 | 9.52 | 1.48 | 0.188 | 0.862 | 0.091 | 0.108 | 0.040 | 0.026 | 0.086 | 0.672 |
| 2. | 0.097 | 0.026 | 16.4 | 2.90 | 8.01 | 1.24 | 0.335 | 0.421 | 0.085 | 0.061 | 0.028 | 0.026 | 0.092 | 0.636 |
| 3. | 0.088 | 0.030 | 12.6 | 3.76 | 6.26 | 1.16 | 3.41 | 0.298 | 0.078 | 0.043 | 0.026 | 0.026 | 0.481 | 0.642 |
| 4. | 0.076 | 1.03 | 9.38 | 4.12 | 5.23 | 1.14 | 1.55 | 0.688 | 0.066 | 0.034 | 0.024 | 0.870 | 0.705 | 0.659 |
| 5. | 0.066 | 0.767 | 10.0 | 5.42 | 4.41 | 1.06 | 1.30 | 2.76 | 0.063 | 0.032 | 0.024 | 1.22 | 0.704 | 0.747 |
| 6. | 0.058 | 0.608 | 9.78 | 5.32 | 3.55 | 0.951 | 1.55 | 1.27 | 0.058 | 0.121 | 0.025 | 1.19 | 0.709 | 0.669 |
| 7. | 0.057 | 0.650 | 8.49 | 5.05 | 2.95 | 0.940 | 1.23 | 0.966 | 0.048 | 0.064 | 0.025 | 1.02 | 5.01 | 0.634 |
| 8. | 0.054 | 1.27 | 10.1 | 4.78 | 3.18 | 0.882 | 1.04 | 0.748 | 0.047 | 0.034 | 0.025 | 0.533 | 3.51 | 0.466 |
| 9. | 0.047 | 3.23 | 10.4 | 4.51 | 2.80 | 0.813 | 0.955 | 0.541 | 0.046 | 0.031 | 0.026 | 0.295 | 2.23 | 0.561 |
| 10. | 0.046 | 2.64 | 11.8 | 4.28 | 2.65 | 1.30 | 1.05 | 0.407 | 0.045 | 0.028 | 0.025 | 0.147 | 1.97 | 0.728 |
| 11. | 0.045 | 2.04 | 8.74 | 4.05 | 3.18 | 1.19 | 0.866 | 0.288 | 0.045 | 0.026 | 0.031 | 0.095 | 2.15 | 0.730 |
| 12. | 0.044 | 2.05 | 9.42 | 3.82 | 3.74 | 0.972 | 0.885 | 0.233 | 0.046 | 0.024 | 0.031 | 0.148 | 1.66 | 0.651 |
| 13. | 0.044 | 2.82 | 9.18 | 3.65 | 3.84 | 1.29 | 0.767 | 0.162 | 0.245 | 0.024 | 0.027 | 0.523 | 1.41 | 0.657 |
| 14. | 0.043 | 4.01 | 6.34 | 3.49 | 3.32 | 1.20 | 0.645 | 0.123 | 2.63 | 0.024 | 0.027 | 0.301 | 1.26 | 0.672 |
| 15. | 0.042 | 3.52 | 4.93 | 3.18 | 2.68 | 1.01 | 0.606 | 0.105 | 2.22 | 0.023 | 0.024 | 0.690 | 1.15 | 4.07 |
| 16. | 0.041 | 3.83 | 4.03 | 2.91 | 2.68 | 0.902 | 0.738 | 0.116 | 1.56 | 0.025 | 0.023 | 0.800 | 1.02 | 4.76 |
| 17. | 0.040 | 4.68 | 3.35 | 2.78 | 3.11 | 0.846 | 0.760 | 0.152 | 8.20 | 0.027 | 0.023 | 0.515 | 0.926 | 4.89 |
| 18. | 0.039 | 3.85 | 2.87 | 2.51 | 3.23 | 0.828 | 0.597 | 0.083 | 5.06 | 0.026 | 0.023 | 0.351 | 0.855 | 6.62 |
| 19. | 0.038 | 3.31 | 3.38 | 2.14 | 2.79 | 0.811 | 0.457 | 0.065 | 3.81 | 0.023 | 0.023 | 0.204 | 0.806 | 6.07 |
| 20. | 0.033 | 2.90 | 3.85 | 1.47 | 2.13 | 0.731 | 0.309 | 0.407 | 2.83 | 0.023 | 0.024 | 0.113 | 0.728 | 4.85 |
| 21. | 0.031 | 2.97 | 3.65 | 1.23 | 1.93 | 0.681 | 0.307 | 0.581 | 2.05 | 0.023 | 0.024 | 0.074 | 0.690 | 4.06 |
| 22. | 0.030 | 3.49 | 5.33 | 1.12 | 2.08 | 0.767 | 0.154 | 0.218 | 1.67 | 0.023 | 0.024 | 0.062 | 0.630 | 3.60 |
| 23. | 0.029 | 8.98 | 10.7 | 1.51 | 1.96 | 0.958 | 0.130 | 0.102 | 1.31 | 0.024 | 0.024 | 0.047 | 0.565 | 13.7 |
| 24. | 0.029 | 12.7 | 8.69 | 6.51 | 1.78 | 0.916 | 0.086 | 0.077 | 1.06 | 0.029 | 0.025 | 0.043 | 0.784 | 30.1 |
| 25. | 0.028 | 11.2 | 6.29 | 11.8 | 1.64 | 0.785 | 0.070 | 0.167 | 0.888 | 0.031 | 0.029 | 0.040 | 0.822 | 18.3 |
| 26. | 0.027 | 11.3 | 4.68 | 7.62 | 1.43 | 0.628 | 0.061 | 0.290 | 0.746 | 0.025 | 0.022 | 0.037 | 0.678 | 14.8 |
| 27. | 0.026 | 12.0 | 3.80 | 5.55 | 1.30 | 0.535 | 0.061 | 0.146 | 0.599 | 0.023 | 0.024 | 0.037 | 0.814 | 14.0 |
| 28. | 0.026 | 9.24 | 3.08 | 4.92 | 1.24 | 0.436 | 0.056 | 0.197 | 0.695 | 0.022 | 0.025 | 0.037 | 0.791 | 9.32 |
| 29. | 0.025 | 6.84 | 2.69 | 7.88 | 1.17 | 0.332 | 0.051 | 0.128 | 0.546 | 0.021 | 0.026 | 0.038 | 0.758 | 6.42 |
| 30. | 0.023 | 5.86 | 2.35 | | 1.80 | 0.270 | 0.049 | 0.111 | 0.457 | 0.023 | 0.026 | 0.038 | 0.729 | 5.21 |
| 31. | | 4.72 | 1.90 | | 1.89 | | 0.064 | | 0.260 | 0.042 | | 0.065 | | 4.30 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 30. | 1. | 31. | 22. | 29. | 30. | 30. | 19. | 10.+ | 29. | 26. | 1.+ | 1. | 8. |
| NQ | 0.023 | 0.023 | 1.90 | 1.12 | 1.17 | 0.270 | 0.049 | 0.065 | 0.045 | 0.021 | 0.022 | 0.026 | 0.086 | 0.466 |
| MQ | 0.046 | 4.28 | 6.95 | 4.14 | 3.14 | 0.902 | 0.656 | 0.424 | 1.21 | 0.035 | 0.026 | 0.310 | 1.16 | 5.30 |
| HQ | 0.109 | 14.5 | 20.9 | 14.4 | 10.2 | 1.76 | 6.38 | 4.80 | 13.8 | 0.355 | 0.088 | 4.46 | 8.41 | 35.4 |
| Tag | 1. | 24. | 2. | 25. | 1. | 1. | 2. | 5. | 17. | 31. | 11. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 1 | 89 | 144 | 81 | 65 | 18 | 14 | 9 | 25 | 1 | 1 | 6 | 23 | 110 |
| | 1950/2011 | | 1951/2012 62 Jahre | | | | | | | | | | | |
| Jahr | 2011 | 2011 | 1996 | 1996 | 1996 | 2011 | 1993 | 1976 | 2003 | 2003 | 2003 | 2000 | 2011 | 2011 |
| NQ | 0.023 | 0.023 | 0.047 | 0.039 | 0.044 | 0.057 | 0.006 | 0.015 | 0.011 | 0.004 | 0.007 | 0.014 | 0.023 | 0.023 |
| MNQ | 0.694 | 0.994 | 1.06 | 1.19 | 1.28 | 1.34 | 0.498 | 0.348 | 0.332 | 0.308 | 0.376 | 0.427 | 0.676 | 0.987 |
| MQ | 2.58 | 3.77 | 3.76 | 3.17 | 4.03 | 3.48 | 1.55 | 1.24 | 1.37 | 0.983 | 1.29 | 1.64 | 2.54 | 3.82 |
| MHQ | 12.4 | 19.4 | 18.5 | 11.7 | 16.9 | 11.2 | 6.62 | 9.49 | 8.30 | 7.24 | 7.96 | 9.01 | 12.3 | 19.9 |
| HQ | 55.3 | 70.9 | 64.7 | 28.2 | 90.0 | 60.4 | 28.3 | 74.8 | 47.2 | 58.2 | 41.6 | 61.6 | 55.3 | 70.9 |
| Jahr | 1990 | 1974 | 1982 | 2000 | 1981 | 1994 | 1965 | 1981 | 1955 | 2007 | 2007 | 1998 | 1990 | 1974 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 52 | 78 | 78 | 62 | 84 | 70 | 32 | 25 | 28 | 20 | 26 | 34 | 51 | 79 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.021 | am 29.08.2012 | 0.023 | 0.021 | 0.021 | am 29.08.2012 |
| MQ $m^3/s$ | 1.85 | | 3.27 | 0.446 | 2.03 | |
| HQ $m^3/s$ | 20.9 | am 02.01.2012 bei W= 192 cm | 20.9 | 13.8 | 35.4 | am 24.12.2012 bei W= 223 cm |
| Nq $l/(s km^2)$ | 0.163 | | 0.178 | 0.163 | 0.163 | |
| Mq $l/(s km^2)$ | 14.3 | | 25.3 | 3.46 | 15.7 | |
| Hq $l/(s km^2)$ | 162 | | 162 | 107 | 274 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 453 | | 399 | 55 | 497 | |
| | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
| NQ $m^3/s$ | 0.004 | am 27.08.2003 | 0.023 | 0.004 | 0.004 | am 27.08.2003 |
| MNQ $m^3/s$ | 0.130 | | 0.398 | 0.147 | 0.144 | |
| MQ $m^3/s$ | 2.40 | | 3.47 | 1.35 | 2.40 | |
| MHQ $m^3/s$ | 36.3 | | 33.3 | 20.8 | 36.6 | |
| HQ $m^3/s$ | 90.0 | am 12.03.1981 bei W= 208 cm | 90.0 | 74.8 | 90.0 | am 12.03.1981 bei W= 208 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.01 | | 3.09 | 1.14 | 1.12 | |
| Mq $l/(s km^2)$ | 18.6 | | 26.9 | 10.5 | 18.6 | |
| MHq $l/(s km^2)$ | 281 | | 258 | 161 | 284 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 588 | | 423 | 166 | 588 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.004 | 0.031 | 27.08.2003 | 90.0 | 698 | 208 | 12.03.1981 |
| 2 | 0.006 | 0.047 | 18.05.1993 | 74.8 | 580 | 182 | 04.06.1981 |
| 3 | 0.008 | 0.062 | 14.08.1990 | 70.9 | 550 | 173 | 08.12.1974 |
| 4 | 0.008 | 0.062 | 22.08.1976 | 69.9 | 542 | 177 | 30.12.1986 |
| 5 | 0.013 | 0.101 | 29.07.1994 | 65.2 | 505 | 281 | 09.03.2000 |
| 6 | 0.014 | 0.109 | 18.10.2000 | 64.7 | 502 | 164 | 06.01.1982 |
| 7 | 0.015 | 0.116 | 22.08.1997 | 64.6 | 501 | 164 | 07.06.1986 |
| 8 | 0.015 | 0.116 | 05.07.1989 | 61.6 | 478 | 275 | 28.10.1998 |
| 9 | 0.016 | 0.124 | 29.07.2011 | 60.4 | 468 | 271 | 13.04.1994 |
| 10 | 0.016 | 0.124 | 30.09.2009 | 59.4 | 460 | 269 | 30.01.1995 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1951/2012 62 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 16.4 | 30.1 | | | |
| 364 | 12.7 | 18.3 | 74.8 | 25.9 | 6.64 |
| 363 | 12.6 | 16.4 | 65.2 | 20.6 | 6.15 |
| 362 | 12.0 | 14.8 | 49.3 | 17.5 | 6.00 |
| 361 | 12.0 | 14.0 | 42.4 | 15.8 | 5.90 |
| 360 | 12.0 | 13.7 | 34.3 | 14.6 | 5.40 |
| 359 | 11.3 | 12.6 | 33.8 | 13.5 | 5.15 |
| 358 | 11.2 | 12.6 | 29.9 | 12.9 | 5.15 |
| 357 | 10.7 | 12.6 | 25.5 | 12.3 | 5.15 |
| 356 | 10.4 | 10.7 | 24.6 | 11.6 | 4.32 |
| 350 | 9.38 | 9.42 | 16.7 | 9.04 | 3.78 |
| 340 | 7.62 | 7.62 | 13.0 | 6.91 | 3.24 |
| 330 | 5.33 | 5.42 | 10.0 | 5.67 | 2.72 |
| 320 | 4.72 | 4.89 | 8.53 | 4.87 | 2.25 |
| 300 | 3.52 | 3.74 | 6.40 | 3.88 | 1.68 |
| 270 | 2.65 | 2.63 | 4.86 | 2.89 | 1.08 |
| 240 | 1.31 | 1.31 | 4.04 | 2.15 | 0.760 |
| 210 | 0.916 | 0.951 | 3.44 | 1.68 | 0.404 |
| 183 | 0.645 | 0.748 | 2.90 | 1.33 | 0.153 |
| 150 | 0.218 | 0.581 | 2.30 | 0.971 | 0.072 |
| 130 | 0.105 | 0.309 | 1.96 | 0.801 | 0.041 |
| 120 | 0.077 | 0.233 | 1.82 | 0.718 | 0.033 |
| 110 | 0.063 | 0.147 | 1.68 | 0.651 | 0.032 |
| 100 | 0.051 | 0.105 | 1.68 | 0.561 | 0.028 |
| 90 | 0.046 | 0.077 | 1.54 | 0.496 | 0.026 |
| 80 | 0.041 | 0.062 | 1.40 | 0.401 | 0.024 |
| 70 | 0.037 | 0.047 | 1.40 | 0.336 | 0.021 |
| 60 | 0.031 | 0.040 | 1.27 | 0.261 | 0.020 |
| 50 | 0.028 | 0.032 | 1.27 | 0.181 | 0.018 |
| 40 | 0.027 | 0.027 | 1.14 | 0.098 | 0.014 |
| 30 | 0.026 | 0.026 | 1.14 | 0.060 | 0.010 |
| 25 | 0.025 | 0.025 | 1.14 | 0.050 | 0.010 |
| 20 | 0.025 | 0.025 | 1.14 | 0.043 | 0.009 |
| 15 | 0.024 | 0.025 | 1.02 | 0.036 | 0.009 |
| 10 | 0.024 | 0.024 | 1.02 | 0.030 | 0.007 |
| 9 | 0.024 | 0.024 | 1.02 | 0.028 | 0.007 |
| 8 | 0.024 | 0.024 | 1.02 | 0.027 | 0.007 |
| 7 | 0.024 | 0.024 | 0.940 | 0.026 | 0.007 |
| 6 | 0.024 | 0.024 | 0.940 | 0.024 | 0.007 |
| 5 | 0.024 | 0.024 | 0.940 | 0.021 | 0.007 |
| 4 | 0.024 | 0.024 | 0.940 | 0.020 | 0.006 |
| 3 | 0.024 | 0.024 | 0.940 | 0.018 | 0.006 |
| 2 | 0.023 | 0.023 | 0.940 | 0.016 | 0.006 |
| 1 | 0.023 | 0.023 | 0.883 | 0.011 | 0.005 |
| 0 | 0.021 | 0.021 | 0.825 | 0.004 | 0.004 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Sieber
Versickerungsverluste im Karst des Pöhlder Beckens

NLWKN

$A_{Eo}$ : 24.2 $km^2$

PNP : NN + 342.82 m

Lage: 30.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Riefensbeek Nr. 4882176

Gewässer : Söse

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.149 | 0.084 | 2.40 | 0.351 | 2.49 | 0.257 | 0.160 | 0.292 | 0.196 | 0.177 | 0.202 | 0.063 | 0.097 | 0.172 |
| 2. | 0.142 | 0.120 | 4.58 | 0.321 | 2.01 | 0.210 | 0.181 | 0.156 | 0.143 | 0.158 | 0.114 | 0.058 | 0.152 | 0.171 |
| 3. | 0.136 | 0.298 | 2.98 | 0.292 | 1.67 | 0.194 | 0.506 | 0.177 | 0.129 | 0.143 | 0.095 | 0.057 | 0.271 | 0.165 |
| 4. | 0.130 | 0.423 | 2.27 | 0.265 | 1.41 | 0.196 | 0.252 | 0.300 | 0.119 | 0.132 | 0.086 | 0.704 | 0.206 | 0.177 |
| 5. | 0.125 | 0.220 | 2.65 | 0.248 | 1.16 | 0.184 | 0.274 | 0.900 | 0.112 | 0.128 | 0.082 | 0.361 | 0.204 | 0.174 |
| 6. | 0.118 | 0.171 | 2.43 | 0.236 | 0.894 | 0.176 | 0.356 | 0.320 | 0.105 | 0.160 | 0.075 | 0.422 | 0.176 | 0.161 |
| 7. | 0.111 | 0.309 | 2.27 | 0.223 | 0.732 | 0.182 | 0.266 | 0.274 | 0.100 | 0.132 | 0.073 | 0.259 | 2.08 | 0.155 |
| 8. | 0.107 | 0.534 | 2.45 | 0.212 | 0.723 | 0.167 | 0.235 | 0.242 | 0.107 | 0.116 | 0.069 | 0.148 | 0.935 | 0.151 |
| 9. | 0.105 | 1.37 | 2.41 | 0.203 | 0.626 | 0.178 | 0.236 | 0.211 | 0.116 | 0.108 | 0.067 | 0.123 | 0.686 | 0.147 |
| 10. | 0.103 | 0.848 | 2.73 | 0.196 | 0.637 | 0.388 | 0.217 | 0.191 | 0.120 | 0.101 | 0.062 | 0.108 | 0.614 | 0.144 |
| 11. | 0.104 | 0.654 | 2.07 | 0.189 | 0.976 | 0.230 | 0.206 | 0.185 | 0.116 | 0.097 | 0.122 | 0.099 | 0.601 | 0.140 |
| 12. | 0.105 | 0.920 | 2.61 | 0.183 | 1.11 | 0.181 | 0.215 | 0.180 | 0.177 | 0.090 | 0.126 | 0.140 | 0.430 | 0.136 |
| 13. | 0.106 | 1.19 | 1.95 | 0.175 | 1.05 | 0.285 | 0.186 | 0.159 | 0.375 | 0.084 | 0.099 | 0.172 | 0.368 | 0.133 |
| 14. | 0.103 | 1.41 | 1.44 | 0.164 | 0.816 | 0.226 | 0.171 | 0.152 | 1.43 | 0.080 | 0.088 | 0.139 | 0.324 | 0.150 |
| 15. | 0.100 | 1.11 | 1.12 | 0.160 | 0.642 | 0.182 | 0.175 | 0.141 | 0.904 | 0.076 | 0.090 | 0.380 | 0.288 | 1.96 |
| 16. | 0.097 | 1.50 | 0.868 | 0.151 | 0.649 | 0.164 | 0.212 | 0.167 | 0.949 | 0.103 | 0.081 | 0.236 | 0.259 | 1.79 |
| 17. | 0.094 | 1.60 | 0.694 | 0.238 | 0.733 | 0.164 | 0.195 | 0.148 | 3.22 | 0.082 | 0.076 | 0.158 | 0.232 | 1.79 |
| 18. | 0.095 | 1.29 | 0.570 | 0.267 | 0.779 | 0.164 | 0.160 | 0.126 | 2.25 | 0.073 | 0.075 | 0.134 | 0.224 | 2.05 |
| 19. | 0.091 | 1.02 | 0.834 | 0.491 | 0.607 | 0.159 | 0.145 | 0.121 | 1.89 | 0.068 | 0.083 | 0.118 | 0.208 | 1.80 |
| 20. | 0.086 | 0.826 | 0.895 | 0.306 | 0.444 | 0.166 | 0.129 | 0.215 | 1.38 | 0.065 | 0.084 | 0.107 | 0.188 | 1.44 |
| 21. | 0.084 | 0.800 | 0.957 | 0.261 | 0.415 | 0.165 | 0.120 | 0.198 | 0.966 | 0.089 | 0.078 | 0.101 | 0.173 | 1.12 |
| 22. | 0.080 | 0.956 | 1.69 | 0.254 | 0.420 | 0.286 | 0.107 | 0.151 | 0.715 | 0.109 | 0.074 | 0.098 | 0.160 | 0.990 |
| 23. | 0.077 | 2.79 | 3.02 | 0.509 | 0.389 | 0.394 | 0.099 | 0.144 | 0.546 | 0.072 | 0.071 | 0.095 | 0.152 | 4.44 |
| 24. | 0.077 | 3.83 | 2.25 | 2.84 | 0.357 | 0.328 | 0.091 | 0.160 | 0.462 | 0.070 | 0.074 | 0.095 | 0.237 | 6.79 |
| 25. | 0.077 | 3.28 | 1.55 | 3.22 | 0.326 | 0.244 | 0.085 | 0.196 | 0.408 | 0.111 | 0.072 | 0.097 | 0.195 | 4.58 |
| 26. | 0.088 | 3.81 | 1.13 | 2.09 | 0.286 | 0.217 | 0.083 | 0.165 | 0.327 | 0.097 | 0.065 | 0.090 | 0.169 | 3.27 |
| 27. | 0.098 | 3.68 | 0.868 | 1.50 | 0.224 | 0.203 | 0.080 | 0.157 | 0.293 | 0.115 | 0.125 | 0.080 | 0.201 | 3.05 |
| 28. | 0.117 | 2.41 | 0.690 | 1.47 | 0.204 | 0.190 | 0.077 | 0.213 | 0.306 | 0.085 | 0.109 | 0.080 | 0.181 | 1.99 |
| 29. | 0.095 | 1.70 | 0.565 | 2.28 | 0.196 | 0.177 | 0.081 | 0.138 | 0.260 | 0.077 | 0.081 | 0.078 | 0.212 | 1.51 |
| 30. | 0.087 | 1.38 | 0.475 | | 0.467 | 0.167 | 0.079 | 0.120 | 0.229 | 0.079 | 0.069 | 0.103 | 0.191 | 1.24 |
| 31. | | 1.07 | 0.385 | | 0.371 | | 0.186 | | 0.200 | 0.157 | | 0.101 | | 0.981 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23.+ | 1. | 31. | 16. | 29. | 19. | 28. | 30. | 7. | 20. | 10. | 3. | 1. | 13. |
| NQ | 0.077 | 0.084 | 0.385 | 0.151 | 0.196 | 0.159 | 0.077 | 0.120 | 0.100 | 0.065 | 0.062 | 0.057 | 0.097 | 0.133 |
| MQ | 0.103 | 1.34 | 1.74 | 0.665 | 0.768 | 0.214 | 0.180 | 0.210 | 0.602 | 0.104 | 0.089 | 0.161 | 0.347 | 1.39 |
| HQ | 0.169 | 4.24 | 5.45 | 5.00 | 2.67 | 0.562 | 1.10 | 2.03 | 5.48 | 0.506 | 0.358 | 2.66 | 3.11 | 8.05 |
| Tag | 27. | 24. | 2. | 24. | 1. | 22. | 3. | 5. | 17. | 31. | 1. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 148 | 193 | 69 | 85 | 23 | 20 | 22 | 67 | 12 | 10 | 18 | 37 | 154 |
| | 1931/2011 | | 1932/2012 81 Jahre | | | | | | | | | | | |
| Jahr | 1943+ | 1963 | 1945 | 1945 | 1932 | 2011 | 1940 | 1936+ | 1936+ | 2003 | 1949+ | 1943 | 1943+ | 1963 |
| NQ | 0.040 | 0.030 | 0.020 | 0.020 | 0.020 | 0.068 | 0.040 | 0.020 | 0.020 | 0.012 | 0.030 | 0.020 | 0.040 | 0.030 |
| MNQ | 0.208 | 0.221 | 0.217 | 0.221 | 0.260 | 0.286 | 0.145 | 0.122 | 0.122 | 0.117 | 0.135 | 0.141 | 0.207 | 0.220 |
| MQ | 0.728 | 0.931 | 0.937 | 0.827 | 0.952 | 0.872 | 0.385 | 0.385 | 0.445 | 0.377 | 0.434 | 0.529 | 0.725 | 0.940 |
| MHQ | 4.39 | 5.67 | 5.99 | 4.03 | 4.67 | 3.56 | 2.32 | 3.57 | 3.42 | 4.10 | 3.34 | 3.34 | 4.41 | 5.73 |
| HQ | 21.0 | 22.9 | 34.5 | 29.0 | 31.0 | 17.2 | 9.72 | 23.7 | 11.3 | 56.5 | 20.3 | 19.8 | 21.0 | 22.9 |
| Jahr | 1990 | 1986 | 1932 | 1946 | 1981 | 1994 | 1998 | 1981 | 1955 | 1967 | 2007 | 1935 | 1990 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 78 | 103 | 104 | 86 | 105 | 93 | 43 | 41 | 49 | 42 | 46 | 59 | 78 | 104 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.057 | am 03.10.2012 | 0.077 | 0.057 | 0.057 | am 03.10.2012 |
| MQ $m^3/s$ | 0.518 | | 0.813 | 0.225 | 0.541 | |
| HQ $m^3/s$ | 5.48 | am 17.07.2012 bei W= 52 cm | 5.45 | 5.48 | 8.05 | am 24.12.2012 bei W= 66 cm |
| Nq $l/(s km^2)$ | 2.36 | | 3.18 | 2.36 | 2.36 | |
| Mq $l/(s km^2)$ | 21.4 | | 33.6 | 9.30 | 22.4 | |
| Hq $l/(s km^2)$ | 226 | | 225 | 226 | 333 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 677 | | 528 | 148 | 707 | |
| | 1932/2012 (*) 81 Jahre | | | | 1932/2012 | |
| NQ $m^3/s$ | 0.012 | am 20.08.2003 | 0.020 | 0.012 | 0.012 | am 20.08.2003 |
| MNQ $m^3/s$ | 0.069 | | 0.112 | 0.074 | 0.068 | |
| MQ $m^3/s$ | 0.649 | | 0.876 | 0.426 | 0.650 | |
| MHQ $m^3/s$ | 13.1 | | 11.1 | 8.43 | 13.4 | |
| HQ $m^3/s$ | 56.5 | am 01.08.1967 bei W= 175 cm | 34.5 | 56.5 | 56.5 | am 01.08.1967 bei W= 175 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.85 | | 4.63 | 3.06 | 2.81 | |
| Mq $l/(s km^2)$ | 26.8 | | 36.2 | 17.6 | 26.9 | |
| MHq $l/(s km^2)$ | 541 | | 459 | 348 | 554 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 848 | | 569 | 280 | 849 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.012 | 0.496 | 20.08.2003 | 56.5 | 2330 | 175 | 01.08.1967 |
| 2 | 0.020 | 0.826 | 22.01.1945 | 34.5 | 1430 | 155 | 04.01.1932 |
| 3 | 0.020 | 0.826 | 15.10.1943 | 31.0 | 1280 | 125 | 12.03.1981 |
| 4 | 0.020 | 0.826 | 01.08.1943 | 29.0 | 1200 | 155 | 08.02.1946 |
| 5 | 0.020 | 0.826 | 31.07.1943 | 23.7 | 980 | 109 | 04.06.1981 |
| 6 | 0.020 | 0.826 | 01.07.1940 | 22.9 | 948 | 105 | 29.06.1966 |
| 7 | 0.020 | 0.826 | 08.06.1940 | 22.9 | 947 | 114 | 29.12.1986 |
| 8 | 0.020 | 0.826 | 01.07.1936 | 21.0 | 869 | 100 | 19.12.1965 |
| 9 | 0.020 | 0.826 | 29.06.1936 | 21.0 | 868 | 113 | 17.11.1990 |
| 10 | 0.020 | 0.826 | 11.03.1932 | 20.5 | 847 | 93 | 27.12.1954 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1932/2012 81 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.58 | 6.79 | | | |
| 364 | 3.83 | 6.79 | 19.6 | 7.07 | 2.57 |
| 363 | 3.81 | 6.79 | 16.3 | 5.76 | 1.92 |
| 362 | 3.68 | 4.44 | 11.8 | 4.98 | 1.42 |
| 361 | 3.28 | 3.27 | 10.8 | 4.44 | 1.42 |
| 360 | 3.28 | 3.27 | 8.39 | 4.01 | 1.42 |
| 359 | 3.28 | 3.27 | 7.39 | 3.78 | 1.30 |
| 358 | 3.02 | 3.05 | 7.28 | 3.53 | 1.30 |
| 357 | 2.98 | 3.02 | 6.59 | 3.34 | 1.20 |
| 356 | 2.84 | 2.98 | 6.20 | 3.17 | 1.20 |
| 350 | 2.45 | 2.45 | 5.08 | 2.46 | 0.920 |
| 340 | 2.09 | 2.08 | 3.52 | 1.87 | 0.740 |
| 330 | 1.55 | 1.80 | 2.76 | 1.53 | 0.660 |
| 320 | 1.29 | 1.41 | 2.28 | 1.31 | 0.500 |
| 300 | 0.894 | 0.894 | 1.70 | 1.01 | 0.360 |
| 270 | 0.462 | 0.430 | 1.44 | 0.711 | 0.250 |
| 240 | 0.293 | 0.288 | 1.12 | 0.542 | 0.200 |
| 210 | 0.220 | 0.226 | 0.909 | 0.406 | 0.150 |
| 183 | 0.185 | 0.198 | 0.763 | 0.326 | 0.120 |
| 150 | 0.164 | 0.173 | 0.608 | 0.251 | 0.090 |
| 130 | 0.140 | 0.161 | 0.541 | 0.219 | 0.090 |
| 120 | 0.128 | 0.155 | 0.505 | 0.201 | 0.090 |
| 110 | 0.121 | 0.145 | 0.465 | 0.186 | 0.090 |
| 100 | 0.114 | 0.136 | 0.415 | 0.181 | 0.070 |
| 90 | 0.108 | 0.125 | 0.390 | 0.161 | 0.070 |
| 80 | 0.104 | 0.118 | 0.353 | 0.149 | 0.070 |
| 70 | 0.099 | 0.108 | 0.328 | 0.135 | 0.062 |
| 60 | 0.094 | 0.100 | 0.297 | 0.122 | 0.055 |
| 50 | 0.087 | 0.097 | 0.295 | 0.113 | 0.052 |
| 40 | 0.083 | 0.085 | 0.270 | 0.101 | 0.045 |
| 30 | 0.080 | 0.081 | 0.270 | 0.091 | 0.043 |
| 25 | 0.078 | 0.079 | 0.247 | 0.081 | 0.041 |
| 20 | 0.077 | 0.077 | 0.224 | 0.079 | 0.039 |
| 15 | 0.074 | 0.074 | 0.224 | 0.071 | 0.035 |
| 10 | 0.070 | 0.070 | 0.203 | 0.061 | 0.030 |
| 9 | 0.070 | 0.070 | 0.203 | 0.059 | 0.030 |
| 8 | 0.070 | 0.070 | 0.203 | 0.054 | 0.030 |
| 7 | 0.068 | 0.068 | 0.203 | 0.051 | 0.029 |
| 6 | 0.067 | 0.067 | 0.203 | 0.051 | 0.028 |
| 5 | 0.067 | 0.067 | 0.203 | 0.047 | 0.020 |
| 4 | 0.067 | 0.067 | 0.203 | 0.041 | 0.020 |
| 3 | 0.063 | 0.063 | 0.203 | 0.041 | 0.020 |
| 2 | 0.062 | 0.062 | 0.203 | 0.041 | 0.015 |
| 1 | 0.058 | 0.058 | 0.203 | 0.031 | 0.013 |
| 0 | 0.057 | 0.057 | 0.163 | 0.012 | 0.012 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Oberharz

Zulauf Sösetalsperre

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 149 $km^2$

PNP : NN + 127.83 m

Lage: 12.1 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Oldendorf Nr. 4884110

Gewässer : Ilme

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.643 | 0.522 | 5.60 | 2.98 | 1.41 | 1.04 | 0.912 | 0.843 | 0.681 | 1.04 | 0.774 | 0.506 | 0.491 | 0.474 |
| 2. | 0.638 | 0.552 | 6.23 | 2.64 | 1.37 | 1.01 | 0.885 | 0.654 | 0.664 | 1.03 | 0.762 | 0.494 | 0.502 | 0.486 |
| 3. | 0.618 | 0.695 | 6.01 | 2.28 | 1.41 | 1.03 | 0.970 | 0.733 | 0.646 | 0.949 | 0.749 | 0.493 | 0.517 | 0.496 |
| 4. | 0.620 | 0.677 | 6.32 | 2.08 | 1.47 | 1.04 | 0.900 | 0.803 | 0.624 | 0.970 | 0.762 | 0.826 | 0.512 | 0.538 |
| 5. | 0.609 | 0.690 | 15.8 | 1.91 | 1.51 | 0.998 | 1.01 | 1.01 | 0.633 | 0.930 | 0.780 | 0.661 | 0.528 | 0.572 |
| 6. | 0.599 | 0.815 | 13.6 | 1.76 | 1.46 | 0.992 | 0.954 | 0.734 | 0.623 | 0.925 | 0.753 | 0.715 | 0.507 | 0.538 |
| 7. | 0.592 | 1.18 | 11.2 | 1.68 | 1.46 | 1.01 | 0.920 | 0.694 | 0.733 | 0.883 | 0.719 | 0.586 | 0.544 | 0.543 |
| 8. | 0.585 | 1.86 | 14.9 | 1.60 | 1.69 | 0.989 | 0.896 | 0.671 | 0.693 | 0.881 | 0.725 | 0.547 | 0.520 | 0.530 |
| 9. | 0.584 | 1.97 | 12.2 | 1.55 | 1.59 | 1.00 | 0.882 | 0.652 | 0.696 | 0.838 | 0.706 | 0.519 | 0.506 | 0.507 |
| 10. | 0.567 | 1.54 | 9.76 | 1.49 | 1.56 | 1.02 | 0.869 | 0.649 | 0.673 | 0.843 | 0.714 | 0.513 | 0.499 | 0.740 |
| 11. | 0.546 | 1.30 | 7.68 | 1.46 | 1.56 | 1.01 | 0.830 | 0.648 | 0.808 | 0.807 | 0.771 | 0.491 | 0.515 | 0.594 |
| 12. | 0.551 | 1.41 | 6.84 | 1.41 | 1.55 | 1.02 | 0.820 | 0.648 | 0.861 | 0.808 | 0.748 | 0.506 | 0.495 | 0.565 |
| 13. | 0.540 | 2.03 | 6.42 | 1.40 | 1.54 | 1.29 | 0.805 | 0.623 | 0.895 | 0.783 | 0.739 | 0.491 | 0.488 | 0.565 |
| 14. | 0.542 | 2.40 | 5.56 | 1.44 | 1.50 | 1.25 | 0.819 | 0.609 | 1.40 | 0.768 | 0.704 | 0.482 | 0.492 | 0.568 |
| 15. | 0.534 | 2.05 | 4.89 | 1.78 | 1.49 | 1.03 | 0.848 | 0.616 | 1.79 | 0.760 | 0.710 | 0.651 | 0.481 | 1.33 |
| 16. | 0.531 | 3.88 | 4.34 | 1.54 | 1.51 | 0.931 | 0.885 | 0.628 | 1.53 | 0.876 | 0.705 | 0.534 | 0.481 | 1.66 |
| 17. | 0.524 | 4.87 | 3.84 | 1.65 | 1.50 | 0.937 | 0.835 | 0.568 | 3.18 | 0.771 | 0.713 | 0.508 | 0.485 | 1.71 |
| 18. | 0.528 | 3.76 | 3.48 | 1.57 | 1.49 | 0.954 | 0.816 | 0.557 | 2.64 | 0.750 | 0.758 | 0.493 | 0.482 | 1.62 |
| 19. | 0.513 | 3.11 | 4.28 | 1.81 | 1.46 | 0.980 | 0.835 | 0.569 | 2.67 | 0.736 | 0.685 | 0.484 | 0.477 | 1.44 |
| 20. | 0.511 | 2.74 | 4.48 | 1.54 | 1.39 | 0.976 | 0.828 | 0.692 | 2.37 | 0.738 | 0.601 | 0.478 | 0.463 | 1.30 |
| 21. | 0.506 | 3.74 | 4.72 | 1.38 | 1.34 | 1.08 | 0.831 | 0.664 | 2.01 | 0.751 | 0.571 | 0.481 | 0.460 | 1.23 |
| 22. | 0.488 | 3.68 | 6.86 | 1.31 | 1.28 | 1.04 | 0.709 | 0.618 | 1.83 | 0.723 | 0.572 | 0.487 | 0.443 | 1.25 |
| 23. | 0.479 | 4.06 | 9.33 | 1.41 | 1.29 | 1.03 | 0.646 | 0.594 | 1.62 | 0.730 | 0.556 | 0.489 | 0.441 | 5.51 |
| 24. | 0.478 | 4.84 | 8.20 | 1.40 | 1.17 | 1.03 | 0.613 | 0.623 | 1.56 | 0.773 | 0.612 | 0.469 | 0.473 | 7.01 |
| 25. | 0.477 | 4.74 | 6.99 | 1.58 | 1.14 | 1.01 | 0.591 | 0.687 | 1.52 | 0.894 | 0.571 | 0.485 | 0.456 | 5.71 |
| 26. | 0.479 | 4.37 | 6.05 | 1.48 | 1.11 | 1.00 | 0.610 | 0.592 | 1.37 | 0.839 | 0.548 | 0.511 | 0.453 | 4.88 |
| 27. | 0.490 | 3.91 | 5.31 | 1.36 | 1.11 | 1.01 | 0.601 | 0.601 | 1.35 | 0.892 | 0.539 | 0.486 | 0.486 | 5.12 |
| 28. | 0.494 | 3.56 | 4.76 | 1.38 | 1.08 | 0.937 | 0.593 | 0.611 | 1.36 | 0.820 | 0.536 | 0.500 | 0.456 | 4.37 |
| 29. | 0.498 | 3.36 | 4.30 | 1.40 | 1.03 | 0.934 | 0.601 | 0.948 | 1.20 | 0.805 | 0.522 | 0.490 | 0.462 | 3.85 |
| 30. | 0.507 | 6.89 | 3.92 | | 1.12 | 0.923 | 0.621 | 0.755 | 1.13 | 0.783 | 0.516 | 0.540 | 0.482 | 3.50 |
| 31. | | 5.96 | 3.44 | | 1.13 | | 0.922 | | 1.06 | 0.798 | | 0.501 | | 3.11 |
| Tag | 25. | 1. | 31. | 22. | 29. | 30. | 25. | 18. | 6. | 22. | 30. | 24. | 23. | 1. |
| NQ | 0.477 | 0.522 | 3.44 | 1.31 | 1.03 | 0.923 | 0.591 | 0.557 | 0.623 | 0.723 | 0.516 | 0.469 | 0.441 | 0.474 |
| MQ | 0.542 | 2.81 | 7.01 | 1.66 | 1.38 | 1.02 | 0.802 | 0.676 | 1.32 | 0.835 | 0.671 | 0.530 | 0.487 | 2.01 |
| HQ | 0.907 | 8.41 | 22.8 | 3.28 | 2.49 | 2.17 | 2.89 | 2.85 | 3.99 | 1.56 | 1.57 | 2.50 | 0.849 | 9.41 |
| Tag | 9. | 30. | 5. | 1. | 3. | 14. | 31. | 29. | 17. | 1. | 6. | 4. | 7. | 23. |
| $h_N$ mm / $h_A$ mm | 9 | 51 | 126 | 28 | 25 | 18 | 14 | 12 | 24 | 15 | 12 | 10 | 8 | 36 |

## Hauptwerte

| | 1961/2011 | | 1962/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1965 | 1997 | 1977 | 1972 | 1972 | 1974 | 2011 | 2011 | 2011 | 1991 | 1973 | 1973 | 1965 | 1997 |
| NQ | 0.290 | 0.424 | 0.500 | 0.410 | 0.460 | 0.730 | 0.555 | 0.374 | 0.350 | 0.400 | 0.300 | 0.260 | 0.290 | 0.424 |
| MNQ | 0.879 | 1.26 | 1.51 | 1.67 | 1.66 | 1.74 | 1.13 | 0.932 | 0.780 | 0.711 | 0.663 | 0.733 | 0.854 | 1.21 |
| MQ | 1.78 | 3.05 | 3.62 | 3.15 | 3.48 | 2.75 | 1.64 | 1.33 | 1.19 | 0.963 | 0.974 | 1.20 | 1.73 | 2.94 |
| MHQ | 5.91 | 10.6 | 12.5 | 9.53 | 10.2 | 5.68 | 4.03 | 4.33 | 4.19 | 3.23 | 3.45 | 3.94 | 5.80 | 10.3 |
| HQ | 30.9 | 36.9 | 33.6 | 21.5 | 27.6 | 22.0 | 12.8 | 19.1 | 27.0 | 11.5 | 29.5 | 35.4 | 30.9 | 36.9 |
| Jahr | 1998 | 1965 | 1987 | 1970 | 1981 | 1994 | 2002 | 1986 | 1965 | 2002 | 2007 | 1998 | 1998 | 1965 |
| $Mh_N$ mm / $Mh_A$ mm | 31 | 55 | 65 | 53 | 63 | 48 | 29 | 23 | 21 | 17 | 17 | 22 | 30 | 53 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.469 | am 24.10.2012 | 0.477 | 0.469 | 0.441 | am 23.11.2012 |
| MQ $m^3/s$ | 1.61 | | 2.43 | 0.807 | 1.54 | |
| HQ $m^3/s$ | 22.8 | am 05.01.2012 bei W= 229 cm | 22.8 | 3.99 | 22.8 | am 05.01.2012 bei W= 229 cm |
| Nq $l/(s km^2)$ | 3.15 | | 3.20 | 3.15 | 2.96 | |
| Mq $l/(s km^2)$ | 10.8 | | 16.3 | 5.42 | 10.3 | |
| Hq $l/(s km^2)$ | 153 | | 153 | 26.8 | 153 | |
| $h_N$ mm / $h_A$ mm | 342 | | 256 | 86 | 327 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| NQ $m^3/s$ | 0.260 | am 01.10.1973 | 0.290 | 0.260 | 0.260 | am 01.10.1973 |
| MNQ $m^3/s$ | 0.519 | | 0.754 | 0.588 | 0.553 | |
| MQ $m^3/s$ | 2.09 | | 2.98 | 1.22 | 2.08 | |
| MHQ $m^3/s$ | 19.5 | | 18.6 | 8.32 | 19.4 | |
| HQ $m^3/s$ | 36.9 | am 19.12.1965 bei W= 251 cm | 36.9 | 35.4 | 36.9 | am 19.12.1965 bei W= 251 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.48 | | 5.06 | 3.95 | 3.71 | |
| Mq $l/(s km^2)$ | 14.0 | | 20.0 | 8.19 | 14.0 | |
| MHq $l/(s km^2)$ | 131 | | 125 | 55.8 | 130 | |
| $Mh_N$ mm / $Mh_A$ mm | 444 | | 314 | 130 | 441 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.260 | 1.74 | 01.10.1973 | 36.9 | 248 | 251 | 19.12.1965 |
| 2 | 0.290 | 1.95 | 16.11.1965 | 36.5 | 245 | 259 | 31.12.1986 |
| 3 | 0.330 | 2.21 | 30.10.1964 | 35.4 | 238 | 302 | 28.10.1998 |
| 4 | 0.339 | 2.28 | 14.11.2005 | 30.9 | 207 | 278 | 01.11.1998 |
| 5 | 0.350 | 2.35 | 12.07.2011 | 29.5 | 198 | 267 | 29.09.2007 |
| 6 | 0.358 | 2.40 | 20.09.1996 | 29.0 | 195 | 267 | 19.12.1988 |
| 7 | 0.379 | 2.54 | 28.09.2009 | 27.6 | 185 | 232 | 12.03.1981 |
| 8 | 0.400 | 2.68 | 29.08.1991 | 27.0 | 181 | 231 | 16.07.1965 |
| 9 | 0.410 | 2.75 | 23.02.1972 | 26.4 | 177 | 226 | 06.01.1982 |
| 10 | 0.424 | 2.85 | 06.12.1997 | 25.8 | 173 | 239 | 20.01.1986 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1962/2012 51 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 15.8 | 15.8 | | | |
| 364 | 14.9 | 14.9 | 32.9 | 16.7 | 4.14 |
| 363 | 13.6 | 13.6 | 30.2 | 14.2 | 3.95 |
| 362 | 12.2 | 12.2 | 23.4 | 12.5 | 3.71 |
| 361 | 11.2 | 11.2 | 22.8 | 11.3 | 3.70 |
| 360 | 9.76 | 9.76 | 22.8 | 10.5 | 3.56 |
| 359 | 9.33 | 9.33 | 20.0 | 9.75 | 3.35 |
| 358 | 8.20 | 8.20 | 17.2 | 9.15 | 3.20 |
| 357 | 7.68 | 7.68 | 17.2 | 8.61 | 3.02 |
| 356 | 6.99 | 7.01 | 16.1 | 8.24 | 3.01 |
| 350 | 6.23 | 6.23 | 12.6 | 6.55 | 2.91 |
| 340 | 4.76 | 4.88 | 10.3 | 5.21 | 2.66 |
| 330 | 3.91 | 3.84 | 8.41 | 4.42 | 2.40 |
| 320 | 3.18 | 2.37 | 7.42 | 3.85 | 2.09 |
| 300 | 1.78 | 1.57 | 5.88 | 3.07 | 1.57 |
| 270 | 1.47 | 1.41 | 4.08 | 2.37 | 1.08 |
| 240 | 1.18 | 1.11 | 3.52 | 1.87 | 0.916 |
| 210 | 1.01 | 0.976 | 3.08 | 1.56 | 0.838 |
| 183 | 0.892 | 0.861 | 2.75 | 1.35 | 0.670 |
| 150 | 0.798 | 0.760 | 2.45 | 1.11 | 0.579 |
| 130 | 0.734 | 0.714 | 2.21 | 0.991 | 0.549 |
| 120 | 0.710 | 0.692 | 2.10 | 0.938 | 0.540 |
| 110 | 0.690 | 0.652 | 2.04 | 0.892 | 0.540 |
| 100 | 0.654 | 0.624 | 1.93 | 0.848 | 0.538 |
| 90 | 0.633 | 0.609 | 1.84 | 0.809 | 0.528 |
| 80 | 0.616 | 0.586 | 1.80 | 0.771 | 0.506 |
| 70 | 0.609 | 0.557 | 1.76 | 0.735 | 0.498 |
| 60 | 0.572 | 0.536 | 1.68 | 0.701 | 0.488 |
| 50 | 0.548 | 0.513 | 1.63 | 0.665 | 0.468 |
| 40 | 0.531 | 0.501 | 1.54 | 0.631 | 0.443 |
| 30 | 0.513 | 0.492 | 1.46 | 0.598 | 0.428 |
| 25 | 0.507 | 0.487 | 1.44 | 0.580 | 0.415 |
| 20 | 0.498 | 0.486 | 1.41 | 0.559 | 0.403 |
| 15 | 0.491 | 0.482 | 1.37 | 0.535 | 0.390 |
| 10 | 0.486 | 0.474 | 1.34 | 0.506 | 0.360 |
| 9 | 0.485 | 0.473 | 1.34 | 0.500 | 0.350 |
| 8 | 0.484 | 0.469 | 1.34 | 0.494 | 0.350 |
| 7 | 0.482 | 0.463 | 1.32 | 0.490 | 0.350 |
| 6 | 0.481 | 0.462 | 1.31 | 0.483 | 0.350 |
| 5 | 0.481 | 0.460 | 1.29 | 0.476 | 0.320 |
| 4 | 0.481 | 0.460 | 1.26 | 0.464 | 0.310 |
| 3 | 0.479 | 0.460 | 1.22 | 0.454 | 0.310 |
| 2 | 0.479 | 0.453 | 1.16 | 0.428 | 0.310 |
| 1 | 0.477 | 0.443 | 1.16 | 0.385 | 0.300 |
| 0 | 0.469 | 0.441 | 1.15 | 0.260 | 0.260 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Solling

NLWKN

$A_{Eo}$ : 95.4 $km^2$

PNP : NN + 116.14 m

Lage: 7.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Gandersheim Nr. 4885116

Gewässer : Gande

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.140 | 0.206 | 0.897 | 0.552 | 0.625 | 0.334 | 0.275 | 0.286 | 0.293 | 0.172 | 0.172 | 0.161 | 0.183 | 0.190 |
| 2. | 0.166 | 0.240 | 1.23 | 0.603 | 0.584 | 0.344 | 0.281 | 0.210 | 0.191 | 0.168 | 0.139 | 0.163 | 0.194 | 0.198 |
| 3. | 0.168 | 0.239 | 1.13 | 0.463 | 0.552 | 0.337 | 0.435 | 0.281 | 0.170 | 0.167 | 0.135 | 0.171 | 0.217 | 0.196 |
| 4. | 0.167 | 0.240 | 0.994 | 0.451 | 0.512 | 0.358 | 0.280 | 0.414 | 0.157 | 0.168 | 0.132 | 0.494 | 0.222 | 0.247 |
| 5. | 0.170 | 0.276 | 3.36 | 0.430 | 0.465 | 0.333 | 0.335 | 0.545 | 0.165 | 0.165 | 0.131 | 0.294 | 0.208 | 0.291 |
| 6. | 0.169 | 0.373 | 2.63 | 0.570 | 0.421 | 0.333 | 0.322 | 0.265 | 0.173 | 0.194 | 0.127 | 0.387 | 0.191 | 0.231 |
| 7. | 0.171 | 0.405 | 1.92 | 0.862 | 0.424 | 0.335 | 0.290 | 0.243 | 0.247 | 0.160 | 0.125 | 0.264 | 0.247 | 0.214 |
| 8. | 0.169 | 0.393 | 2.06 | 0.397 | 0.591 | 0.325 | 0.273 | 0.222 | 0.215 | 0.158 | 0.124 | 0.217 | 0.203 | 0.194 |
| 9. | 0.169 | 0.469 | 1.78 | 0.380 | 0.474 | 0.341 | 0.269 | 0.203 | 0.195 | 0.159 | 0.123 | 0.216 | 0.198 | 0.194 |
| 10. | 0.169 | 0.346 | 1.79 | 0.371 | 0.470 | 0.356 | 0.263 | 0.200 | 0.159 | 0.158 | 0.119 | 0.206 | 0.206 | 0.310 |
| 11. | 0.169 | 0.304 | 1.34 | 0.368 | 0.451 | 0.347 | 0.256 | 0.198 | 0.252 | 0.158 | 0.219 | 0.207 | 0.198 | 0.234 |
| 12. | 0.170 | 0.328 | 1.19 | 0.351 | 0.423 | 0.359 | 0.244 | 0.207 | 0.229 | 0.157 | 0.150 | 0.244 | 0.174 | 0.222 |
| 13. | 0.170 | 0.404 | 1.12 | 0.363 | 0.418 | 0.555 | 0.243 | 0.203 | 0.262 | 0.155 | 0.126 | 0.226 | 0.171 | 0.216 |
| 14. | 0.171 | 0.435 | 0.950 | 0.362 | 0.399 | 0.378 | 0.244 | 0.194 | 0.428 | 0.154 | 0.126 | 0.229 | 0.170 | 0.239 |
| 15. | 0.171 | 0.404 | 0.836 | 0.421 | 0.403 | 0.355 | 0.274 | 0.192 | 0.335 | 0.153 | 0.121 | 0.340 | 0.167 | 1.01 |
| 16. | 0.171 | 1.22 | 0.758 | 0.351 | 0.401 | 0.342 | 0.283 | 0.218 | 0.307 | 0.210 | 0.116 | 0.251 | 0.166 | 1.07 |
| 17. | 0.171 | 1.34 | 0.661 | 0.404 | 0.400 | 0.336 | 0.241 | 0.199 | 0.663 | 0.158 | 0.114 | 0.234 | 0.165 | 0.876 |
| 18. | 0.173 | 0.713 | 0.593 | 0.379 | 0.394 | 0.335 | 0.242 | 0.168 | 0.387 | 0.153 | 0.119 | 0.218 | 0.169 | 0.715 |
| 19. | 0.173 | 0.508 | 1.05 | 0.469 | 0.371 | 0.335 | 0.241 | 0.161 | 0.344 | 0.150 | 0.124 | 0.215 | 0.166 | 0.540 |
| 20. | 0.172 | 0.476 | 1.69 | 0.374 | 0.356 | 0.330 | 0.231 | 0.241 | 0.281 | 0.150 | 0.128 | 0.210 | 0.163 | 0.427 |
| 21. | 0.172 | 0.584 | 1.85 | 0.372 | 0.359 | 0.333 | 0.221 | 0.198 | 0.234 | 0.164 | 0.129 | 0.208 | 0.162 | 0.389 |
| 22. | 0.175 | 0.736 | 2.71 | 0.375 | 0.357 | 0.343 | 0.212 | 0.171 | 0.211 | 0.151 | 0.133 | 0.207 | 0.163 | 0.438 |
| 23. | 0.176 | 0.829 | 3.01 | 0.438 | 0.391 | 0.337 | 0.206 | 0.159 | 0.205 | 0.140 | 0.137 | 0.207 | 0.167 | 2.29 |
| 24. | 0.179 | 0.817 | 2.16 | 0.519 | 0.369 | 0.338 | 0.198 | 0.180 | 0.204 | 0.152 | 0.149 | 0.207 | 0.201 | 1.86 |
| 25. | 0.179 | 0.739 | 1.97 | 0.615 | 0.345 | 0.321 | 0.197 | 0.188 | 0.192 | 0.228 | 0.159 | 0.205 | 0.186 | 1.12 |
| 26. | 0.184 | 0.641 | 1.43 | 0.533 | 0.326 | 0.304 | 0.195 | 0.162 | 0.187 | 0.173 | 0.147 | 0.247 | 0.181 | 0.819 |
| 27. | 0.189 | 0.566 | 1.09 | 0.486 | 0.314 | 0.301 | 0.193 | 0.159 | 0.188 | 0.189 | 0.156 | 0.226 | 0.189 | 0.861 |
| 28. | 0.188 | 0.514 | 0.935 | 0.557 | 0.334 | 0.289 | 0.191 | 0.158 | 0.333 | 0.142 | 0.154 | 0.199 | 0.184 | 0.742 |
| 29. | 0.192 | 0.514 | 0.847 | 0.603 | 0.338 | 0.285 | 0.191 | 0.206 | 0.202 | 0.139 | 0.155 | 0.188 | 0.198 | 0.645 |
| 30. | 0.194 | 1.50 | 0.751 | | 0.356 | 0.276 | 0.187 | 0.174 | 0.188 | 0.148 | 0.158 | 0.197 | 0.199 | 0.573 |
| 31. | | 1.11 | 0.648 | | 0.346 | | 0.321 | | 0.178 | 0.215 | | 0.183 | | 0.511 |
| Tag | 1. | 1. | 18. | 12.+ | 27. | 30. | 30. | 28. | 4. | 29. | 17. | 1. | 21. | 1. |
| NQ | 0.140 | 0.206 | 0.593 | 0.351 | 0.314 | 0.276 | 0.187 | 0.158 | 0.157 | 0.139 | 0.114 | 0.161 | 0.162 | 0.190 |
| MQ | 0.173 | 0.576 | 1.46 | 0.463 | 0.418 | 0.340 | 0.253 | 0.220 | 0.251 | 0.165 | 0.138 | 0.233 | 0.187 | 0.583 |
| HQ | 0.199 | 2.07 | 6.93 | 1.77 | 1.25 | 0.982 | 1.15 | 1.33 | 2.45 | 0.960 | 1.52 | 2.07 | 0.392 | 3.50 |
| Tag | 30. | 16. | 5. | 7. | 15. | 13. | 3. | 5. | 28. | 26. | 11. | 4. | 4. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 16 | 41 | 12 | 12 | 9 | 7 | 6 | 7 | 5 | 4 | 7 | 5 | 16 |
| | 1960/2011 | | 1961/2012 52 Jahre | | | | | | | | | | | |
| Jahr | 1977 | 1964 | 1964 | 1972 | 1976 | 1972 | 1996+ | 1996 | 1976 | 1973 | 1973 | 1977 | 1977 | 1964 |
| NQ | 0.020 | 0.080 | 0.040 | 0.110 | 0.160 | 0.180 | 0.187 | 0.127 | 0.090 | 0.050 | 0.050 | 0.010 | 0.020 | 0.080 |
| MNQ | 0.301 | 0.450 | 0.565 | 0.606 | 0.643 | 0.654 | 0.476 | 0.356 | 0.304 | 0.272 | 0.251 | 0.256 | 0.293 | 0.433 |
| MQ | 0.638 | 1.08 | 1.31 | 1.27 | 1.33 | 1.03 | 0.748 | 0.569 | 0.452 | 0.433 | 0.402 | 0.443 | 0.624 | 1.05 |
| MHQ | 4.18 | 6.75 | 7.58 | 5.79 | 6.39 | 3.46 | 5.03 | 4.55 | 3.38 | 3.31 | 2.50 | 2.82 | 4.08 | 6.44 |
| HQ | 34.5 | 35.0 | 37.2 | 21.7 | 21.7 | 24.4 | 21.2 | 24.6 | 27.7 | 19.7 | 27.3 | 41.8 | 34.5 | 35.0 |
| Jahr | 1998 | 1988 | 1968 | 1970 | 1994 | 1994 | 1997 | 1981 | 1965 | 2007 | 2007 | 1998 | 1998 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 17 | 30 | 37 | 33 | 37 | 28 | 21 | 15 | 13 | 12 | 11 | 12 | 17 | 29 |

## Hauptwerte

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.114 | am 17.09.2012 | 0.140 | 0.114 | 0.114 | am 17.09.2012 |
| MQ $m^3/s$ | 0.393 | | 0.577 | 0.210 | 0.394 | |
| HQ $m^3/s$ | 6.93 | am 05.01.2012 bei W= 140 cm | 6.93 | 2.45 | 6.93 | am 05.01.2012 bei W= 140 cm |
| Nq $l/(s km^2)$ | 1.19 | | 1.47 | 1.19 | 1.19 | |
| Mq $l/(s km^2)$ | 4.12 | | 6.05 | 2.20 | 4.13 | |
| Hq $l/(s km^2)$ | 72.6 | | 72.6 | 25.7 | 72.6 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 130 | | 95 | 35 | 131 | |
| | 1961/2012 (*) 52 Jahre | | | | 1961/2012 | |
| NQ $m^3/s$ | 0.010 | am 24.10.1977 | 0.020 | 0.010 | 0.010 | am 24.10.1977 |
| MNQ $m^3/s$ | 0.165 | | 0.259 | 0.204 | 0.181 | |
| MQ $m^3/s$ | 0.807 | | 1.11 | 0.508 | 0.803 | |
| MHQ $m^3/s$ | 15.6 | | 13.0 | 8.80 | 15.5 | |
| HQ $m^3/s$ | 41.8 | am 28.10.1998 bei W= 333 cm | 37.2 | 41.8 | 41.8 | am 28.10.1998 bei W= 333 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.73 | | 2.71 | 2.14 | 1.90 | |
| Mq $l/(s km^2)$ | 8.46 | | 11.6 | 5.32 | 8.42 | |
| MHq $l/(s km^2)$ | 164 | | 136 | 92.2 | 162 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 267 | | 183 | 85 | 266 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.010 | 0.105 | 24.10.1977 | 41.8 | 438 | 333 | 28.10.1998 |
| 2 | 0.040 | 0.419 | 18.01.1964 | 37.2 | 390 | 310 | 15.01.1968 |
| 3 | 0.050 | 0.524 | 22.08.1973 | 35.0 | 367 | 314 | 19.12.1988 |
| 4 | 0.050 | 0.524 | 01.11.1971 | 34.5 | 362 | 311 | 01.11.1998 |
| 5 | 0.070 | 0.734 | 19.11.1976 | 27.7 | 290 | 266 | 15.07.1965 |
| 6 | 0.080 | 0.839 | 29.12.1964 | 27.3 | 286 | 285 | 29.09.2007 |
| 7 | 0.098 | 1.03 | 09.08.1996 | 24.6 | 258 | 295 | 04.06.1981 |
| 8 | 0.100 | 1.05 | 20.08.1974 | 24.4 | 256 | 285 | 13.04.1994 |
| 9 | 0.106 | 1.11 | 27.09.2003 | 22.0 | 231 | 278 | 30.12.1993 |
| 10 | 0.108 | 1.13 | 12.10.1991 | 21.7 | 227 | 273 | 19.03.1994 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1961/2012 52 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 3.36 | 3.36 | | | |
| 364 | 3.01 | 3.01 | 15.7 | 7.50 | 2.13 |
| 363 | 2.71 | 2.71 | 14.5 | 5.76 | 1.77 |
| 362 | 2.63 | 2.63 | 12.5 | 4.85 | 1.65 |
| 361 | 2.16 | 2.29 | 10.7 | 4.28 | 1.57 |
| 360 | 2.06 | 2.16 | 9.80 | 3.96 | 1.52 |
| 359 | 1.97 | 2.06 | 9.75 | 3.63 | 1.34 |
| 358 | 1.92 | 1.97 | 9.71 | 3.37 | 1.29 |
| 357 | 1.85 | 1.92 | 8.89 | 3.22 | 1.27 |
| 356 | 1.79 | 1.86 | 7.94 | 3.11 | 1.24 |
| 350 | 1.43 | 1.34 | 5.18 | 2.49 | 1.04 |
| 340 | 0.950 | 0.994 | 3.93 | 1.97 | 0.829 |
| 330 | 0.739 | 0.758 | 2.85 | 1.66 | 0.719 |
| 320 | 0.615 | 0.615 | 2.59 | 1.46 | 0.599 |
| 300 | 0.476 | 0.470 | 2.22 | 1.17 | 0.470 |
| 270 | 0.393 | 0.379 | 1.79 | 0.891 | 0.348 |
| 240 | 0.345 | 0.340 | 1.43 | 0.731 | 0.292 |
| 210 | 0.314 | 0.290 | 1.24 | 0.613 | 0.255 |
| 183 | 0.252 | 0.247 | 1.16 | 0.531 | 0.237 |
| 150 | 0.216 | 0.212 | 1.04 | 0.447 | 0.200 |
| 130 | 0.204 | 0.204 | 1.02 | 0.394 | 0.180 |
| 120 | 0.197 | 0.199 | 0.990 | 0.371 | 0.180 |
| 110 | 0.192 | 0.195 | 0.960 | 0.353 | 0.170 |
| 100 | 0.188 | 0.192 | 0.930 | 0.331 | 0.160 |
| 90 | 0.174 | 0.188 | 0.890 | 0.311 | 0.160 |
| 80 | 0.172 | 0.174 | 0.840 | 0.291 | 0.151 |
| 70 | 0.170 | 0.169 | 0.790 | 0.271 | 0.141 |
| 60 | 0.166 | 0.166 | 0.700 | 0.254 | 0.135 |
| 50 | 0.160 | 0.160 | 0.620 | 0.237 | 0.130 |
| 40 | 0.158 | 0.159 | 0.590 | 0.219 | 0.127 |
| 30 | 0.151 | 0.152 | 0.570 | 0.201 | 0.110 |
| 25 | 0.148 | 0.149 | 0.570 | 0.191 | 0.100 |
| 20 | 0.140 | 0.140 | 0.570 | 0.181 | 0.060 |
| 15 | 0.132 | 0.132 | 0.534 | 0.170 | 0.040 |
| 10 | 0.127 | 0.127 | 0.530 | 0.151 | 0.040 |
| 9 | 0.127 | 0.127 | 0.530 | 0.151 | 0.030 |
| 8 | 0.125 | 0.125 | 0.520 | 0.145 | 0.030 |
| 7 | 0.125 | 0.125 | 0.520 | 0.141 | 0.030 |
| 6 | 0.125 | 0.125 | 0.510 | 0.136 | 0.020 |
| 5 | 0.123 | 0.123 | 0.510 | 0.131 | 0.020 |
| 4 | 0.121 | 0.121 | 0.460 | 0.125 | 0.020 |
| 3 | 0.121 | 0.121 | 0.460 | 0.121 | 0.020 |
| 2 | 0.121 | 0.121 | 0.441 | 0.108 | 0.020 |
| 1 | 0.116 | 0.116 | 0.431 | 0.090 | 0.020 |
| 0 | 0.114 | 0.114 | 0.406 | 0.010 | 0.010 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Harzvorland

NLWKN

$A_{Eo}$ : 136 $km^2$

PNP : NN + 81.58 m

Lage: 6.3 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Mehle

Gewässer : Saale

Gebiet : Leine

Nr. 4885150

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.220 | 0.144 | 1.35 | 1.88 | 3.08 | 0.538 | 0.321 | 0.351 | 0.275 | 0.292 | 0.093 | 0.152 | 0.159 | 0.311 |
| 2. | 0.204 | 0.180 | 2.05 | 1.99 | 2.60 | 0.492 | 0.313 | 0.254 | 0.277 | 0.253 | 0.099 | 0.150 | 0.163 | 0.325 |
| 3. | 0.215 | 0.227 | 1.74 | 1.81 | 2.24 | 0.495 | 0.361 | 0.285 | 0.282 | 0.248 | 0.108 | 0.157 | 0.185 | 0.348 |
| 4. | 0.224 | 0.199 | 1.57 | 1.66 | 1.96 | 0.528 | 0.296 | 0.330 | 0.263 | 0.239 | 0.100 | 0.310 | 0.167 | 0.417 |
| 5. | 0.182 | 0.306 | 9.45 | 1.75 | 1.76 | 0.487 | 0.321 | 0.594 | 0.258 | 0.276 | 0.121 | 0.221 | 0.162 | 0.462 |
| 6. | 0.215 | 0.239 | 4.14 | 1.94 | 1.49 | 0.468 | 0.324 | 0.385 | 0.254 | 0.280 | 0.124 | 0.238 | 0.160 | 0.408 |
| 7. | 0.206 | 0.390 | 2.84 | 1.89 | 1.38 | 0.490 | 0.313 | 0.326 | 0.267 | 0.275 | 0.122 | 0.214 | 0.194 | 0.417 |
| 8. | 0.200 | 0.655 | 4.08 | 1.56 | 2.02 | 0.443 | 0.297 | 0.286 | 0.326 | 0.240 | 0.122 | 0.185 | 0.170 | 0.393 |
| 9. | 0.195 | 0.652 | 3.52 | 1.55 | 1.72 | 0.440 | 0.351 | 0.280 | 0.314 | 0.224 | 0.127 | 0.172 | 0.160 | 0.452 |
| 10. | 0.219 | 0.463 | 2.88 | 1.48 | 1.44 | 0.440 | 0.692 | 0.253 | 0.268 | 0.195 | 0.129 | 0.177 | 0.161 | 0.706 |
| 11. | 0.200 | 0.326 | 2.04 | 1.50 | 1.25 | 0.436 | 0.589 | 0.225 | 0.280 | 0.191 | 0.180 | 0.172 | 0.169 | 0.568 |
| 12. | 0.191 | 0.324 | 1.74 | 1.49 | 1.08 | 0.436 | 0.401 | 0.246 | 0.433 | 0.189 | 0.188 | 0.176 | 0.150 | 0.551 |
| 13. | 0.193 | 0.403 | 1.66 | 1.55 | 0.941 | 0.526 | 0.346 | 0.233 | 0.530 | 0.171 | 0.145 | 0.176 | 0.143 | 0.522 |
| 14. | 0.192 | 0.529 | 1.55 | 1.70 | 0.832 | 0.481 | 0.312 | 0.208 | 0.531 | 0.165 | 0.152 | 0.174 | 0.139 | 0.545 |
| 15. | 0.169 | 0.837 | 1.36 | 2.88 | 0.799 | 0.446 | 0.343 | 0.217 | 0.532 | 0.165 | 0.160 | 0.206 | 0.137 | 1.63 |
| 16. | 0.153 | 1.92 | 1.19 | 2.07 | 0.780 | 0.441 | 0.389 | 0.222 | 0.465 | 0.207 | 0.160 | 0.178 | 0.146 | 1.71 |
| 17. | 0.141 | 2.94 | 1.08 | 3.04 | 0.739 | 0.417 | 0.335 | 0.225 | 0.579 | 0.203 | 0.149 | 0.170 | 0.141 | 1.32 |
| 18. | 0.154 | 1.49 | 1.04 | 2.77 | 0.725 | 0.437 | 0.309 | 0.199 | 0.849 | 0.156 | 0.159 | 0.156 | 0.134 | 1.06 |
| 19. | 0.165 | 0.999 | 3.26 | 4.11 | 0.673 | 0.419 | 0.292 | 0.193 | 0.719 | 0.144 | 0.157 | 0.145 | 0.137 | 0.944 |
| 20. | 0.141 | 0.844 | 6.09 | 2.87 | 0.600 | 0.408 | 0.296 | 0.237 | 0.530 | 0.144 | 0.155 | 0.145 | 0.122 | 0.855 |
| 21. | 0.147 | 1.29 | 5.47 | 2.29 | 0.599 | 0.409 | 0.283 | 0.263 | 0.326 | 0.134 | 0.150 | 0.151 | 0.132 | 0.805 |
| 22. | 0.145 | 1.45 | 6.36 | 2.22 | 0.586 | 0.434 | 0.267 | 0.234 | 0.259 | 0.138 | 0.160 | 0.157 | 0.149 | 0.855 |
| 23. | 0.150 | 1.81 | 8.01 | 2.60 | 0.579 | 0.412 | 0.236 | 0.219 | 0.222 | 0.130 | 0.151 | 0.148 | 0.164 | 3.20 |
| 24. | 0.158 | 1.71 | 5.55 | 3.58 | 0.562 | 0.402 | 0.233 | 0.245 | 0.271 | 0.116 | 0.165 | 0.151 | 0.198 | 2.78 |
| 25. | 0.164 | 1.61 | 5.06 | 5.25 | 0.537 | 0.386 | 0.239 | 0.331 | 0.355 | 0.147 | 0.156 | 0.182 | 0.200 | 1.80 |
| 26. | 0.160 | 1.06 | 3.65 | 3.88 | 0.522 | 0.381 | 0.232 | 0.293 | 0.325 | 0.146 | 0.156 | 0.166 | 0.225 | 1.68 |
| 27. | 0.151 | 0.847 | 2.95 | 3.24 | 0.495 | 0.365 | 0.237 | 0.251 | 0.332 | 0.167 | 0.155 | 0.163 | 0.264 | 1.96 |
| 28. | 0.146 | 0.722 | 2.54 | 3.47 | 0.493 | 0.340 | 0.223 | 0.273 | 0.638 | 0.139 | 0.153 | 0.162 | 0.270 | 1.79 |
| 29. | 0.151 | 0.654 | 2.25 | 3.44 | 0.521 | 0.348 | 0.237 | 0.288 | 0.385 | 0.105 | 0.144 | 0.161 | 0.281 | 1.42 |
| 30. | 0.165 | 2.40 | 1.96 | | 0.572 | 0.317 | 0.217 | 0.357 | 0.305 | 0.091 | 0.149 | 0.195 | 0.299 | 1.27 |
| 31. | | 1.99 | 1.70 | | 0.575 | | 0.234 | | 0.289 | 0.095 | | 0.172 | | 1.15 |
| Tag | 17.+ | 1. | 18. | 10. | 28. | 30. | 30. | 19. | 23. | 30. | 1. | 19.+ | 20. | 1. |
| NQ | 0.141 | 0.144 | 1.04 | 1.48 | 0.493 | 0.317 | 0.217 | 0.193 | 0.222 | 0.091 | 0.093 | 0.145 | 0.122 | 0.311 |
| MQ | 0.177 | 0.955 | 3.23 | 2.46 | 1.10 | 0.435 | 0.317 | 0.277 | 0.385 | 0.183 | 0.143 | 0.177 | 0.176 | 1.05 |
| HQ | 0.327 | 4.83 | 19.8 | 6.01 | 3.31 | 0.611 | 0.945 | 0.729 | 0.977 | 0.333 | 0.362 | 0.507 | 0.334 | 5.74 |
| Tag | 25. | 17. | 5. | 25. | 1. | 12. | 10. | 5. | 18. | 1. | 11. | 4. | 30. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 3 | 19 | 64 | 45 | 22 | 8 | 6 | 5 | 8 | 4 | 3 | 3 | 3 | 21 |

## Hauptwerte

| | 1961/2011 | | 1962/2012 51 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1965 | 2011 | 1977 | 1972 | 1974 | 2012 | 2012 | 1999 | 1977 | 2012 | 2012 | 2000+ | 1965 | 2011 |
| NQ | 0.100 | 0.144 | 0.230 | 0.320 | 0.260 | 0.317 | 0.217 | 0.161 | 0.170 | 0.091 | 0.093 | 0.145 | 0.100 | 0.144 |
| MNQ | 0.499 | 0.766 | 0.955 | 1.06 | 1.01 | 0.986 | 0.645 | 0.481 | 0.425 | 0.362 | 0.355 | 0.403 | 0.484 | 0.751 |
| MQ | 1.17 | 2.01 | 2.42 | 2.32 | 2.35 | 1.69 | 1.12 | 0.812 | 0.724 | 0.618 | 0.618 | 0.714 | 1.15 | 1.99 |
| MHQ | 5.99 | 9.72 | 11.1 | 8.75 | 9.61 | 4.90 | 5.11 | 4.36 | 4.27 | 3.77 | 3.57 | 3.38 | 5.91 | 9.64 |
| HQ | 40.6 | 30.7 | 41.6 | 28.0 | 47.0 | 27.1 | 30.4 | 16.8 | 32.4 | 49.4 | 48.3 | 26.7 | 40.6 | 30.7 |
| Jahr | 2007 | 1988 | 2008 | 1970 | 2007 | 1994 | 2004 | 1981 | 2002 | 2007 | 2007 | 1993 | 2007 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 22 | 40 | 48 | 43 | 46 | 32 | 22 | 15 | 14 | 12 | 12 | 14 | 22 | 39 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.091 | am 30.08.2012 | 0.141 | 0.091 | 0.091 | am 30.08.2012 |
| MQ $m^3/s$ | 0.818 | | 1.39 | 0.247 | 0.826 | |
| HQ $m^3/s$ | 19.8 | am 05.01.2012 bei W= 174 cm | 19.8 | 0.977 | 19.8 | am 05.01.2012 bei W= 174 cm |
| Nq $l/(s km^2)$ | 0.669 | | 1.04 | 0.669 | 0.669 | |
| Mq $l/(s km^2)$ | 6.01 | | 10.2 | 1.82 | 6.07 | |
| Hq $l/(s km^2)$ | 146 | | 146 | 7.18 | 146 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 190 | | 161 | 29 | 192 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| NQ $m^3/s$ | 0.091 | am 30.08.2012 | 0.100 | 0.091 | 0.091 | am 30.08.2012 |
| MNQ $m^3/s$ | 0.259 | | 0.446 | 0.295 | 0.283 | |
| MQ $m^3/s$ | 1.38 | | 2.00 | 0.769 | 1.37 | |
| MHQ $m^3/s$ | 19.9 | | 18.3 | 9.81 | 20.1 | |
| HQ $m^3/s$ | 49.4 | am 22.08.2007 bei W= 242 cm | 47.0 | 49.4 | 49.4 | am 22.08.2007 bei W= 242 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.90 | | 3.28 | 2.17 | 2.08 | |
| Mq $l/(s km^2)$ | 10.1 | | 14.7 | 5.65 | 10.1 | |
| MHq $l/(s km^2)$ | 146 | | 135 | 72.1 | 148 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 321 | | 231 | 90 | 319 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.091 | 0.669 | 30.08.2012 | 49.4 | 363 | 242 | 22.08.2007 |
| 2 | 0.100 | 0.735 | 23.11.1965 | 48.3 | 355 | 237 | 30.09.2007 |
| 3 | 0.129 | 0.949 | 31.08.2009 | 47.0 | 345 | 234 | 23.03.2007 |
| 4 | 0.132 | 0.971 | 09.11.2000 | 41.6 | 306 | 217 | 27.01.2008 |
| 5 | 0.140 | 1.03 | 08.09.1996 | 40.6 | 299 | 213 | 11.11.2007 |
| 6 | 0.141 | 1.04 | 20.11.2011 | 37.1 | 273 | 216 | 07.01.2011 |
| 7 | 0.148 | 1.09 | 30.08.1991 | 37.0 | 272 | 200 | 19.01.2007 |
| 8 | 0.150 | 1.10 | 27.09.1976 | 35.3 | 260 | 195 | 03.01.2003 |
| 9 | 0.161 | 1.18 | 28.06.1999 | 32.4 | 238 | 188 | 18.07.2002 |
| 10 | 0.170 | 1.25 | 13.07.1977 | 31.0 | 228 | 185 | 01.11.1998 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1962/2012 51 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 9.45 | 9.45 | | | |
| 364 | 8.01 | 8.01 | 33.1 | 13.2 | 4.42 |
| 363 | 6.36 | 6.36 | 30.7 | 10.6 | 3.71 |
| 362 | 6.09 | 6.09 | 30.3 | 9.00 | 3.55 |
| 361 | 5.55 | 5.55 | 25.0 | 8.03 | 3.18 |
| 360 | 5.47 | 5.47 | 23.3 | 7.24 | 2.82 |
| 359 | 5.25 | 5.25 | 21.7 | 6.75 | 2.58 |
| 358 | 5.06 | 5.06 | 17.1 | 6.35 | 2.43 |
| 357 | 4.14 | 4.14 | 14.5 | 6.08 | 2.41 |
| 356 | 4.11 | 4.11 | 13.5 | 5.78 | 2.38 |
| 350 | 3.47 | 3.47 | 10.6 | 4.68 | 1.97 |
| 340 | 2.87 | 2.87 | 6.57 | 3.68 | 1.76 |
| 330 | 2.22 | 2.22 | 5.46 | 3.10 | 1.40 |
| 320 | 1.92 | 1.89 | 4.52 | 2.65 | 1.23 |
| 300 | 1.56 | 1.56 | 3.51 | 2.05 | 0.970 |
| 270 | 0.719 | 0.725 | 2.98 | 1.53 | 0.725 |
| 240 | 0.493 | 0.521 | 2.39 | 1.21 | 0.521 |
| 210 | 0.386 | 0.401 | 2.06 | 0.981 | 0.401 |
| 183 | 0.314 | 0.324 | 1.79 | 0.821 | 0.324 |
| 150 | 0.259 | 0.273 | 1.56 | 0.661 | 0.273 |
| 130 | 0.236 | 0.240 | 1.47 | 0.577 | 0.240 |
| 120 | 0.223 | 0.234 | 1.40 | 0.539 | 0.234 |
| 110 | 0.214 | 0.219 | 1.35 | 0.509 | 0.219 |
| 100 | 0.200 | 0.198 | 1.30 | 0.476 | 0.198 |
| 90 | 0.188 | 0.182 | 1.24 | 0.450 | 0.182 |
| 80 | 0.174 | 0.171 | 1.19 | 0.421 | 0.171 |
| 70 | 0.166 | 0.164 | 1.13 | 0.391 | 0.164 |
| 60 | 0.161 | 0.161 | 1.08 | 0.368 | 0.161 |
| 50 | 0.157 | 0.157 | 1.04 | 0.341 | 0.157 |
| 40 | 0.152 | 0.151 | 0.980 | 0.311 | 0.151 |
| 30 | 0.148 | 0.146 | 0.920 | 0.281 | 0.146 |
| 25 | 0.146 | 0.143 | 0.910 | 0.266 | 0.143 |
| 20 | 0.145 | 0.138 | 0.856 | 0.250 | 0.138 |
| 15 | 0.134 | 0.130 | 0.838 | 0.231 | 0.130 |
| 10 | 0.124 | 0.124 | 0.828 | 0.210 | 0.124 |
| 9 | 0.124 | 0.124 | 0.810 | 0.202 | 0.124 |
| 8 | 0.121 | 0.121 | 0.803 | 0.200 | 0.121 |
| 7 | 0.116 | 0.116 | 0.794 | 0.194 | 0.116 |
| 6 | 0.108 | 0.108 | 0.791 | 0.184 | 0.108 |
| 5 | 0.105 | 0.105 | 0.788 | 0.179 | 0.105 |
| 4 | 0.100 | 0.100 | 0.788 | 0.171 | 0.100 |
| 3 | 0.099 | 0.099 | 0.788 | 0.162 | 0.099 |
| 2 | 0.095 | 0.095 | 0.779 | 0.155 | 0.095 |
| 1 | 0.093 | 0.093 | 0.770 | 0.146 | 0.093 |
| 0 | 0.091 | 0.091 | 0.763 | 0.091 | 0.091 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Ith-Hils-Bergland

NLWKN

$A_{Eo}$ : 897 $km^2$

PNP : NN + 78.88 m

Lage: 26.0 km oberhalb der Mündung rechts

Q

$m^3/s$

Pegel : Heinde Nr. 4886168

Gewässer : Innerste

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.76 | 2.49 | 10.3 | 12.3 | 7.84 | 4.71 | 3.52 | 4.08 | 4.19 | 2.95 | 2.91 | 1.89 | 2.04 | 2.01 |
| 2. | 3.39 | 2.44 | 12.3 | 9.97 | 8.43 | 4.50 | 3.56 | 2.83 | 3.48 | 2.90 | 2.30 | 1.89 | 1.98 | 2.06 |
| 3. | 2.68 | 2.88 | 13.8 | 9.56 | 8.30 | 4.45 | 4.48 | 3.10 | 2.94 | 2.92 | 2.26 | 1.89 | 2.18 | 2.17 |
| 4. | 2.44 | 3.01 | 15.0 | 9.22 | 8.01 | 4.70 | 3.75 | 4.14 | 2.83 | 2.88 | 2.26 | 2.90 | 2.21 | 2.11 |
| 5. | 2.63 | 3.26 | 28.5 | 8.69 | 7.84 | 4.53 | 3.86 | 8.58 | 2.79 | 2.80 | 2.21 | 4.17 | 2.24 | 2.72 |
| 6. | 2.70 | 3.22 | 28.5 | 8.48 | 7.41 | 4.45 | 4.64 | 4.09 | 3.98 | 2.95 | 2.12 | 3.41 | 2.09 | 2.43 |
| 7. | 2.70 | 4.12 | 23.7 | 9.92 | 7.24 | 4.44 | 4.05 | 3.56 | 3.13 | 3.00 | 2.21 | 3.34 | 2.26 | 2.04 |
| 8. | 2.63 | 4.62 | 25.1 | 8.06 | 8.35 | 4.28 | 3.70 | 3.27 | 3.11 | 2.69 | 2.12 | 2.44 | 2.30 | 2.06 |
| 9. | 2.98 | 4.72 | 23.8 | 7.83 | 8.36 | 4.20 | 4.22 | 3.15 | 3.04 | 2.76 | 2.15 | 2.26 | 2.04 | 2.08 |
| 10. | 2.48 | 4.31 | 26.2 | 7.63 | 7.87 | 4.50 | 3.77 | 2.69 | 2.73 | 2.69 | 2.11 | 2.19 | 2.23 | 2.64 |
| 11. | 2.48 | 3.72 | 24.0 | 7.45 | 7.67 | 4.35 | 3.94 | 2.60 | 2.91 | 2.72 | 2.21 | 2.14 | 2.05 | 2.58 |
| 12. | 2.55 | 3.47 | 22.3 | 7.33 | 7.48 | 4.47 | 3.51 | 3.34 | 4.00 | 2.57 | 2.86 | 2.16 | 2.10 | 2.19 |
| 13. | 2.40 | 4.27 | 22.0 | 7.26 | 7.39 | 6.38 | 3.36 | 3.20 | 3.80 | 2.68 | 2.37 | 2.26 | 2.06 | 2.18 |
| 14. | 2.45 | 5.57 | 20.4 | 5.97 | 7.22 | 4.86 | 3.32 | 2.82 | 4.89 | 2.40 | 2.15 | 2.17 | 2.09 | 2.21 |
| 15. | 2.45 | 5.66 | 19.3 | 6.31 | 7.14 | 4.60 | 3.44 | 2.76 | 5.10 | 2.23 | 2.26 | 2.81 | 2.00 | 7.41 |
| 16. | 2.50 | 7.54 | 17.5 | 5.73 | 7.02 | 4.45 | 3.84 | 2.80 | 4.61 | 2.42 | 2.28 | 2.41 | 2.05 | 8.19 |
| 17. | 2.39 | 12.0 | 13.0 | 6.02 | 7.00 | 4.34 | 3.46 | 2.88 | 5.96 | 2.76 | 2.12 | 2.24 | 1.99 | 7.18 |
| 18. | 2.46 | 8.62 | 12.5 | 5.98 | 6.83 | 4.30 | 3.20 | 2.84 | 7.10 | 2.23 | 2.18 | 2.23 | 2.05 | 6.03 |
| 19. | 2.42 | 6.61 | 14.7 | 6.69 | 6.73 | 4.21 | 3.22 | 2.63 | 6.71 | 2.32 | 2.09 | 2.21 | 2.02 | 5.53 |
| 20. | 2.46 | 6.17 | 20.2 | 5.95 | 6.42 | 4.14 | 3.14 | 3.15 | 6.01 | 2.23 | 1.95 | 2.08 | 1.98 | 4.79 |
| 21. | 2.40 | 6.15 | 20.1 | 5.53 | 6.30 | 4.17 | 3.10 | 3.52 | 4.92 | 2.20 | 2.00 | 1.95 | 2.02 | 4.44 |
| 22. | 2.24 | 6.13 | 23.3 | 5.49 | 6.26 | 4.26 | 3.01 | 2.82 | 4.38 | 2.26 | 2.12 | 2.03 | 1.95 | 4.32 |
| 23. | 2.38 | 7.69 | 31.7 | 5.73 | 6.19 | 4.11 | 2.91 | 2.60 | 4.02 | 2.30 | 2.01 | 2.06 | 1.91 | 12.4 |
| 24. | 2.36 | 8.35 | 27.7 | 6.25 | 6.13 | 4.08 | 2.77 | 2.61 | 3.71 | 2.30 | 2.24 | 2.02 | 2.08 | 16.8 |
| 25. | 2.37 | 8.39 | 24.7 | 7.69 | 5.94 | 3.98 | 2.75 | 3.11 | 3.54 | 3.36 | 2.14 | 2.14 | 2.09 | 12.0 |
| 26. | 2.38 | 7.50 | 20.3 | 7.50 | 5.69 | 3.82 | 2.71 | 2.78 | 3.39 | 2.70 | 1.97 | 2.02 | 2.03 | 9.74 |
| 27. | 2.40 | 6.92 | 19.3 | 7.17 | 4.75 | 3.72 | 2.70 | 2.63 | 3.26 | 2.50 | 1.97 | 2.08 | 1.98 | 9.40 |
| 28. | 2.44 | 6.84 | 17.4 | 7.33 | 4.62 | 3.74 | 2.68 | 2.59 | 4.04 | 2.15 | 1.97 | 2.05 | 2.07 | 9.14 |
| 29. | 2.41 | 6.57 | 15.9 | 7.76 | 4.58 | 3.66 | 2.66 | 2.60 | 3.33 | 2.18 | 1.92 | 2.02 | 2.07 | 8.93 |
| 30. | 2.42 | 10.8 | 14.7 | | 4.91 | 3.61 | 2.56 | 2.70 | 3.28 | 2.35 | 1.92 | 2.12 | 2.12 | 8.26 |
| 31. | | 11.7 | 13.5 | | 5.01 | | 2.62 | | 3.02 | 2.58 | | 2.15 | | 7.70 |
| Tag | 22. | 2. | 1. | 22. | 29. | 30. | 30. | 28. | 10. | 28. | 30. | 2.+ | 23. | 1. |
| NQ | 2.24 | 2.44 | 10.3 | 5.49 | 4.58 | 3.61 | 2.56 | 2.59 | 2.73 | 2.15 | 1.92 | 1.89 | 1.91 | 2.01 |
| MQ | 2.53 | 5.99 | 20.0 | 7.47 | 6.80 | 4.33 | 3.37 | 3.22 | 4.01 | 2.58 | 2.18 | 2.32 | 2.08 | 5.61 |
| HQ | 13.3 | 15.1 | 42.8 | 17.7 | 9.57 | 7.57 | 11.2 | 13.3 | 10.1 | 4.89 | 3.76 | 7.08 | 3.36 | 22.5 |
| Tag | 9. | 16. | 5. | 7. | 9. | 13. | 15. | 5. | 17. | 25. | 12. | 5. | 12. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 18 | 60 | 21 | 20 | 13 | 10 | 9 | 12 | 8 | 6 | 7 | 6 | 17 |
| | 1952/2011 | | 1953/2012 60 Jahre | | | | | | | | | | | |
| Jahr | 1959 | 1959 | 1972 | 1972 | 1960 | 1960 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 |
| NQ | 1.15 | 1.10 | 2.00 | 1.96 | 2.04 | 1.83 | 1.83 | 1.50 | 1.39 | 1.50 | 1.21 | 0.930 | 1.15 | 1.10 |
| MNQ | 3.86 | 4.93 | 6.31 | 6.82 | 6.89 | 6.75 | 4.84 | 4.04 | 3.46 | 3.21 | 3.15 | 3.16 | 3.69 | 4.84 |
| MQ | 6.63 | 9.99 | 12.6 | 11.9 | 12.9 | 10.7 | 7.38 | 6.45 | 5.76 | 4.80 | 4.61 | 4.99 | 6.36 | 9.82 |
| MHQ | 19.4 | 31.1 | 36.8 | 29.8 | 35.2 | 23.9 | 21.8 | 21.8 | 17.5 | 14.6 | 13.6 | 15.9 | 18.7 | 30.8 |
| HQ | 99.8 | 104 | 106 | 103 | 112 | 121 | 74.6 | 94.9 | 100 | 71.4 | 163 | 156 | 99.8 | 104 |
| Jahr | 1998 | 1986 | 2003 | 1970 | 1957 | 1994 | 2004 | 1981 | 1956 | 2007 | 2007 | 2007 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 19 | 30 | 38 | 33 | 39 | 31 | 22 | 19 | 17 | 14 | 13 | 15 | 18 | 29 |

## Hauptwerte

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 1.89 | am 01.10.2012 | 2.24 | 1.89 | 1.89 | am 01.10.2012 |
| MQ $m^3/s$ | 5.42 | | 7.92 | 2.95 | 5.35 | |
| HQ $m^3/s$ | 42.8 | am 05.01.2012 bei W= 408 cm | 42.8 | 13.3 | 42.8 | am 05.01.2012 bei W= 408 cm |
| Nq $l/(s km^2)$ | 2.11 | | 2.50 | 2.11 | 2.11 | |
| Mq $l/(s km^2)$ | 6.04 | | 8.83 | 3.29 | 5.96 | |
| Hq $l/(s km^2)$ | 47.7 | | 47.7 | 14.9 | 47.7 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 191 | | 139 | 52 | 189 | |
| | 1953/2012 (*) 60 Jahre | | | | 1953/2012 | |
| NQ $m^3/s$ | 0.930 | am 03.10.1959 | 1.10 | 0.930 | 0.930 | am 03.10.1959 |
| MNQ $m^3/s$ | 2.30 | | 3.33 | 2.49 | 2.42 | |
| MQ $m^3/s$ | 8.21 | | 10.8 | 5.67 | 8.17 | |
| MHQ $m^3/s$ | 64.9 | | 58.8 | 38.0 | 66.7 | |
| HQ $m^3/s$ | 163 | am 30.09.2007 bei W= 675 cm | 121 | 163 | 163 | am 30.09.2007 bei W= 675 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.56 | | 3.71 | 2.78 | 2.70 | |
| Mq $l/(s km^2)$ | 9.15 | | 12.0 | 6.32 | 9.11 | |
| MHq $l/(s km^2)$ | 72.4 | | 65.6 | 42.4 | 74.4 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 289 | | 189 | 100 | 288 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.930 | 1.04 | 03.10.1959 | 163 | 181 | 675 | 30.09.2007 |
| 2 | 1.00 | 1.11 | 27.10.1963 | 121 | 135 | 627 | 14.04.1994 |
| 3 | 1.45 | 1.62 | 28.10.1983 | 112 | 125 | 632 | 19.03.1957 |
| 4 | 1.50 | 1.67 | 17.07.1960 | 106 | 118 | 597 | 03.01.2003 |
| 5 | 1.68 | 1.87 | 21.09.2005 | 105 | 117 | 592 | 13.03.1981 |
| 6 | 1.68 | 1.87 | 07.08.1996 | 104 | 116 | 590 | 31.12.1986 |
| 7 | 1.70 | 1.90 | 19.12.1953 | 103 | 115 | 596 | 23.02.1970 |
| 8 | 1.72 | 1.92 | 16.09.1991 | 103 | 115 | 624 | 15.01.1968 |
| 9 | 1.75 | 1.95 | 04.07.1954 | 100 | 111 | 604 | 16.07.1956 |
| 10 | 1.77 | 1.97 | 18.09.1999 | 99.8 | 111 | 578 | 01.11.1998 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1953/2012 60 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 31.7 | 31.7 | | | |
| 364 | 31.7 | 31.7 | 155 | 59.4 | 13.6 |
| 363 | 31.7 | 31.7 | 130 | 51.4 | 13.5 |
| 362 | 27.7 | 27.7 | 98.7 | 44.9 | 12.9 |
| 361 | 26.2 | 26.2 | 77.2 | 41.2 | 12.1 |
| 360 | 25.1 | 25.1 | 69.7 | 38.0 | 11.9 |
| 359 | 24.7 | 24.7 | 65.3 | 35.7 | 11.6 |
| 358 | 24.0 | 24.0 | 58.4 | 33.2 | 11.2 |
| 357 | 23.8 | 23.8 | 56.9 | 31.6 | 10.5 |
| 356 | 23.7 | 23.7 | 53.0 | 30.3 | 10.4 |
| 350 | 20.2 | 20.2 | 45.5 | 24.2 | 8.81 |
| 340 | 13.8 | 15.0 | 33.9 | 19.5 | 7.74 |
| 330 | 9.97 | 9.97 | 29.2 | 16.5 | 7.17 |
| 320 | 8.36 | 8.48 | 25.4 | 14.5 | 5.33 |
| 300 | 7.41 | 7.45 | 21.6 | 11.9 | 4.73 |
| 270 | 6.15 | 5.98 | 17.2 | 9.34 | 4.04 |
| 240 | 4.58 | 4.47 | 14.9 | 7.69 | 3.57 |
| 210 | 4.09 | 4.00 | 12.9 | 6.46 | 2.50 |
| 183 | 3.48 | 3.36 | 11.5 | 5.62 | 2.17 |
| 150 | 3.00 | 2.86 | 9.92 | 4.76 | 1.90 |
| 130 | 2.81 | 2.71 | 9.30 | 4.32 | 1.83 |
| 120 | 2.75 | 2.64 | 9.04 | 4.11 | 1.83 |
| 110 | 2.70 | 2.57 | 8.47 | 3.90 | 1.76 |
| 100 | 2.62 | 2.32 | 8.20 | 3.71 | 1.70 |
| 90 | 2.55 | 2.28 | 8.00 | 3.54 | 1.63 |
| 80 | 2.45 | 2.24 | 7.76 | 3.35 | 1.54 |
| 70 | 2.41 | 2.19 | 7.58 | 3.19 | 1.54 |
| 60 | 2.32 | 2.16 | 7.42 | 3.02 | 1.50 |
| 50 | 2.26 | 2.12 | 7.15 | 2.85 | 1.50 |
| 40 | 2.23 | 2.09 | 6.90 | 2.68 | 1.44 |
| 30 | 2.16 | 2.06 | 6.72 | 2.51 | 1.39 |
| 25 | 2.14 | 2.04 | 6.58 | 2.42 | 1.39 |
| 20 | 2.09 | 2.03 | 6.36 | 2.31 | 1.33 |
| 15 | 2.03 | 1.99 | 6.27 | 2.21 | 1.27 |
| 10 | 2.00 | 1.98 | 5.83 | 2.07 | 1.27 |
| 9 | 2.00 | 1.98 | 5.80 | 2.05 | 1.27 |
| 8 | 2.00 | 1.97 | 5.70 | 2.01 | 1.27 |
| 7 | 2.00 | 1.97 | 5.68 | 1.98 | 1.27 |
| 6 | 1.97 | 1.97 | 5.67 | 1.96 | 1.27 |
| 5 | 1.97 | 1.95 | 5.54 | 1.91 | 1.21 |
| 4 | 1.95 | 1.95 | 5.45 | 1.86 | 1.21 |
| 3 | 1.95 | 1.91 | 5.42 | 1.80 | 1.21 |
| 2 | 1.92 | 1.91 | 5.32 | 1.71 | 1.10 |
| 1 | 1.92 | 1.91 | 5.29 | 1.45 | 1.04 |
| 0 | 1.89 | 1.89 | 5.21 | 0.930 | 0.930 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Innerste
Innerstetalsperre seit 1966

NLWKN

$A_{Eo}$ : 558 $km^2$

PNP : NN + 38.55 m

Lage: 5.2 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Wunstorf Nr. 4888139

Gewässer : Westaue

Gebiet : Leine

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.815 | 0.786 | 5.16 | 4.47 | 5.76 | 1.90 | 1.28 | 2.70 | 0.790 | 1.11 | 3.18 | 0.651 | 0.739 | 0.797 |
| 2. | 0.711 | 0.893 | 7.63 | 3.81 | 5.04 | 1.94 | 1.26 | 1.10 | 0.751 | 1.01 | 1.03 | 0.765 | 0.789 | 0.799 |
| 3. | 0.734 | 1.11 | 7.61 | 3.25 | 4.50 | 1.74 | 1.85 | 1.04 | 0.719 | 0.960 | 0.857 | 0.763 | 0.831 | 0.905 |
| 4. | 0.770 | 1.25 | 7.03 | 3.04 | 4.05 | 3.00 | 1.38 | 1.59 | 0.671 | 0.979 | 0.746 | 3.29 | 0.812 | 0.899 |
| 5. | 0.719 | 1.11 | 15.7 | 2.70 | 4.06 | 2.40 | 1.53 | 1.49 | 0.598 | 1.16 | 0.710 | 3.70 | 0.961 | 1.16 |
| 6. | 0.673 | 1.48 | 17.4 | 2.50 | 3.38 | 1.97 | 1.45 | 1.10 | 0.605 | 1.37 | 0.736 | 4.35 | 0.876 | 0.872 |
| 7. | 0.776 | 2.39 | 13.4 | 2.37 | 3.03 | 2.24 | 1.32 | 1.13 | 0.942 | 1.39 | 0.692 | 3.90 | 0.904 | 0.851 |
| 8. | 0.759 | 3.48 | 15.3 | 2.46 | 6.10 | 1.88 | 1.23 | 0.910 | 1.53 | 1.05 | 0.638 | 1.52 | 0.929 | 0.811 |
| 9. | 0.740 | 2.47 | 13.1 | 2.37 | 5.77 | 1.94 | 1.22 | 0.873 | 1.20 | 1.32 | 0.687 | 1.09 | 0.886 | 0.860 |
| 10. | 0.768 | 1.66 | 11.0 | 2.15 | 4.58 | 1.91 | 1.27 | 0.845 | 0.722 | 1.13 | 0.669 | 0.923 | 0.792 | 2.56 |
| 11. | 0.750 | 1.14 | 8.73 | 2.17 | 3.96 | 1.87 | 6.34 | 0.800 | 0.984 | 0.963 | 0.639 | 0.864 | 0.830 | 1.99 |
| 12. | 0.828 | 1.08 | 7.59 | 2.02 | 3.52 | 1.77 | 2.41 | 0.777 | 0.967 | 0.952 | 1.02 | 0.879 | 0.814 | 1.40 |
| 13. | 0.660 | 1.42 | 7.33 | 2.13 | 3.21 | 1.64 | 1.61 | 0.762 | 1.09 | 0.793 | 0.714 | 1.07 | 0.728 | 1.25 |
| 14. | 0.784 | 1.66 | 6.52 | 2.31 | 2.93 | 1.62 | 1.34 | 0.749 | 1.10 | 0.806 | 0.637 | 0.901 | 0.749 | 1.16 |
| 15. | 0.789 | 1.57 | 5.59 | 4.00 | 2.72 | 1.56 | 1.38 | 0.742 | 0.955 | 0.766 | 0.696 | 0.856 | 0.728 | 5.52 |
| 16. | 0.817 | 3.69 | 4.67 | 2.76 | 2.65 | 1.46 | 1.46 | 0.801 | 1.04 | 1.25 | 0.638 | 0.838 | 0.712 | 6.02 |
| 17. | 0.768 | 10.4 | 3.95 | 3.06 | 2.56 | 1.42 | 1.23 | 0.899 | 1.34 | 1.30 | 0.648 | 0.766 | 0.745 | 5.53 |
| 18. | 0.773 | 6.14 | 3.47 | 2.98 | 2.42 | 1.48 | 1.16 | 0.711 | 2.76 | 0.692 | 0.677 | 0.771 | 0.746 | 4.10 |
| 19. | 0.773 | 3.76 | 6.92 | 4.67 | 2.37 | 1.51 | 1.10 | 0.685 | 5.26 | 0.741 | 0.671 | 0.805 | 0.812 | 3.30 |
| 20. | 0.795 | 3.00 | 15.1 | 3.35 | 2.04 | 1.50 | 1.07 | 0.674 | 6.43 | 0.628 | 0.613 | 0.616 | 0.747 | 2.51 |
| 21. | 0.777 | 3.02 | 19.1 | 2.85 | 1.95 | 1.46 | 1.00 | 0.704 | 2.45 | 0.721 | 0.759 | 0.695 | 0.684 | 2.24 |
| 22. | 0.763 | 3.20 | 22.5 | 2.87 | 1.92 | 1.70 | 0.920 | 0.696 | 1.69 | 0.647 | 0.580 | 0.671 | 0.746 | 2.29 |
| 23. | 0.781 | 4.88 | 33.1 | 3.74 | 1.90 | 1.52 | 0.970 | 0.617 | 1.40 | 0.651 | 0.630 | 0.661 | 0.726 | 11.7 |
| 24. | 0.789 | 5.51 | 22.1 | 5.43 | 1.84 | 1.55 | 0.855 | 0.650 | 1.26 | 0.653 | 0.891 | 0.659 | 0.848 | 16.0 |
| 25. | 0.761 | 5.93 | 18.2 | 8.11 | 1.83 | 1.43 | 0.946 | 1.38 | 1.16 | 0.767 | 1.04 | 0.699 | 0.828 | 9.19 |
| 26. | 0.791 | 3.74 | 13.9 | 7.36 | 1.68 | 1.60 | 0.931 | 0.975 | 1.08 | 0.816 | 0.851 | 0.658 | 0.789 | 7.62 |
| 27. | 0.763 | 2.86 | 11.1 | 6.28 | 1.68 | 1.36 | 0.928 | 0.723 | 1.02 | 0.777 | 1.07 | 0.656 | 0.955 | 7.92 |
| 28. | 0.839 | 2.47 | 9.34 | 6.45 | 1.68 | 1.45 | 0.919 | 0.714 | 3.05 | 0.764 | 0.934 | 0.674 | 0.861 | 6.87 |
| 29. | 0.850 | 2.26 | 8.19 | 6.16 | 1.72 | 1.32 | 0.908 | 0.896 | 1.56 | 0.735 | 0.729 | 0.673 | 0.781 | 5.61 |
| 30. | 0.734 | 6.57 | 7.08 | | 2.15 | 1.26 | 0.879 | 2.57 | 1.22 | 0.921 | 0.862 | 1.01 | 0.807 | 4.88 |
| 31. | | 6.93 | 5.47 | | 2.06 | | 0.974 | | 1.34 | 1.27 | | 0.948 | | 4.38 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13. | 1. | 18. | 12. | 26. | 30. | 24. | 23. | 5. | 20. | 22. | 20. | 21. | 1. |
| NQ | 0.660 | 0.786 | 3.47 | 2.02 | 1.68 | 1.26 | 0.855 | 0.617 | 0.598 | 0.628 | 0.580 | 0.616 | 0.684 | 0.797 |
| MQ | 0.768 | 3.16 | 11.4 | 3.72 | 3.07 | 1.71 | 1.39 | 1.01 | 1.54 | 0.939 | 0.842 | 1.20 | 0.805 | 3.93 |
| HQ | 1.29 | 12.3 | 37.6 | 8.42 | 7.22 | 4.78 | 11.2 | 5.30 | 9.42 | 3.70 | 5.07 | 7.32 | 1.12 | 23.7 |
| Tag | 12. | 17. | 23. | 25. | 8. | 4. | 11. | 30. | 20. | 31. | 1. | 4. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 4 | 15 | 55 | 17 | 15 | 8 | 7 | 5 | 7 | 5 | 4 | 6 | 4 | 19 |

| | 1978/2011 | | 1979/2012 34 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1985 | 2003 | 1996 | 1979 | 1992 | 1996 | 1989 | 1989 | 1989 | 1989 | 1989 | 1982 | 1985 | 2003 |
| NQ | 0.507 | 0.585 | 0.748 | 0.718 | 1.36 | 0.589 | 0.501 | 0.516 | 0.411 | 0.407 | 0.423 | 0.380 | 0.507 | 0.585 |
| MNQ | 1.41 | 1.80 | 2.92 | 3.15 | 3.34 | 2.53 | 1.69 | 1.23 | 1.03 | 0.993 | 0.935 | 1.06 | 1.41 | 1.81 |
| MQ | 3.42 | 5.18 | 8.01 | 6.76 | 7.88 | 4.58 | 2.88 | 2.03 | 1.96 | 1.63 | 1.62 | 2.05 | 3.42 | 5.18 |
| MHQ | 13.8 | 25.4 | 31.3 | 23.6 | 30.9 | 13.2 | 11.3 | 9.63 | 10.3 | 8.23 | 7.35 | 10.3 | 13.8 | 25.5 |
| HQ | 50.4 | 107 | 99.2 | 55.2 | 88.6 | 58.4 | 62.4 | 45.0 | 69.6 | 52.0 | 27.1 | 95.8 | 50.4 | 107 |
| Jahr | 1998 | 1986 | 1987 | 1997 | 1981 | 1983 | 1984 | 1981 | 2002 | 2010 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 16 | 25 | 38 | 30 | 38 | 21 | 14 | 9 | 9 | 8 | 8 | 10 | 16 | 25 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.580 | am 22.09.2012 | 0.660 | 0.580 | 0.580 | am 22.09.2012 |
| MQ $m^3/s$ | 2.57 | | 4.00 | 1.16 | 2.64 | |
| HQ $m^3/s$ | 37.6 | am 23.01.2012 bei W= 275 cm | 37.6 | 11.2 | 37.6 | am 23.01.2012 bei W= 275 cm |
| Nq $l/(s km^2)$ | 1.04 | | 1.18 | 1.04 | 1.04 | |
| Mq $l/(s km^2)$ | 4.61 | | 7.17 | 2.08 | 4.73 | |
| Hq $l/(s km^2)$ | 67.5 | | 67.5 | 20.1 | 67.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 146 | | 113 | 33 | 150 | |
| | 1979/2012 (*) 34 Jahre | | | | 1979/2012 | |
| NQ $m^3/s$ | 0.380 | am 11.10.1982 | 0.507 | 0.380 | 0.380 | am 11.10.1982 |
| MNQ $m^3/s$ | 0.674 | | 1.21 | 0.747 | 0.707 | |
| MQ $m^3/s$ | 3.99 | | 5.99 | 2.03 | 3.99 | |
| MHQ $m^3/s$ | 52.5 | | 48.1 | 22.9 | 53.9 | |
| HQ $m^3/s$ | 107 | am 31.12.1986 bei W= 348 cm | 107 | 95.8 | 107 | am 31.12.1986 bei W= 348 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.21 | | 2.17 | 1.34 | 1.27 | |
| Mq $l/(s km^2)$ | 7.15 | | 10.7 | 3.64 | 7.15 | |
| MHq $l/(s km^2)$ | 94.1 | | 86.2 | 41.0 | 96.6 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 226 | | 169 | 58 | 226 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.380 | 0.681 | 11.10.1982 | 107 | 192 | 348 | 31.12.1986 |
| 2 | 0.407 | 0.729 | 13.08.1989 | 95.8 | 172 | 340 | 29.10.1998 |
| 3 | 0.497 | 0.891 | 04.10.2009 | 90.8 | 163 | 333 | 03.01.2003 |
| 4 | 0.501 | 0.898 | 14.07.1988 | 88.6 | 159 | 330 | 13.03.1981 |
| 5 | 0.504 | 0.903 | 06.10.2003 | 79.0 | 142 | 322 | 28.01.1994 |
| 6 | 0.507 | 0.909 | 09.11.1985 | 75.1 | 135 | 319 | 23.03.1987 |
| 7 | 0.528 | 0.946 | 22.07.2010 | 72.7 | 130 | 312 | 19.03.1994 |
| 8 | 0.537 | 0.962 | 29.09.2000 | 69.6 | 125 | 317 | 19.07.2002 |
| 9 | 0.555 | 0.995 | 13.08.1990 | 67.4 | 121 | 311 | 31.12.1993 |
| 10 | 0.565 | 1.01 | 02.06.1981 | 66.1 | 118 | 310 | 05.03.1979 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1979/2012 34 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 33.1 | 33.1 | | | |
| 364 | 22.5 | 22.5 | 104 | 44.6 | 12.4 |
| 363 | 22.1 | 22.1 | 84.7 | 36.5 | 9.56 |
| 362 | 19.1 | 19.1 | 77.9 | 31.7 | 8.33 |
| 361 | 18.2 | 18.2 | 55.1 | 28.1 | 8.31 |
| 360 | 17.4 | 17.4 | 53.3 | 25.1 | 8.22 |
| 359 | 15.7 | 16.0 | 51.0 | 23.2 | 6.94 |
| 358 | 15.3 | 15.7 | 50.7 | 21.8 | 6.60 |
| 357 | 15.1 | 15.3 | 44.1 | 20.2 | 6.58 |
| 356 | 13.9 | 15.1 | 43.9 | 19.0 | 5.75 |
| 350 | 9.34 | 11.0 | 34.9 | 14.6 | 5.33 |
| 340 | 7.03 | 7.59 | 25.9 | 10.9 | 4.10 |
| 330 | 6.14 | 6.34 | 17.0 | 8.60 | 3.69 |
| 320 | 5.16 | 5.52 | 14.0 | 7.26 | 3.34 |
| 300 | 3.69 | 3.90 | 10.2 | 5.59 | 2.67 |
| 270 | 2.56 | 2.57 | 7.55 | 4.18 | 2.01 |
| 240 | 1.91 | 1.91 | 6.20 | 3.30 | 1.48 |
| 210 | 1.50 | 1.48 | 5.12 | 2.69 | 1.17 |
| 183 | 1.28 | 1.27 | 4.74 | 2.22 | 0.900 |
| 150 | 1.05 | 1.02 | 4.03 | 1.80 | 0.794 |
| 130 | 0.946 | 0.929 | 3.55 | 1.59 | 0.689 |
| 120 | 0.908 | 0.901 | 3.42 | 1.49 | 0.660 |
| 110 | 0.862 | 0.872 | 3.27 | 1.39 | 0.639 |
| 100 | 0.817 | 0.848 | 3.18 | 1.30 | 0.623 |
| 90 | 0.790 | 0.811 | 2.98 | 1.21 | 0.572 |
| 80 | 0.776 | 0.790 | 2.86 | 1.11 | 0.554 |
| 70 | 0.764 | 0.765 | 2.75 | 1.04 | 0.536 |
| 60 | 0.749 | 0.747 | 2.57 | 0.956 | 0.520 |
| 50 | 0.723 | 0.729 | 2.39 | 0.900 | 0.520 |
| 40 | 0.704 | 0.710 | 2.26 | 0.839 | 0.497 |
| 30 | 0.677 | 0.684 | 2.18 | 0.779 | 0.470 |
| 25 | 0.673 | 0.673 | 2.11 | 0.743 | 0.456 |
| 20 | 0.659 | 0.659 | 2.01 | 0.708 | 0.434 |
| 15 | 0.653 | 0.653 | 1.78 | 0.668 | 0.431 |
| 10 | 0.639 | 0.639 | 1.66 | 0.628 | 0.428 |
| 9 | 0.639 | 0.639 | 1.66 | 0.619 | 0.428 |
| 8 | 0.637 | 0.637 | 1.62 | 0.607 | 0.427 |
| 7 | 0.630 | 0.630 | 1.58 | 0.599 | 0.427 |
| 6 | 0.628 | 0.628 | 1.58 | 0.585 | 0.423 |
| 5 | 0.617 | 0.617 | 1.58 | 0.571 | 0.419 |
| 4 | 0.616 | 0.616 | 1.56 | 0.559 | 0.417 |
| 3 | 0.613 | 0.613 | 1.56 | 0.538 | 0.415 |
| 2 | 0.605 | 0.605 | 1.52 | 0.518 | 0.412 |
| 1 | 0.598 | 0.598 | 1.49 | 0.462 | 0.410 |
| 0 | 0.580 | 0.580 | 1.42 | 0.380 | 0.380 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Westaue

NLWKN

$A_{Eo}$ : 100 $km^2$

PNP : NN + 23.51 m

Lage: 11.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Lehringen Nr. 4898107

Gewässer : Lehrde

Gebiet : Aller

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.581 | 0.685 | 1.60 | 0.974 | 1.20 | 0.711 | 0.730 | 0.735 | 0.623 | 0.597 | 0.558 | 0.633 | 0.729 | 0.649 |
| 2. | 0.597 | 0.725 | 1.96 | 0.925 | 1.15 | 0.711 | 0.689 | 0.636 | 0.616 | 0.564 | 0.538 | 0.601 | 0.731 | 0.648 |
| 3. | 0.601 | 0.730 | 2.05 | 0.888 | 1.09 | 0.723 | 0.720 | 0.647 | 0.611 | 0.608 | 0.527 | 0.643 | 0.733 | 0.648 |
| 4. | 0.599 | 0.809 | 2.19 | 0.898 | 1.03 | 0.812 | 0.755 | 0.648 | 0.590 | 0.872 | 0.511 | 0.782 | 0.734 | 0.648 |
| 5. | 0.574 | 0.814 | 3.85 | 0.918 | 1.02 | 0.801 | 0.706 | 0.673 | 0.576 | 0.744 | 0.491 | 1.04 | 0.736 | 0.647 |
| 6. | 0.572 | 0.894 | 5.94 | 0.980 | 0.969 | 0.768 | 0.711 | 0.650 | 0.581 | 0.746 | 0.504 | 1.30 | 0.706 | 0.647 |
| 7. | 0.570 | 0.970 | 3.03 | 0.856 | 0.956 | 0.768 | 0.717 | 0.693 | 0.640 | 0.747 | 0.504 | 1.25 | 0.732 | 0.647 |
| 8. | 0.568 | 1.58 | 3.29 | 0.785 | 1.34 | 0.768 | 0.722 | 0.680 | 0.782 | 0.796 | 0.523 | 0.959 | 0.773 | 0.616 |
| 9. | 0.566 | 1.36 | 2.67 | 0.770 | 1.23 | 0.787 | 0.710 | 0.633 | 0.690 | 0.785 | 0.502 | 0.842 | 0.698 | 0.614 |
| 10. | 0.573 | 1.16 | 2.22 | 0.771 | 1.09 | 0.828 | 0.721 | 0.608 | 0.666 | 0.751 | 0.457 | 0.764 | 0.689 | 0.926 |
| 11. | 0.563 | 1.00 | 1.65 | 0.773 | 0.996 | 0.828 | 0.720 | 0.609 | 0.699 | 0.731 | 0.484 | 0.737 | 0.691 | 0.880 |
| 12. | 0.561 | 0.933 | 1.62 | 0.775 | 0.960 | 0.824 | 0.691 | 0.593 | 0.722 | 0.663 | 0.566 | 0.746 | 0.692 | 0.768 |
| 13. | 0.559 | 1.02 | 1.64 | 0.777 | 0.928 | 0.819 | 0.649 | 0.575 | 0.818 | 0.602 | 0.539 | 0.948 | 0.660 | 0.752 |
| 14. | 0.574 | 1.07 | 1.37 | 0.778 | 0.892 | 0.814 | 0.613 | 0.567 | 0.814 | 0.558 | 0.573 | 0.813 | 0.644 | 0.698 |
| 15. | 0.608 | 1.08 | 1.18 | 0.969 | 0.892 | 0.809 | 0.612 | 0.569 | 0.786 | 0.555 | 0.582 | 0.736 | 0.645 | 1.10 |
| 16. | 0.607 | 1.38 | 1.07 | 0.946 | 0.892 | 0.805 | 0.611 | 0.610 | 0.747 | 0.586 | 0.545 | 0.697 | 0.647 | 1.23 |
| 17. | 0.605 | 2.19 | 1.06 | 1.02 | 0.892 | 0.800 | 0.610 | 0.591 | 0.793 | 0.603 | 0.531 | 0.675 | 0.648 | 1.07 |
| 18. | 0.603 | 1.51 | 1.00 | 1.09 | 0.881 | 0.795 | 0.638 | 0.579 | 1.10 | 0.560 | 0.531 | 0.673 | 0.650 | 0.946 |
| 19. | 0.601 | 1.34 | 1.54 | 1.27 | 0.827 | 0.790 | 0.647 | 0.555 | 1.27 | 0.536 | 0.529 | 0.671 | 0.651 | 0.922 |
| 20. | 0.600 | 1.17 | 2.19 | 1.25 | 0.803 | 0.785 | 0.645 | 0.555 | 1.11 | 0.536 | 0.528 | 0.670 | 0.652 | 0.814 |
| 21. | 0.603 | 1.31 | 2.11 | 1.16 | 0.767 | 0.780 | 0.618 | 0.534 | 0.896 | 0.557 | 0.522 | 0.668 | 0.653 | 0.757 |
| 22. | 0.608 | 1.30 | 3.64 | 1.36 | 0.767 | 0.776 | 0.587 | 0.512 | 0.766 | 0.578 | 0.518 | 0.666 | 0.652 | 0.702 |
| 23. | 0.612 | 1.38 | 4.04 | 1.37 | 0.767 | 0.820 | 0.569 | 0.488 | 0.719 | 0.546 | 0.523 | 0.664 | 0.652 | 1.60 |
| 24. | 0.617 | 1.52 | 3.66 | 1.52 | 0.767 | 0.802 | 0.542 | 0.546 | 0.639 | 0.560 | 0.614 | 0.663 | 0.651 | 1.91 |
| 25. | 0.621 | 1.43 | 2.26 | 1.72 | 0.747 | 0.770 | 0.533 | 0.726 | 0.604 | 0.578 | 0.716 | 0.663 | 0.651 | 1.30 |
| 26. | 0.626 | 1.25 | 1.69 | 1.42 | 0.711 | 0.768 | 0.531 | 0.798 | 0.604 | 0.607 | 0.719 | 0.665 | 0.651 | 1.38 |
| 27. | 0.631 | 1.12 | 1.50 | 1.27 | 0.711 | 0.741 | 0.526 | 0.690 | 0.580 | 0.626 | 0.768 | 0.667 | 0.675 | 1.21 |
| 28. | 0.635 | 0.986 | 1.37 | 1.24 | 0.711 | 0.753 | 0.517 | 0.751 | 0.648 | 0.583 | 0.722 | 0.668 | 0.697 | 1.07 |
| 29. | 0.640 | 0.939 | 1.28 | 1.24 | 0.711 | 0.786 | 0.514 | 0.679 | 0.662 | 0.546 | 0.708 | 0.670 | 0.679 | 0.957 |
| 30. | 0.699 | 2.25 | 1.16 | | 0.711 | 0.741 | 0.510 | 0.693 | 0.630 | 0.536 | 0.681 | 0.720 | 0.701 | 0.957 |
| 31. | | 1.87 | 1.05 | | 0.711 | | 0.581 | | 0.631 | 0.556 | | 0.728 | | 0.889 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13. | 1. | 18. | 9. | 26.+ | 1.+ | 30. | 23. | 5. | 19.+ | 10. | 2. | 14. | 9. |
| NQ | 0.559 | 0.685 | 1.00 | 0.770 | 0.711 | 0.711 | 0.510 | 0.488 | 0.576 | 0.536 | 0.457 | 0.601 | 0.644 | 0.614 |
| MQ | 0.599 | 1.22 | 2.16 | 1.06 | 0.907 | 0.783 | 0.634 | 0.627 | 0.730 | 0.626 | 0.567 | 0.762 | 0.683 | 0.923 |
| HQ | 0.699 | 2.86 | 6.55 | 1.84 | 1.43 | 0.833 | 0.756 | 0.930 | 1.67 | 1.00 | 0.770 | 1.59 | 0.801 | 2.83 |
| Tag | 30. | 30. | 6. | 25. | 8. | 23. | 4. | 26. | 18. | 4. | 26. | 6. | 8. | 24. |
| $h_N$ mm / $h_A$ mm | 16 | 33 | 58 | 27 | 24 | 20 | 17 | 16 | 20 | 17 | 15 | 20 | 18 | 25 |
| | 1954/2011 | | 1955/2012 58 Jahre | | | | | | | | | | | |
| Jahr | 1997 | 1991 | 1996 | 1960 | 1973 | 1960 | 1960 | 2011 | 1999 | 1999 | 1993 | 1993 | 1997 | 1991 |
| NQ | 0.467 | 0.490 | 0.550 | 0.610 | 0.530 | 0.540 | 0.380 | 0.393 | 0.356 | 0.288 | 0.273 | 0.384 | 0.467 | 0.490 |
| MNQ | 0.759 | 0.836 | 0.905 | 0.948 | 0.914 | 0.823 | 0.713 | 0.623 | 0.580 | 0.579 | 0.626 | 0.660 | 0.750 | 0.827 |
| MQ | 1.01 | 1.22 | 1.34 | 1.31 | 1.26 | 1.06 | 0.900 | 0.801 | 0.786 | 0.762 | 0.784 | 0.840 | 0.990 | 1.20 |
| MHQ | 2.00 | 2.97 | 3.49 | 2.93 | 2.88 | 1.93 | 1.62 | 1.68 | 1.93 | 1.71 | 1.39 | 1.66 | 1.95 | 2.92 |
| HQ | 5.25 | 9.10 | 13.4 | 9.57 | 10.8 | 5.28 | 4.17 | 4.26 | 14.4 | 8.12 | 4.68 | 8.43 | 5.25 | 9.10 |
| Jahr | 2002 | 1960 | 1955 | 1970 | 1956 | 1994 | 1975 | 1984 | 2002 | 2002 | 2001 | 1998 | 2002 | 1960 |
| $Mh_N$ mm / $Mh_A$ mm | 26 | 33 | 36 | 33 | 34 | 27 | 24 | 21 | 21 | 20 | 20 | 22 | 26 | 32 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.457 | am 10.09.2012 | 0.559 | 0.457 | 0.457 | am 10.09.2012 |
| MQ $m^3/s$ | 0.891 | | 1.13 | 0.658 | 0.873 | |
| HQ $m^3/s$ | 6.55 | am 06.01.2012 bei W= 103 cm | 6.55 | 1.67 | 6.55 | am 06.01.2012 bei W= 103 cm |
| Nq $l/(s km^2)$ | 4.57 | | 5.59 | 4.57 | 4.57 | |
| Mq $l/(s km^2)$ | 8.91 | | 11.3 | 6.58 | 8.73 | |
| Hq $l/(s km^2)$ | 65.5 | | 65.5 | 16.7 | 65.5 | |
| $h_N$ mm / $h_A$ mm | 282 | | 178 | 105 | 276 | |
| | 1955/2012 (*) 58 Jahre | | | | 1955/2012 | |
| NQ $m^3/s$ | 0.273 | am 21.09.1993 | 0.467 | 0.273 | 0.273 | am 21.09.1993 |
| MNQ $m^3/s$ | 0.510 | | 0.684 | 0.516 | 0.512 | |
| MQ $m^3/s$ | 1.00 | | 1.20 | 0.812 | 1.00 | |
| MHQ $m^3/s$ | 5.54 | | 5.07 | 3.11 | 5.61 | |
| HQ $m^3/s$ | 14.4 | am 19.07.2002 bei W= 168 cm | 13.4 | 14.4 | 14.4 | am 19.07.2002 bei W= 168 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 5.10 | | 6.84 | 5.16 | 5.12 | |
| Mq $l/(s km^2)$ | 10.0 | | 12.0 | 8.12 | 10.0 | |
| MHq $l/(s km^2)$ | 55.4 | | 50.7 | 31.1 | 56.1 | |
| $Mh_N$ mm / $Mh_A$ mm | 316 | | 189 | 129 | 316 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.273 | 2.73 | 21.09.1993 | 14.4 | 144 | 168 | 19.07.2002 |
| 2 | 0.288 | 2.88 | 03.08.1999 | 10.5 | 105 | 140 | 22.01.2008 |
| 3 | 0.310 | 3.10 | 16.08.1976 | 9.57 | 95.7 | 166 | 23.02.1970 |
| 4 | 0.352 | 3.52 | 11.08.1992 | 9.10 | 91.0 | 147 | 05.12.1960 |
| 5 | 0.362 | 3.62 | 27.08.1996 | 9.09 | 90.9 | 160 | 16.01.1968 |
| 6 | 0.364 | 3.64 | 21.07.2010 | 8.85 | 88.4 | 125 | 28.01.2008 |
| 7 | 0.391 | 3.91 | 19.09.1997 | 8.43 | 84.3 | 150 | 29.10.1998 |
| 8 | 0.393 | 3.93 | 05.06.2011 | 8.12 | 81.2 | 132 | 01.08.2002 |
| 9 | 0.400 | 4.00 | 14.09.1973 | 7.96 | 79.6 | 140 | 12.03.1981 |
| 10 | 0.408 | 4.08 | 11.08.1998 | 7.59 | 75.9 | 144 | 04.03.1979 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1955/2012 58 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 5.94 | 5.94 | | | |
| 364 | 4.04 | 4.04 | 11.7 | 3.95 | 1.50 |
| 363 | 3.85 | 3.85 | 7.71 | 3.40 | 1.50 |
| 362 | 3.66 | 3.66 | 6.70 | 3.06 | 1.47 |
| 361 | 3.64 | 3.64 | 5.14 | 2.89 | 1.45 |
| 360 | 3.29 | 3.29 | 4.59 | 2.70 | 1.45 |
| 359 | 3.03 | 3.03 | 4.45 | 2.56 | 1.45 |
| 358 | 2.67 | 2.67 | 3.62 | 2.45 | 1.35 |
| 357 | 2.26 | 2.26 | 3.59 | 2.36 | 1.33 |
| 356 | 2.25 | 2.22 | 3.59 | 2.28 | 1.29 |
| 350 | 2.05 | 1.91 | 3.05 | 1.98 | 1.19 |
| 340 | 1.54 | 1.50 | 2.48 | 1.71 | 1.00 |
| 330 | 1.38 | 1.28 | 2.21 | 1.56 | 0.824 |
| 320 | 1.28 | 1.21 | 2.12 | 1.45 | 0.807 |
| 300 | 1.10 | 1.03 | 1.85 | 1.30 | 0.775 |
| 270 | 0.918 | 0.872 | 1.69 | 1.15 | 0.741 |
| 240 | 0.801 | 0.786 | 1.56 | 1.03 | 0.713 |
| 210 | 0.768 | 0.752 | 1.44 | 0.941 | 0.680 |
| 183 | 0.723 | 0.721 | 1.37 | 0.873 | 0.646 |
| 150 | 0.681 | 0.691 | 1.30 | 0.804 | 0.610 |
| 130 | 0.650 | 0.665 | 1.26 | 0.769 | 0.573 |
| 120 | 0.639 | 0.653 | 1.25 | 0.751 | 0.556 |
| 110 | 0.630 | 0.649 | 1.25 | 0.731 | 0.549 |
| 100 | 0.612 | 0.648 | 1.20 | 0.712 | 0.525 |
| 90 | 0.608 | 0.636 | 1.20 | 0.699 | 0.517 |
| 80 | 0.602 | 0.613 | 1.17 | 0.679 | 0.492 |
| 70 | 0.583 | 0.607 | 1.16 | 0.661 | 0.472 |
| 60 | 0.575 | 0.586 | 1.15 | 0.641 | 0.464 |
| 50 | 0.567 | 0.575 | 1.13 | 0.613 | 0.453 |
| 40 | 0.559 | 0.560 | 1.10 | 0.591 | 0.435 |
| 30 | 0.542 | 0.542 | 1.07 | 0.561 | 0.421 |
| 25 | 0.538 | 0.538 | 1.06 | 0.542 | 0.411 |
| 20 | 0.533 | 0.533 | 1.04 | 0.525 | 0.396 |
| 15 | 0.526 | 0.526 | 1.01 | 0.501 | 0.387 |
| 10 | 0.514 | 0.514 | 0.974 | 0.473 | 0.373 |
| 9 | 0.512 | 0.512 | 0.974 | 0.471 | 0.369 |
| 8 | 0.511 | 0.511 | 0.974 | 0.462 | 0.360 |
| 7 | 0.510 | 0.510 | 0.974 | 0.460 | 0.357 |
| 6 | 0.510 | 0.510 | 0.974 | 0.451 | 0.353 |
| 5 | 0.510 | 0.510 | 0.974 | 0.440 | 0.345 |
| 4 | 0.502 | 0.502 | 0.974 | 0.431 | 0.329 |
| 3 | 0.491 | 0.491 | 0.974 | 0.422 | 0.289 |
| 2 | 0.488 | 0.488 | 0.970 | 0.412 | 0.284 |
| 1 | 0.484 | 0.484 | 0.970 | 0.385 | 0.281 |
| 0 | 0.457 | 0.457 | 0.925 | 0.273 | 0.273 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Südheide

NLWKN

$A_{Eo}$ : 103 $km^2$

PNP : NN + 10.00 m

Lage: 12.4 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Holzkamp Nr. 4928107

Gewässer : Delme

Gebiet : Mittelweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.513 | 0.443 | 1.72 | 0.430 | 1.25 | 0.602 | 0.536 | 0.742 | 0.408 | 0.438 | 0.533 | 0.423 | 0.457 | 0.494 |
| 2. | 0.514 | 0.694 | 2.85 | 0.499 | 1.14 | 0.572 | 0.517 | 0.537 | 0.418 | 0.397 | 0.467 | 0.400 | 0.523 | 0.519 |
| 3. | 0.485 | 0.679 | 3.70 | 0.619 | 1.05 | 0.576 | 0.748 | 0.487 | 0.415 | 0.386 | 0.435 | 0.416 | 0.530 | 0.577 |
| 4. | 0.455 | 0.738 | 3.76 | 0.684 | 0.986 | 0.581 | 0.886 | 0.502 | 0.399 | 0.355 | 0.423 | 1.01 | 0.553 | 0.602 |
| 5. | 0.466 | 0.629 | 4.25 | 0.641 | 0.972 | 0.578 | 0.641 | 0.565 | 0.382 | 0.354 | 0.379 | 1.44 | 0.644 | 0.618 |
| 6. | 0.445 | 0.931 | 5.23 | 0.571 | 0.904 | 0.552 | 0.588 | 0.510 | 0.377 | 0.392 | 0.372 | 1.90 | 0.626 | 0.581 |
| 7. | 0.442 | 0.984 | 4.14 | 0.620 | 0.867 | 0.556 | 0.566 | 0.497 | 0.371 | 0.511 | 0.364 | 1.72 | 0.627 | 0.508 |
| 8. | 0.454 | 2.31 | 3.40 | 0.497 | 1.56 | 0.561 | 0.560 | 0.700 | 0.369 | 0.548 | 0.357 | 0.932 | 0.665 | 0.451 |
| 9. | 0.447 | 2.28 | 3.48 | 0.499 | 1.26 | 0.591 | 0.565 | 0.730 | 0.537 | 0.540 | 0.349 | 0.675 | 0.628 | 0.550 |
| 10. | 0.425 | 1.81 | 2.71 | 0.501 | 1.04 | 0.840 | 0.764 | 0.505 | 0.458 | 0.461 | 0.354 | 0.546 | 0.598 | 1.77 |
| 11. | 0.430 | 1.00 | 2.01 | 0.503 | 0.968 | 0.788 | 0.744 | 0.456 | 0.407 | 0.448 | 0.358 | 0.486 | 0.585 | 1.22 |
| 12. | 0.435 | 0.642 | 1.93 | 0.505 | 0.906 | 0.702 | 0.644 | 0.430 | 0.403 | 0.417 | 0.458 | 0.464 | 0.565 | 0.798 |
| 13. | 0.440 | 0.759 | 2.31 | 0.515 | 0.867 | 0.660 | 0.562 | 0.416 | 0.471 | 0.400 | 0.522 | 0.673 | 0.529 | 0.721 |
| 14. | 0.445 | 1.41 | 1.91 | 0.579 | 0.843 | 0.619 | 0.550 | 0.390 | 0.504 | 0.362 | 0.473 | 0.579 | 0.505 | 0.633 |
| 15. | 0.451 | 1.90 | 1.53 | 0.813 | 0.807 | 0.618 | 0.536 | 0.382 | 0.563 | 0.335 | 0.448 | 0.475 | 0.483 | 1.41 |
| 16. | 0.456 | 2.05 | 1.30 | 0.770 | 0.744 | 0.581 | 0.535 | 0.373 | 0.547 | 0.535 | 0.479 | 0.456 | 0.463 | 1.55 |
| 17. | 0.461 | 3.15 | 1.23 | 0.817 | 0.734 | 0.547 | 0.535 | 0.436 | 0.817 | 0.708 | 0.429 | 0.446 | 0.463 | 1.25 |
| 18. | 0.444 | 3.30 | 1.15 | 0.962 | 0.734 | 0.548 | 0.510 | 0.383 | 0.685 | 0.471 | 0.360 | 0.410 | 0.479 | 1.10 |
| 19. | 0.425 | 1.66 | 1.59 | 1.39 | 0.678 | 0.551 | 0.493 | 0.368 | 0.692 | 0.397 | 0.357 | 0.392 | 0.588 | 0.994 |
| 20. | 0.430 | 1.31 | 2.48 | 1.14 | 0.643 | 0.586 | 0.531 | 0.359 | 0.733 | 0.364 | 0.354 | 0.398 | 0.569 | 0.787 |
| 21. | 0.435 | 1.37 | 2.90 | 0.963 | 0.632 | 0.552 | 0.500 | 0.340 | 0.565 | 0.363 | 0.351 | 0.405 | 0.518 | 0.686 |
| 22. | 0.441 | 1.35 | 3.78 | 0.964 | 0.636 | 0.603 | 0.484 | 0.322 | 0.474 | 0.361 | 0.348 | 0.412 | 0.501 | 0.602 |
| 23. | 0.446 | 1.83 | 5.84 | 1.07 | 0.641 | 0.720 | 0.474 | 0.313 | 0.433 | 0.358 | 0.345 | 0.419 | 0.500 | 1.89 |
| 24. | 0.451 | 1.83 | 7.46 | 1.35 | 0.642 | 0.639 | 0.450 | 0.364 | 0.361 | 0.352 | 0.611 | 0.425 | 0.535 | 2.71 |
| 25. | 0.456 | 1.81 | 3.51 | 1.80 | 0.612 | 0.664 | 0.436 | 0.858 | 0.326 | 0.414 | 0.847 | 0.432 | 0.594 | 2.41 |
| 26. | 0.461 | 1.36 | 2.16 | 1.58 | 0.580 | 0.614 | 0.436 | 0.562 | 0.320 | 0.557 | 0.575 | 0.434 | 0.599 | 2.63 |
| 27. | 0.466 | 1.17 | 1.77 | 1.40 | 0.583 | 0.556 | 0.436 | 0.476 | 0.314 | 0.763 | 0.562 | 0.435 | 0.660 | 1.87 |
| 28. | 0.455 | 1.03 | 1.57 | 1.37 | 0.587 | 0.564 | 0.437 | 0.518 | 0.719 | 0.547 | 0.596 | 0.415 | 0.626 | 1.42 |
| 29. | 0.433 | 1.08 | 1.26 | 1.32 | 0.592 | 0.590 | 0.437 | 0.458 | 0.839 | 0.496 | 0.522 | 0.398 | 0.570 | 1.02 |
| 30. | 0.438 | 2.62 | 0.974 | | 0.596 | 0.555 | 0.424 | 0.420 | 0.573 | 0.465 | 0.473 | 0.439 | 0.537 | 0.957 |
| 31. | | 2.46 | 0.656 | | 0.601 | | 0.461 | | 0.501 | 0.466 | | 0.484 | | 0.860 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 10.+ | 1. | 31. | 1. | 26. | 17. | 30. | 23. | 27. | 15. | 23. | 19. | 1. | 8. |
| NQ | 0.425 | 0.443 | 0.656 | 0.430 | 0.580 | 0.547 | 0.424 | 0.313 | 0.314 | 0.335 | 0.345 | 0.392 | 0.457 | 0.451 |
| MQ | 0.452 | 1.50 | 2.73 | 0.875 | 0.828 | 0.609 | 0.548 | 0.480 | 0.496 | 0.450 | 0.450 | 0.611 | 0.557 | 1.10 |
| HQ | 0.527 | 3.76 | 9.70 | 1.90 | 1.83 | 0.884 | 1.17 | 1.13 | 1.42 | 1.10 | 0.992 | 2.34 | 0.666 | 2.89 |
| Tag | 2. | 18. | 24. | 25. | 8. | 10. | 3. | 8. | 28. | 27. | 24. | 6. | 27. | 24. |
| $h_N$ mm / $h_A$ mm | 11 | 39 | 71 | 21 | 22 | 15 | 14 | 12 | 13 | 12 | 11 | 16 | 14 | 29 |
| | 1966/2011 | | 1967/2012 46 Jahre | | | | | | | | | | | |
| Jahr | 2009 | 1968 | 1973 | 1970 | 1972 | 1996 | 1971 | 1970 | 2006 | 1973 | 1969 | 2009 | 2009 | 1968 |
| NQ | 0.298 | 0.370 | 0.310 | 0.400 | 0.380 | 0.413 | 0.350 | 0.270 | 0.235 | 0.200 | 0.210 | 0.308 | 0.298 | 0.370 |
| MNQ | 0.596 | 0.656 | 0.766 | 0.776 | 0.765 | 0.646 | 0.504 | 0.426 | 0.387 | 0.383 | 0.424 | 0.501 | 0.592 | 0.643 |
| MQ | 0.980 | 1.25 | 1.53 | 1.41 | 1.37 | 0.995 | 0.739 | 0.620 | 0.594 | 0.553 | 0.612 | 0.761 | 0.964 | 1.22 |
| MHQ | 2.45 | 3.37 | 4.50 | 3.75 | 3.96 | 2.33 | 1.83 | 1.85 | 1.89 | 1.62 | 1.44 | 2.26 | 2.39 | 3.30 |
| HQ | 8.14 | 7.74 | 16.2 | 14.0 | 14.6 | 10.1 | 5.57 | 8.98 | 9.14 | 9.40 | 6.46 | 25.7 | 8.14 | 7.74 |
| Jahr | 2002 | 2002 | 1968 | 1970 | 1979 | 1994 | 2004 | 1996 | 1981 | 2002 | 1993 | 1998 | 2002 | 2002 |
| $Mh_N$ mm / $Mh_A$ mm | 25 | 33 | 40 | 34 | 36 | 25 | 19 | 16 | 15 | 14 | 15 | 20 | 24 | 32 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.313 | am 23.06.2012 | 0.425 | 0.313 | 0.313 | am 23.06.2012 |
| MQ $m^3/s$ | 0.839 | | 1.18 | 0.506 | 0.814 | |
| HQ $m^3/s$ | 9.70 | am 24.01.2012 bei W= 387 cm | 9.70 | 2.34 | 9.70 | am 24.01.2012 bei W= 387 cm |
| Nq $l/(s km^2)$ | 3.04 | | 4.13 | 3.04 | 3.04 | |
| Mq $l/(s km^2)$ | 8.15 | | 11.5 | 4.91 | 7.90 | |
| Hq $l/(s km^2)$ | 94.2 | | 94.2 | 22.7 | 94.2 | |
| $h_N$ mm / $h_A$ mm | 258 | | 180 | 78 | 250 | |
| | 1967/2012 (*) 46 Jahre | | | | 1967/2012 | |
| NQ $m^3/s$ | 0.200 | am 13.08.1973 | 0.298 | 0.200 | 0.200 | am 13.08.1973 |
| MNQ $m^3/s$ | 0.334 | | 0.507 | 0.336 | 0.332 | |
| MQ $m^3/s$ | 0.949 | | 1.26 | 0.647 | 0.945 | |
| MHQ $m^3/s$ | 7.15 | | 6.48 | 3.85 | 7.20 | |
| HQ $m^3/s$ | 25.7 | am 29.10.1998 bei W= 460 cm | 16.2 | 25.7 | 25.7 | am 29.10.1998 bei W= 460 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.24 | | 4.92 | 3.26 | 3.22 | |
| Mq $l/(s km^2)$ | 9.21 | | 12.2 | 6.28 | 9.17 | |
| MHq $l/(s km^2)$ | 69.4 | | 62.9 | 37.4 | 69.9 | |
| $Mh_N$ mm / $Mh_A$ mm | 291 | | 192 | 100 | 290 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.200 | 1.94 | 13.08.1973 | 25.7 | 250 | 460 | 29.10.1998 |
| 2 | 0.210 | 2.04 | 10.09.1969 | 16.2 | 157 | 414 | 16.01.1968 |
| 3 | 0.235 | 2.28 | 27.07.2006 | 14.6 | 142 | 408 | 04.03.1979 |
| 4 | 0.236 | 2.29 | 24.09.2009 | 14.2 | 138 | 408 | 12.03.1981 |
| 5 | 0.240 | 2.33 | 22.07.1972 | 14.1 | 137 | 415 | 22.01.2008 |
| 6 | 0.260 | 2.52 | 21.08.1974 | 14.0 | 136 | 404 | 24.02.1970 |
| 7 | 0.270 | 2.62 | 12.07.1976 | 10.8 | 105 | 388 | 20.03.1994 |
| 8 | 0.270 | 2.62 | 02.08.1971 | 10.1 | 98.1 | 383 | 06.04.1994 |
| 9 | 0.270 | 2.62 | 22.06.1970 | 9.70 | 94.2 | 387 | 24.01.2012 |
| 10 | 0.281 | 2.73 | 14.07.2010 | 9.40 | 91.3 | 384 | 26.08.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1967/2012 46 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 7.46 | 7.46 | | | |
| 364 | 5.84 | 5.84 | 20.4 | 5.59 | 2.09 |
| 363 | 5.23 | 5.23 | 11.7 | 4.79 | 1.72 |
| 362 | 4.25 | 4.25 | 11.4 | 4.35 | 1.70 |
| 361 | 4.14 | 4.14 | 9.75 | 4.01 | 1.68 |
| 360 | 3.78 | 3.78 | 8.41 | 3.75 | 1.60 |
| 359 | 3.76 | 3.76 | 6.14 | 3.60 | 1.60 |
| 358 | 3.70 | 3.70 | 5.90 | 3.39 | 1.60 |
| 357 | 3.51 | 3.51 | 5.58 | 3.23 | 1.54 |
| 356 | 3.48 | 3.48 | 5.09 | 3.10 | 1.53 |
| 350 | 2.71 | 2.63 | 4.50 | 2.55 | 1.36 |
| 340 | 1.93 | 1.87 | 3.70 | 2.05 | 1.13 |
| 330 | 1.77 | 1.55 | 3.25 | 1.75 | 1.03 |
| 320 | 1.40 | 1.30 | 2.51 | 1.55 | 0.961 |
| 300 | 1.05 | 0.968 | 1.99 | 1.29 | 0.800 |
| 270 | 0.770 | 0.742 | 1.69 | 1.04 | 0.697 |
| 240 | 0.643 | 0.639 | 1.50 | 0.876 | 0.600 |
| 210 | 0.583 | 0.590 | 1.25 | 0.771 | 0.551 |
| 183 | 0.551 | 0.563 | 1.13 | 0.701 | 0.515 |
| 150 | 0.502 | 0.530 | 0.948 | 0.625 | 0.480 |
| 130 | 0.474 | 0.502 | 0.885 | 0.587 | 0.467 |
| 120 | 0.464 | 0.494 | 0.847 | 0.571 | 0.451 |
| 110 | 0.456 | 0.475 | 0.830 | 0.551 | 0.435 |
| 100 | 0.447 | 0.464 | 0.795 | 0.534 | 0.426 |
| 90 | 0.439 | 0.457 | 0.771 | 0.514 | 0.413 |
| 80 | 0.436 | 0.437 | 0.735 | 0.497 | 0.392 |
| 70 | 0.429 | 0.432 | 0.720 | 0.481 | 0.366 |
| 60 | 0.417 | 0.417 | 0.700 | 0.463 | 0.359 |
| 50 | 0.403 | 0.403 | 0.684 | 0.446 | 0.350 |
| 40 | 0.390 | 0.390 | 0.661 | 0.429 | 0.332 |
| 30 | 0.369 | 0.369 | 0.649 | 0.405 | 0.321 |
| 25 | 0.363 | 0.363 | 0.634 | 0.392 | 0.307 |
| 20 | 0.359 | 0.359 | 0.612 | 0.378 | 0.305 |
| 15 | 0.355 | 0.355 | 0.610 | 0.361 | 0.295 |
| 10 | 0.351 | 0.351 | 0.594 | 0.344 | 0.270 |
| 9 | 0.349 | 0.349 | 0.594 | 0.339 | 0.269 |
| 8 | 0.348 | 0.348 | 0.589 | 0.332 | 0.250 |
| 7 | 0.345 | 0.345 | 0.585 | 0.330 | 0.250 |
| 6 | 0.340 | 0.340 | 0.584 | 0.321 | 0.250 |
| 5 | 0.335 | 0.335 | 0.582 | 0.314 | 0.250 |
| 4 | 0.326 | 0.326 | 0.580 | 0.306 | 0.240 |
| 3 | 0.322 | 0.322 | 0.580 | 0.300 | 0.220 |
| 2 | 0.320 | 0.320 | 0.540 | 0.291 | 0.210 |
| 1 | 0.314 | 0.314 | 0.540 | 0.273 | 0.210 |
| 0 | 0.313 | 0.313 | 0.530 | 0.200 | 0.200 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
gelegen in der Hydrologischen Landschaft Wildeshauser Geest

NLWKN

$A_{Eo}$ : 248 $km^2$

PNP : NN + 25.66 m

Lage: 78.4 km oberhalb der Mündung links

Q

$m^3/s$

Pegel : Lauenbrück B 75 Nr. 4941116

Gewässer : Wümme

Gebiet : Lesum

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.70 | 1.45 | 5.05 | 3.07 | 4.04 | 1.74 | 1.41 | 1.52 | 1.01 | 0.753 | 0.709 | 0.856 | 1.22 | 1.35 |
| 2. | 1.64 | 1.73 | 5.87 | 2.84 | 3.74 | 1.79 | 1.37 | 1.32 | 0.937 | 0.707 | 0.657 | 0.794 | 1.28 | 1.38 |
| 3. | 1.60 | 1.92 | 6.49 | 2.55 | 3.42 | 1.83 | 1.31 | 1.22 | 0.876 | 0.644 | 0.613 | 0.795 | 1.31 | 1.42 |
| 4. | 1.61 | 2.31 | 9.15 | 2.44 | 3.21 | 1.86 | 1.27 | 1.15 | 0.836 | 0.714 | 0.607 | 1.01 | 1.40 | 1.48 |
| 5. | 1.57 | 2.71 | 11.0 | 2.48 | 2.98 | 1.80 | 1.27 | 1.15 | 0.763 | 0.742 | 0.573 | 1.57 | 1.56 | 1.56 |
| 6. | 1.54 | 3.81 | 12.8 | 2.61 | 2.74 | 1.75 | 1.24 | 1.12 | 0.756 | 0.758 | 0.540 | 2.22 | 1.57 | 1.53 |
| 7. | 1.53 | 4.79 | 13.2 | 2.55 | 2.61 | 1.87 | 1.25 | 1.20 | 0.755 | 0.814 | 0.570 | 2.51 | 1.68 | 1.43 |
| 8. | 1.54 | 7.54 | 13.2 | 2.32 | 3.47 | 1.83 | 1.28 | 1.29 | 0.733 | 0.835 | 0.574 | 1.97 | 1.90 | 1.34 |
| 9. | 1.50 | 9.35 | 13.1 | 2.10 | 3.42 | 1.75 | 1.25 | 1.19 | 0.715 | 0.849 | 0.574 | 1.68 | 1.79 | 1.38 |
| 10. | 1.47 | 11.0 | 12.5 | 2.05 | 3.08 | 2.02 | 1.29 | 1.08 | 0.715 | 0.832 | 0.537 | 1.51 | 1.68 | 2.18 |
| 11. | 1.46 | 10.5 | 10.9 | 1.99 | 2.83 | 2.04 | 1.56 | 1.04 | 0.795 | 0.812 | 0.498 | 1.41 | 1.64 | 2.33 |
| 12. | 1.42 | 8.72 | 9.32 | 1.95 | 2.66 | 1.96 | 1.34 | 1.01 | 0.859 | 0.797 | 0.528 | 1.36 | 1.58 | 2.06 |
| 13. | 1.40 | 7.64 | 9.02 | 1.98 | 2.55 | 1.84 | 1.25 | 1.00 | 0.859 | 0.693 | 0.544 | 1.62 | 1.47 | 1.88 |
| 14. | 1.37 | 7.16 | 8.91 | 2.10 | 2.44 | 1.73 | 1.25 | 0.960 | 0.903 | 0.612 | 0.544 | 1.69 | 1.43 | 1.77 |
| 15. | 1.37 | 7.23 | 7.42 | 3.10 | 2.39 | 1.66 | 1.26 | 0.899 | 1.08 | 0.596 | 0.583 | 1.57 | 1.38 | 2.72 |
| 16. | 1.37 | 7.20 | 6.45 | 2.83 | 2.30 | 1.62 | 1.30 | 0.957 | 1.08 | 0.591 | 0.612 | 1.47 | 1.35 | 3.40 |
| 17. | 1.37 | 9.14 | 5.59 | 3.37 | 2.22 | 1.56 | 1.25 | 1.06 | 1.13 | 0.662 | 0.555 | 1.40 | 1.33 | 3.38 |
| 18. | 1.37 | 9.20 | 4.81 | 3.76 | 2.19 | 1.57 | 1.22 | 0.949 | 1.22 | 0.650 | 0.552 | 1.34 | 1.30 | 3.08 |
| 19. | 1.37 | 9.38 | 5.40 | 4.75 | 2.08 | 1.54 | 1.20 | 0.899 | 1.26 | 0.578 | 0.553 | 1.28 | 1.34 | 2.78 |
| 20. | 1.36 | 8.70 | 8.16 | 5.04 | 2.00 | 1.53 | 1.12 | 0.894 | 1.29 | 0.532 | 0.534 | 1.22 | 1.38 | 2.45 |
| 21. | 1.36 | 7.96 | 11.0 | 4.67 | 1.96 | 1.49 | 1.05 | 0.882 | 1.21 | 0.546 | 0.521 | 1.16 | 1.34 | 2.21 |
| 22. | 1.36 | 7.43 | 11.9 | 5.27 | 1.94 | 1.50 | 0.998 | 0.782 | 1.08 | 0.565 | 0.491 | 1.16 | 1.32 | 2.00 |
| 23. | 1.36 | 7.44 | 13.0 | 5.43 | 1.91 | 1.59 | 0.963 | 0.764 | 0.984 | 0.564 | 0.507 | 1.17 | 1.29 | 2.67 |
| 24. | 1.36 | 7.30 | 13.6 | 5.57 | 1.88 | 1.59 | 0.886 | 0.795 | 0.882 | 0.531 | 0.637 | 1.17 | 1.29 | 4.17 |
| 25. | 1.36 | 7.38 | 12.8 | 6.02 | 1.81 | 1.60 | 0.811 | 1.15 | 0.783 | 0.581 | 0.804 | 1.17 | 1.35 | 4.34 |
| 26. | 1.35 | 6.73 | 10.4 | 5.56 | 1.77 | 1.56 | 0.805 | 1.25 | 0.747 | 0.623 | 0.902 | 1.17 | 1.41 | 5.02 |
| 27. | 1.40 | 6.06 | 8.12 | 4.97 | 1.75 | 1.50 | 0.819 | 1.18 | 0.709 | 0.639 | 1.02 | 1.20 | 1.46 | 4.97 |
| 28. | 1.56 | 5.27 | 6.53 | 4.63 | 1.72 | 1.48 | 0.808 | 1.16 | 0.691 | 0.640 | 1.07 | 1.16 | 1.51 | 4.50 |
| 29. | 1.55 | 4.57 | 5.36 | 4.35 | 1.70 | 1.52 | 0.783 | 1.05 | 0.789 | 0.640 | 1.00 | 1.14 | 1.48 | 3.66 |
| 30. | 1.50 | 5.01 | 4.41 | | 1.71 | 1.46 | 0.784 | 1.12 | 0.827 | 0.605 | 0.910 | 1.16 | 1.41 | 3.28 |
| 31. | | 5.24 | 3.55 | | 1.77 | | 0.870 | | 0.819 | 0.606 | | 1.22 | | 3.24 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 1. | 31. | 12. | 29. | 30. | 29. | 23. | 28. | 24. | 22. | 2. | 1. | 8. |
| NQ | 1.35 | 1.45 | 3.55 | 1.95 | 1.70 | 1.46 | 0.783 | 0.764 | 0.691 | 0.531 | 0.491 | 0.794 | 1.22 | 1.34 |
| MQ | 1.46 | 6.51 | 9.00 | 3.53 | 2.46 | 1.69 | 1.14 | 1.07 | 0.906 | 0.668 | 0.644 | 1.36 | 1.45 | 2.61 |
| HQ | 1.75 | 11.2 | 13.6 | 6.08 | 4.21 | 2.26 | 1.71 | 1.57 | 1.29 | 0.849 | 1.08 | 2.74 | 1.90 | 5.04 |
| Tag | 1. | 10. | 25. | 25. | 1. | 10. | 11. | 1. | 19. | 8. | 28. | 7. | 8. | 26. |
| $h_N$ mm / $h_A$ mm | 15 | 70 | 97 | 36 | 27 | 18 | 12 | 11 | 10 | 7 | 7 | 15 | 15 | 28 |
| | 1968/2011 | | 1969/2012 44 Jahre | | | | | | | | | | | |
| Jahr | 1976 | 1969 | 1970 | 1996 | 1972 | 1974 | 1971 | 2011 | 1976 | 1992 | 1976 | 1992 | 1976 | 1969 |
| NQ | 0.550 | 0.790 | 0.840 | 1.05 | 0.990 | 0.970 | 0.630 | 0.443 | 0.260 | 0.192 | 0.320 | 0.416 | 0.550 | 0.790 |
| MNQ | 1.38 | 1.68 | 1.98 | 1.99 | 2.01 | 1.58 | 1.05 | 0.804 | 0.714 | 0.689 | 0.750 | 0.985 | 1.37 | 1.69 |
| MQ | 2.58 | 3.30 | 3.91 | 3.60 | 3.61 | 2.56 | 1.67 | 1.33 | 1.37 | 1.18 | 1.31 | 1.55 | 2.55 | 3.33 |
| MHQ | 5.39 | 6.93 | 8.39 | 7.80 | 7.94 | 4.98 | 3.31 | 2.99 | 3.56 | 2.79 | 2.75 | 3.46 | 5.33 | 6.97 |
| HQ | 13.1 | 16.2 | 21.9 | 17.1 | 23.3 | 12.2 | 7.74 | 8.41 | 27.5 | 9.70 | 14.0 | 13.0 | 13.1 | 16.2 |
| Jahr | 1987 | 1986 | 2008 | 1987 | 1979 | 1994 | 1979 | 1971 | 2002 | 2002 | 2001 | 1998 | 1987 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 27 | 36 | 42 | 36 | 39 | 27 | 18 | 14 | 15 | 13 | 14 | 17 | 27 | 36 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.491 | am 22.09.2012 | 1.35 | 0.491 | 0.491 | am 22.09.2012 |
| MQ $m^3/s$ | 2.54 | | 4.14 | 0.965 | 2.21 | |
| HQ $m^3/s$ | 13.6 | am 25.01.2012 bei W= 217 cm | 13.6 | 2.74 | 13.6 | am 25.01.2012 bei W= 217 cm |
| Nq $l/(s km^2)$ | 1.98 | | 5.44 | 1.98 | 1.98 | |
| Mq $l/(s km^2)$ | 10.2 | | 16.7 | 3.89 | 8.91 | |
| Hq $l/(s km^2)$ | 54.7 | | 54.7 | 11.0 | 54.7 | |
| $h_N$ mm / $h_A$ mm | 324 | | 263 | 62 | 282 | |
| | 1969/2012 (*) 44 Jahre | | | | 1969/2012 | |
| NQ $m^3/s$ | 0.192 | am 10.08.1992 | 0.550 | 0.192 | 0.192 | am 10.08.1992 |
| MNQ $m^3/s$ | 0.536 | | 1.16 | 0.539 | 0.539 | |
| MQ $m^3/s$ | 2.33 | | 3.26 | 1.40 | 2.32 | |
| MHQ $m^3/s$ | 12.3 | | 11.8 | 6.05 | 12.6 | |
| HQ $m^3/s$ | 27.5 | am 20.07.2002 bei W= 249 cm | 23.3 | 27.5 | 27.5 | am 20.07.2002 bei W= 249 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.16 | | 4.68 | 2.17 | 2.17 | |
| Mq $l/(s km^2)$ | 9.40 | | 13.1 | 5.65 | 9.35 | |
| MHq $l/(s km^2)$ | 49.6 | | 47.6 | 24.4 | 50.8 | |
| $Mh_N$ mm / $Mh_A$ mm | 297 | | 207 | 90 | 296 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.192 | 0.774 | 10.08.1992 | 27.5 | 111 | 249 | 20.07.2002 |
| 2 | 0.260 | 1.05 | 14.07.1976 | 23.3 | 94.0 | 215 | 05.03.1979 |
| 3 | 0.308 | 1.24 | 03.08.1999 | 21.9 | 88.3 | 238 | 22.01.2008 |
| 4 | 0.330 | 1.33 | 15.08.1975 | 21.8 | 87.9 | 215 | 12.03.1981 |
| 5 | 0.331 | 1.33 | 02.09.1983 | 17.1 | 69.0 | 207 | 07.02.1987 |
| 6 | 0.346 | 1.40 | 21.07.2010 | 16.7 | 67.3 | 225 | 20.01.2007 |
| 7 | 0.354 | 1.43 | 11.08.2003 | 16.2 | 65.5 | 221 | 07.02.2011 |
| 8 | 0.354 | 1.43 | 12.08.1986 | 16.2 | 65.3 | 206 | 31.12.1986 |
| 9 | 0.370 | 1.49 | 11.08.1969 | 16.1 | 64.9 | 203 | 24.03.1983 |
| 10 | 0.372 | 1.50 | 23.08.1995 | 16.0 | 64.5 | 204 | 02.02.1983 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1969/2012 44 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 13.6 | 13.6 | | | |
| 364 | 13.6 | 13.6 | 26.5 | 12.9 | 5.38 |
| 363 | 13.6 | 13.6 | 21.6 | 11.3 | 4.87 |
| 362 | 13.1 | 13.1 | 20.5 | 10.6 | 4.67 |
| 361 | 13.0 | 13.0 | 15.5 | 9.78 | 4.48 |
| 360 | 13.0 | 13.0 | 13.4 | 9.18 | 4.36 |
| 359 | 13.0 | 13.0 | 12.8 | 8.84 | 4.32 |
| 358 | 12.5 | 12.5 | 12.5 | 8.43 | 4.27 |
| 357 | 11.9 | 11.9 | 12.4 | 8.13 | 4.14 |
| 356 | 11.9 | 11.9 | 12.4 | 7.89 | 4.13 |
| 350 | 9.38 | 9.02 | 10.1 | 6.71 | 3.22 |
| 340 | 8.16 | 5.59 | 8.59 | 5.57 | 2.75 |
| 330 | 7.23 | 5.02 | 7.45 | 4.84 | 2.48 |
| 320 | 5.59 | 4.17 | 6.88 | 4.30 | 2.25 |
| 300 | 4.35 | 2.84 | 5.94 | 3.48 | 1.89 |
| 270 | 2.39 | 2.06 | 4.96 | 2.75 | 1.61 |
| 240 | 1.80 | 1.77 | 4.32 | 2.31 | 1.39 |
| 210 | 1.57 | 1.54 | 3.66 | 1.97 | 1.20 |
| 183 | 1.41 | 1.40 | 3.23 | 1.74 | 1.00 |
| 150 | 1.26 | 1.26 | 2.47 | 1.47 | 0.780 |
| 130 | 1.17 | 1.17 | 2.17 | 1.32 | 0.740 |
| 120 | 1.13 | 1.13 | 2.05 | 1.25 | 0.690 |
| 110 | 1.06 | 1.06 | 1.97 | 1.19 | 0.640 |
| 100 | 0.963 | 0.963 | 1.91 | 1.13 | 0.600 |
| 90 | 0.894 | 0.894 | 1.82 | 1.07 | 0.510 |
| 80 | 0.836 | 0.836 | 1.69 | 1.01 | 0.470 |
| 70 | 0.805 | 0.805 | 1.59 | 0.931 | 0.450 |
| 60 | 0.784 | 0.784 | 1.53 | 0.870 | 0.420 |
| 50 | 0.733 | 0.733 | 1.46 | 0.803 | 0.390 |
| 40 | 0.657 | 0.657 | 1.36 | 0.745 | 0.370 |
| 30 | 0.613 | 0.613 | 1.32 | 0.671 | 0.340 |
| 25 | 0.591 | 0.591 | 1.29 | 0.621 | 0.330 |
| 20 | 0.578 | 0.578 | 1.24 | 0.576 | 0.320 |
| 15 | 0.555 | 0.555 | 1.18 | 0.532 | 0.300 |
| 10 | 0.546 | 0.546 | 1.15 | 0.481 | 0.300 |
| 9 | 0.540 | 0.540 | 1.13 | 0.471 | 0.290 |
| 8 | 0.537 | 0.537 | 1.12 | 0.454 | 0.281 |
| 7 | 0.534 | 0.534 | 1.12 | 0.442 | 0.274 |
| 6 | 0.532 | 0.532 | 1.12 | 0.431 | 0.273 |
| 5 | 0.531 | 0.531 | 1.11 | 0.419 | 0.264 |
| 4 | 0.528 | 0.528 | 1.11 | 0.397 | 0.240 |
| 3 | 0.521 | 0.521 | 1.11 | 0.371 | 0.226 |
| 2 | 0.507 | 0.507 | 1.08 | 0.355 | 0.205 |
| 1 | 0.498 | 0.498 | 1.07 | 0.321 | 0.199 |
| 0 | 0.491 | 0.491 | 0.992 | 0.192 | 0.192 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Wümmegeest

NLWKN

$A_{Eo}$ : 908 $km^2$

PNP : NN + 9.60 m

Lage: 44.0 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Hellwege-Schleuse Nr. 4945108

Gewässer : Wümme

Gebiet : Lesum

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.66 | 5.10 | 23.8 | 13.3 | 16.8 | 6.71 | 5.28 | 4.84 | 4.80 | 2.75 | 2.91 | 3.72 | 4.59 | 5.50 |
| 2. | 6.57 | 5.74 | 23.5 | 11.7 | 15.7 | 6.66 | 4.93 | 4.88 | 4.17 | 2.61 | 2.86 | 3.39 | 4.83 | 5.55 |
| 3. | 6.54 | 6.62 | 26.0 | 10.8 | 14.4 | 6.75 | 5.11 | 4.30 | 3.78 | 2.46 | 2.67 | 3.35 | 5.08 | 5.58 |
| 4. | 6.42 | 8.07 | 27.6 | 9.76 | 13.5 | 6.95 | 5.22 | 4.23 | 3.60 | 2.68 | 2.55 | 4.06 | 5.44 | 5.82 |
| 5. | 6.13 | 9.07 | 30.3 | 9.16 | 12.9 | 7.12 | 5.01 | 4.24 | 3.39 | 3.07 | 2.48 | 6.58 | 6.13 | 6.26 |
| 6. | 5.87 | 11.7 | 44.7 | 8.78 | 11.8 | 6.78 | 4.76 | 4.16 | 3.22 | 2.99 | 2.37 | 9.35 | 6.23 | 6.14 |
| 7. | 5.71 | 14.8 | 54.4 | 8.60 | 11.0 | 6.98 | 4.67 | 4.33 | 3.11 | 3.36 | 2.29 | 12.1 | 6.59 | 5.84 |
| 8. | 5.67 | 21.0 | 51.6 | 7.99 | 14.3 | 6.96 | 4.68 | 4.66 | 3.19 | 3.28 | 2.28 | 9.86 | 8.16 | 5.38 |
| 9. | 5.62 | 24.6 | 48.3 | 8.08 | 15.1 | 6.63 | 4.69 | 4.50 | 3.29 | 3.33 | 2.28 | 7.98 | 7.63 | 5.32 |
| 10. | 5.54 | 27.5 | 48.5 | 8.02 | 13.5 | 7.59 | 5.11 | 4.03 | 3.16 | 3.27 | 2.27 | 6.81 | 7.03 | 7.58 |
| 11. | 5.43 | 29.6 | 45.3 | 7.80 | 12.4 | 8.11 | 5.78 | 3.90 | 3.25 | 3.14 | 2.21 | 6.18 | 6.71 | 9.71 |
| 12. | 5.32 | 31.0 | 37.9 | 7.74 | 11.6 | 7.69 | 5.69 | 3.83 | 3.26 | 3.01 | 2.30 | 5.95 | 6.42 | 8.92 |
| 13. | 5.22 | 29.7 | 33.0 | 7.85 | 11.0 | 7.74 | 5.00 | 3.69 | 3.37 | 2.79 | 2.46 | 6.84 | 5.89 | 8.16 |
| 14. | 5.23 | 28.0 | 29.8 | 8.20 | 10.4 | 7.12 | 4.68 | 3.50 | 3.44 | 2.60 | 2.52 | 7.57 | 5.50 | 7.72 |
| 15. | 5.22 | 27.4 | 28.0 | 11.4 | 10.0 | 6.61 | 4.68 | 3.40 | 3.52 | 2.48 | 2.51 | 6.94 | 5.40 | 10.1 |
| 16. | 5.14 | 26.9 | 26.2 | 12.1 | 9.74 | 6.18 | 4.90 | 3.39 | 3.49 | 2.42 | 2.57 | 6.41 | 5.23 | 14.6 |
| 17. | 5.20 | 28.4 | 22.9 | 12.9 | 9.33 | 5.96 | 4.96 | 3.71 | 3.72 | 2.43 | 2.49 | 6.00 | 5.17 | 14.4 |
| 18. | 5.14 | 30.1 | 19.5 | 15.0 | 9.14 | 5.78 | 4.78 | 3.58 | 4.27 | 2.50 | 2.41 | 5.77 | 5.13 | 13.3 |
| 19. | 5.09 | 32.7 | 20.1 | 18.9 | 8.53 | 5.69 | 4.49 | 3.28 | 5.58 | 2.45 | 2.36 | 5.34 | 5.33 | 12.3 |
| 20. | 5.09 | 33.7 | 24.8 | 21.0 | 7.93 | 5.66 | 4.33 | 3.18 | 7.02 | 2.26 | 2.36 | 5.00 | 5.53 | 10.7 |
| 21. | 5.01 | 31.3 | 27.8 | 18.8 | 7.66 | 5.67 | 4.16 | 3.14 | 5.70 | 2.22 | 2.30 | 4.77 | 5.37 | 9.55 |
| 22. | 5.06 | 29.6 | 35.1 | 21.2 | 7.60 | 5.74 | 3.99 | 3.01 | 4.61 | 2.31 | 2.28 | 4.62 | 5.13 | 8.44 |
| 23. | 5.01 | 28.7 | 54.5 | 21.6 | 7.50 | 6.02 | 3.79 | 2.85 | 4.05 | 2.33 | 2.24 | 4.54 | 4.99 | 10.1 |
| 24. | 4.92 | 28.3 | 59.0 | 22.6 | 7.34 | 6.10 | 3.67 | 2.83 | 3.64 | 2.28 | 2.52 | 4.55 | 5.16 | 19.4 |
| 25. | 4.97 | 28.2 | 56.0 | 24.0 | 7.08 | 6.19 | 3.30 | 4.45 | 3.31 | 2.31 | 3.48 | 4.77 | 5.48 | 19.5 |
| 26. | 5.06 | 27.5 | 49.7 | 24.1 | 6.71 | 5.97 | 3.33 | 4.81 | 3.05 | 2.43 | 3.76 | 4.54 | 5.76 | 22.2 |
| 27. | 5.12 | 25.7 | 40.5 | 20.9 | 6.68 | 5.72 | 3.27 | 4.44 | 2.88 | 2.50 | 4.21 | 4.42 | 5.91 | 22.0 |
| 28. | 5.15 | 22.5 | 31.9 | 19.0 | 6.61 | 5.64 | 3.23 | 4.76 | 2.76 | 2.57 | 4.51 | 4.35 | 6.10 | 19.8 |
| 29. | 5.26 | 19.1 | 27.0 | 18.1 | 6.51 | 5.80 | 3.16 | 4.50 | 2.87 | 2.53 | 4.29 | 4.29 | 5.91 | 15.9 |
| 30. | 5.20 | 21.9 | 21.4 | | 6.53 | 5.62 | 3.08 | 5.01 | 2.96 | 2.46 | 4.10 | 4.36 | 5.78 | 14.2 |
| 31. | | 25.7 | 16.1 | | 6.81 | | 3.17 | | 2.88 | 2.58 | | 4.62 | | 13.2 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 31. | 12. | 29. | 30. | 30. | 24. | 28. | 21. | 11. | 3. | 1. | 9. |
| NQ | 4.92 | 5.10 | 16.1 | 7.74 | 6.51 | 5.62 | 3.08 | 2.83 | 2.76 | 2.22 | 2.21 | 3.35 | 4.59 | 5.32 |
| MQ | 5.45 | 23.2 | 35.0 | 14.1 | 10.2 | 6.47 | 4.42 | 3.98 | 3.72 | 2.66 | 2.76 | 5.77 | 5.79 | 11.1 |
| HQ | 6.71 | 34.0 | 59.8 | 24.6 | 17.4 | 8.13 | 6.24 | 5.50 | 7.49 | 3.38 | 4.91 | 12.5 | 8.24 | 22.8 |
| Tag | 1. | 20. | 24. | 26. | 1. | 11. | 12. | 1. | 20. | 7. | 28. | 7. | 8. | 26. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 16 | 68 | 103 | 39 | 30 | 18 | 13 | 11 | 11 | 8 | 8 | 17 | 17 | 33 |

| | 1960/2011 | | 1961/2012 52 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1997 | 1997 | 1963 | 1963 | 1963 | 1974 | 1989 | 1992 | 1976 | 1992 | 1976 | 1997 | 1997 | 1997 |
| NQ | 2.40 | 3.47 | 3.50 | 3.10 | 3.00 | 3.64 | 2.14 | 1.86 | 1.03 | 0.864 | 1.40 | 1.90 | 2.40 | 3.47 |
| MNQ | 5.95 | 7.42 | 8.48 | 8.39 | 8.15 | 6.54 | 4.49 | 3.35 | 2.94 | 3.02 | 3.39 | 4.28 | 5.84 | 7.27 |
| MQ | 10.6 | 14.3 | 16.0 | 15.0 | 14.4 | 10.9 | 7.51 | 5.56 | 5.81 | 5.36 | 5.90 | 6.87 | 10.4 | 14.1 |
| MHQ | 20.9 | 28.7 | 33.4 | 31.1 | 30.0 | 20.7 | 15.2 | 11.6 | 14.5 | 12.2 | 12.4 | 14.6 | 20.5 | 28.2 |
| HQ | 76.0 | 74.8 | 80.0 | 90.5 | 118 | 76.1 | 51.2 | 26.8 | 107 | 48.9 | 50.6 | 78.8 | 76.0 | 74.8 |
| Jahr | 1998 | 1961 | 1994 | 1987 | 1979 | 1994 | 1965 | 1979 | 2002 | 1961 | 1968 | 1998 | 1998 | 1961 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 30 | 42 | 47 | 41 | 42 | 31 | 22 | 16 | 17 | 16 | 17 | 20 | 30 | 42 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 2.21 | am 11.09.2012 | 4.92 | 2.21 | 2.21 | am 11.09.2012 |
| MQ $m^3/s$ | 9.85 | | 15.9 | 3.89 | 8.85 | |
| HQ $m^3/s$ | 59.8 | am 24.01.2012 bei W= 287 cm | 59.8 | 12.5 | 59.8 | am 24.01.2012 bei W= 287 cm |
| Nq $l/(s km^2)$ | 2.43 | | 5.42 | 2.43 | 2.43 | |
| Mq $l/(s km^2)$ | 10.8 | | 17.5 | 4.28 | 9.75 | |
| Hq $l/(s km^2)$ | 65.8 | | 65.8 | 13.7 | 65.8 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 343 | | 275 | 68 | 308 | |
| | 1961/2012 (*) 52 Jahre | | | | 1961/2012 | |
| NQ $m^3/s$ | 0.864 | am 10.08.1992 | 2.40 | 0.864 | 0.864 | am 10.08.1992 |
| MNQ $m^3/s$ | 2.38 | | 4.91 | 2.39 | 2.39 | |
| MQ $m^3/s$ | 9.83 | | 13.6 | 6.17 | 9.80 | |
| MHQ $m^3/s$ | 50.2 | | 47.8 | 25.3 | 52.0 | |
| HQ $m^3/s$ | 118 | am 05.03.1979 bei W= 260 cm | 118 | 107 | 118 | am 05.03.1979 bei W= 260 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.62 | | 5.41 | 2.63 | 2.63 | |
| Mq $l/(s km^2)$ | 10.8 | | 15.0 | 6.80 | 10.8 | |
| MHq $l/(s km^2)$ | 55.3 | | 52.6 | 27.9 | 57.3 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 342 | | 236 | 108 | 341 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.864 | 0.952 | 10.08.1992 | 118 | 130 | 306 | 05.03.1979 |
| 2 | 1.01 | 1.11 | 27.08.1976 | 107 | 118 | 308 | 20.07.2002 |
| 3 | 1.26 | 1.39 | 10.08.1975 | 97.5 | 107 | 289 | 12.03.1981 |
| 4 | 1.36 | 1.50 | 13.07.1977 | 90.5 | 99.7 | 292 | 08.02.1987 |
| 5 | 1.44 | 1.59 | 26.08.2003 | 80.0 | 88.1 | 282 | 29.01.1994 |
| 6 | 1.45 | 1.60 | 09.07.1973 | 79.8 | 87.9 | 292 | 23.01.2008 |
| 7 | 1.50 | 1.65 | 24.08.1983 | 78.8 | 86.8 | 279 | 31.10.1998 |
| 8 | 1.50 | 1.65 | 19.09.1982 | 78.3 | 86.2 | 291 | 16.01.1968 |
| 9 | 1.59 | 1.75 | 22.07.2010 | 76.1 | 83.8 | 276 | 06.04.1994 |
| 10 | 1.60 | 1.76 | 21.07.1963 | 74.8 | 82.4 | 300 | 03.12.1961 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1961/2012 52 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 59.0 | 59.0 | | | |
| 364 | 56.0 | 56.0 | 109 | 53.6 | 17.2 |
| 363 | 54.5 | 54.5 | 102 | 46.6 | 17.1 |
| 362 | 54.4 | 54.4 | 81.3 | 42.1 | 17.1 |
| 361 | 51.6 | 51.6 | 71.0 | 38.7 | 17.1 |
| 360 | 49.7 | 49.7 | 65.0 | 36.1 | 16.9 |
| 359 | 48.5 | 48.5 | 63.2 | 34.3 | 16.8 |
| 358 | 48.3 | 48.3 | 63.0 | 32.8 | 16.3 |
| 357 | 45.3 | 45.3 | 56.5 | 31.7 | 16.1 |
| 356 | 44.7 | 44.7 | 56.5 | 30.8 | 16.0 |
| 350 | 32.7 | 30.3 | 39.1 | 26.7 | 12.8 |
| 340 | 28.7 | 24.0 | 32.6 | 22.6 | 9.96 |
| 330 | 27.4 | 21.0 | 29.8 | 19.9 | 9.26 |
| 320 | 24.0 | 18.1 | 27.7 | 17.9 | 8.74 |
| 300 | 16.8 | 12.3 | 25.0 | 14.9 | 7.90 |
| 270 | 9.33 | 8.20 | 20.8 | 11.9 | 6.80 |
| 240 | 6.98 | 6.94 | 17.9 | 9.84 | 5.99 |
| 210 | 6.02 | 6.00 | 14.8 | 8.41 | 5.16 |
| 183 | 5.32 | 5.53 | 12.8 | 7.42 | 4.17 |
| 150 | 4.81 | 4.80 | 10.5 | 6.38 | 3.44 |
| 130 | 4.51 | 4.51 | 9.11 | 5.75 | 3.05 |
| 120 | 4.30 | 4.30 | 8.75 | 5.46 | 2.93 |
| 110 | 4.10 | 4.10 | 8.53 | 5.18 | 2.82 |
| 100 | 3.76 | 3.76 | 8.09 | 4.89 | 2.72 |
| 90 | 3.49 | 3.49 | 7.87 | 4.64 | 2.54 |
| 80 | 3.35 | 3.35 | 7.54 | 4.38 | 2.31 |
| 70 | 3.25 | 3.25 | 7.10 | 4.12 | 2.20 |
| 60 | 3.11 | 3.11 | 6.80 | 3.85 | 2.11 |
| 50 | 2.91 | 2.91 | 6.50 | 3.56 | 2.02 |
| 40 | 2.61 | 2.61 | 6.17 | 3.25 | 1.79 |
| 30 | 2.51 | 2.51 | 5.77 | 2.93 | 1.64 |
| 25 | 2.48 | 2.48 | 5.70 | 2.75 | 1.60 |
| 20 | 2.45 | 2.45 | 5.62 | 2.57 | 1.54 |
| 15 | 2.37 | 2.37 | 5.49 | 2.37 | 1.42 |
| 10 | 2.31 | 2.31 | 5.43 | 2.15 | 1.32 |
| 9 | 2.29 | 2.29 | 5.41 | 2.10 | 1.31 |
| 8 | 2.29 | 2.29 | 5.38 | 2.06 | 1.20 |
| 7 | 2.29 | 2.29 | 5.37 | 2.02 | 1.16 |
| 6 | 2.29 | 2.29 | 5.37 | 1.97 | 1.06 |
| 5 | 2.29 | 2.29 | 5.37 | 1.92 | 1.02 |
| 4 | 2.27 | 2.27 | 5.30 | 1.87 | 0.983 |
| 3 | 2.26 | 2.26 | 5.29 | 1.77 | 0.940 |
| 2 | 2.24 | 2.24 | 5.19 | 1.64 | 0.912 |
| 1 | 2.22 | 2.22 | 5.00 | 1.51 | 0.897 |
| 0 | 2.21 | 2.21 | 4.81 | 0.864 | 0.864 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Wümmegeest

NLWKN

$A_{Eo}$ : 149 $km^2$

PNP : NN + 20.82 m

Lage: 3.1 km oberhalb der Mündung links

Q

$m^3/s$

Pegel : Worth Nr. 4944120

Gewässer : Wiedau

Gebiet : Lesum

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.10 | 0.794 | 3.37 | 1.78 | 2.66 | 1.31 | 0.868 | 0.916 | 0.934 | 0.470 | 0.469 | 0.726 | 0.844 | 0.841 |
| 2. | 1.09 | 0.925 | 4.71 | 1.62 | 2.42 | 1.31 | 0.797 | 0.799 | 0.782 | 0.437 | 0.440 | 0.642 | 0.935 | 0.871 |
| 3. | 1.11 | 1.08 | 5.47 | 1.57 | 2.26 | 1.30 | 0.796 | 0.726 | 0.694 | 0.479 | 0.398 | 0.634 | 0.994 | 0.945 |
| 4. | 1.07 | 1.40 | 7.26 | 1.45 | 2.12 | 1.44 | 0.795 | 0.716 | 0.625 | 0.761 | 0.388 | 1.09 | 1.14 | 1.01 |
| 5. | 1.04 | 1.58 | 8.31 | 1.42 | 2.03 | 1.48 | 0.794 | 0.715 | 0.545 | 0.676 | 0.361 | 1.97 | 1.23 | 1.01 |
| 6. | 1.01 | 1.84 | 11.8 | 1.39 | 1.88 | 1.39 | 0.756 | 0.713 | 0.529 | 0.675 | 0.342 | 2.76 | 1.12 | 0.885 |
| 7. | 0.970 | 2.39 | 11.5 | 1.27 | 1.80 | 1.41 | 0.752 | 0.741 | 0.493 | 0.772 | 0.347 | 2.84 | 1.39 | 0.809 |
| 8. | 0.916 | 5.15 | 9.90 | 1.22 | 2.68 | 1.35 | 0.752 | 0.796 | 0.702 | 0.724 | 0.363 | 1.75 | 1.52 | 0.728 |
| 9. | 0.897 | 5.49 | 11.4 | 1.25 | 2.36 | 1.30 | 0.753 | 0.777 | 0.630 | 0.673 | 0.356 | 1.34 | 1.33 | 0.782 |
| 10. | 0.900 | 5.73 | 9.54 | 1.24 | 2.14 | 1.52 | 0.830 | 0.705 | 0.580 | 0.632 | 0.322 | 1.20 | 1.20 | 1.49 |
| 11. | 0.874 | 3.84 | 6.48 | 1.15 | 1.98 | 1.55 | 0.944 | 0.664 | 0.555 | 0.616 | 0.314 | 1.10 | 1.18 | 1.54 |
| 12. | 0.863 | 2.84 | 5.33 | 1.12 | 1.88 | 1.43 | 0.959 | 0.662 | 0.559 | 0.545 | 0.436 | 1.09 | 1.09 | 1.30 |
| 13. | 0.842 | 2.99 | 5.39 | 1.14 | 1.80 | 1.31 | 0.869 | 0.623 | 0.582 | 0.457 | 0.438 | 1.60 | 0.981 | 1.19 |
| 14. | 0.827 | 3.56 | 4.84 | 1.23 | 1.74 | 1.22 | 0.831 | 0.582 | 0.616 | 0.409 | 0.424 | 1.43 | 0.927 | 1.12 |
| 15. | 0.830 | 3.74 | 3.75 | 2.08 | 1.67 | 1.16 | 0.789 | 0.544 | 0.626 | 0.358 | 0.455 | 1.23 | 0.881 | 2.24 |
| 16. | 0.833 | 4.18 | 3.16 | 1.72 | 1.63 | 1.08 | 0.829 | 0.559 | 0.568 | 0.360 | 0.418 | 1.13 | 0.846 | 2.64 |
| 17. | 0.836 | 7.25 | 3.04 | 2.46 | 1.59 | 1.08 | 0.830 | 0.576 | 0.714 | 0.438 | 0.382 | 1.07 | 0.835 | 2.24 |
| 18. | 0.807 | 5.84 | 2.69 | 2.44 | 1.58 | 1.08 | 0.829 | 0.549 | 0.831 | 0.378 | 0.386 | 1.05 | 0.840 | 2.04 |
| 19. | 0.800 | 5.24 | 4.20 | 4.17 | 1.50 | 1.03 | 0.791 | 0.522 | 1.27 | 0.327 | 0.400 | 0.961 | 0.956 | 1.76 |
| 20. | 0.803 | 4.19 | 6.27 | 3.31 | 1.42 | 1.03 | 0.745 | 0.514 | 1.97 | 0.351 | 0.382 | 0.840 | 0.917 | 1.52 |
| 21. | 0.806 | 3.85 | 7.68 | 3.12 | 1.41 | 1.02 | 0.723 | 0.505 | 1.28 | 0.374 | 0.371 | 0.807 | 0.863 | 1.36 |
| 22. | 0.848 | 3.78 | 8.36 | 3.70 | 1.41 | 1.02 | 0.692 | 0.465 | 0.983 | 0.369 | 0.355 | 0.776 | 0.827 | 1.22 |
| 23. | 0.788 | 4.34 | 10.1 | 3.86 | 1.38 | 1.02 | 0.659 | 0.420 | 0.792 | 0.347 | 0.361 | 0.763 | 0.798 | 2.40 |
| 24. | 0.773 | 4.28 | 10.1 | 4.07 | 1.37 | 1.04 | 0.622 | 0.462 | 0.666 | 0.341 | 0.555 | 0.783 | 0.879 | 3.95 |
| 25. | 0.776 | 4.37 | 7.55 | 4.68 | 1.28 | 1.06 | 0.584 | 1.14 | 0.585 | 0.400 | 0.948 | 0.780 | 0.970 | 3.56 |
| 26. | 0.779 | 3.39 | 4.79 | 3.56 | 1.24 | 1.02 | 0.576 | 0.920 | 0.520 | 0.411 | 0.873 | 0.817 | 0.955 | 4.20 |
| 27. | 0.782 | 2.92 | 3.64 | 2.96 | 1.23 | 0.970 | 0.574 | 0.789 | 0.505 | 0.451 | 1.09 | 0.796 | 1.10 | 3.42 |
| 28. | 0.785 | 2.62 | 3.11 | 2.92 | 1.23 | 0.947 | 0.542 | 0.840 | 0.467 | 0.415 | 1.08 | 0.758 | 1.00 | 2.56 |
| 29. | 0.788 | 2.41 | 2.73 | 2.83 | 1.23 | 0.969 | 0.533 | 0.825 | 0.482 | 0.406 | 0.923 | 0.745 | 0.924 | 2.12 |
| 30. | 0.791 | 4.97 | 2.34 | | 1.22 | 0.933 | 0.499 | 1.30 | 0.517 | 0.368 | 0.862 | 0.827 | 0.879 | 1.94 |
| 31. | | 4.39 | 1.94 | | 1.27 | | 0.536 | | 0.481 | 0.393 | | 0.853 | | 1.79 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 31. | 12. | 30. | 30. | 30. | 23. | 28. | 19. | 11. | 3. | 23. | 8. |
| NQ | 0.773 | 0.794 | 1.94 | 1.12 | 1.22 | 0.933 | 0.499 | 0.420 | 0.467 | 0.327 | 0.314 | 0.634 | 0.798 | 0.728 |
| MQ | 0.878 | 3.59 | 6.15 | 2.30 | 1.72 | 1.19 | 0.737 | 0.702 | 0.713 | 0.478 | 0.508 | 1.13 | 1.01 | 1.79 |
| HQ | 1.13 | 7.60 | 13.3 | 4.97 | 2.94 | 1.58 | 1.01 | 1.53 | 2.42 | 0.800 | 1.19 | 3.75 | 1.67 | 4.64 |
| Tag | 1. | 17. | 6. | 25. | 8. | 4. | 11. | 30. | 20. | 4. | 27. | 7. | 8. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 15 | 65 | 111 | 39 | 31 | 21 | 13 | 12 | 13 | 9 | 9 | 20 | 18 | 32 |

| | 1982/2011 | | 1983/2012 30 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1997 | 1996 | 1996 | 1996 | 1996 | 1996 | 1985 | 1985 | 1992 | 2003 | 2009 | 1996 | 1997 | 1996 |
| NQ | 0.524 | 0.663 | 0.544 | 0.648 | 0.680 | 0.467 | 0.242 | 0.150 | 0.161 | 0.157 | 0.157 | 0.226 | 0.524 | 0.663 |
| MNQ | 0.924 | 1.08 | 1.34 | 1.35 | 1.32 | 0.931 | 0.616 | 0.455 | 0.402 | 0.398 | 0.477 | 0.632 | 0.923 | 1.07 |
| MQ | 1.71 | 2.30 | 2.87 | 2.48 | 2.45 | 1.55 | 1.03 | 0.828 | 0.853 | 0.817 | 0.977 | 1.13 | 1.70 | 2.29 |
| MHQ | 4.60 | 6.30 | 7.15 | 6.76 | 6.30 | 3.81 | 2.56 | 2.62 | 3.51 | 2.73 | 2.45 | 3.33 | 4.51 | 6.25 |
| HQ | 11.7 | 12.5 | 14.5 | 12.7 | 12.6 | 14.0 | 5.85 | 8.24 | 17.0 | 12.3 | 11.3 | 14.3 | 11.7 | 12.5 |
| Jahr | 1990 | 1993 | 1994 | 2002 | 1994 | 1994 | 1987 | 1988 | 2002 | 1989 | 2001 | 1998 | 1990 | 1993 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 30 | 41 | 52 | 42 | 44 | 27 | 19 | 14 | 15 | 15 | 17 | 20 | 30 | 41 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.314 | am 11.09.2012 | 0.773 | 0.314 | 0.314 | am 11.09.2012 |
| MQ $m^3/s$ | 1.68 | | 2.66 | 0.713 | 1.54 | |
| HQ $m^3/s$ | 13.3 | am 06.01.2012 bei W= 249 cm | 13.3 | 3.75 | 13.3 | am 06.01.2012 bei W= 249 cm |
| Nq $l/(s km^2)$ | 2.11 | | 5.19 | 2.11 | 2.11 | |
| Mq $l/(s km^2)$ | 11.3 | | 17.9 | 4.79 | 10.3 | |
| Hq $l/(s km^2)$ | 89.1 | | 89.1 | 25.2 | 89.1 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 357 | | 281 | 76 | 327 | |
| | 1983/2012 (*) 30 Jahre | | | | 1983/2012 | |
| NQ $m^3/s$ | 0.150 | am 05.06.1985 | 0.467 | 0.150 | 0.150 | am 05.06.1985 |
| MNQ $m^3/s$ | 0.303 | | 0.769 | 0.303 | 0.303 | |
| MQ $m^3/s$ | 1.58 | | 2.23 | 0.941 | 1.58 | |
| MHQ $m^3/s$ | 10.5 | | 9.70 | 6.27 | 10.7 | |
| HQ $m^3/s$ | 17.0 | am 19.07.2002 bei W= 266 cm | 14.5 | 17.0 | 17.0 | am 19.07.2002 bei W= 266 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.03 | | 5.16 | 2.03 | 2.03 | |
| Mq $l/(s km^2)$ | 10.6 | | 15.0 | 6.32 | 10.6 | |
| MHq $l/(s km^2)$ | 70.5 | | 65.1 | 42.1 | 71.8 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 335 | | 235 | 100 | 335 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.150 | 1.01 | 05.06.1985 | 17.0 | 114 | 267 | 19.07.2002 |
| 2 | 0.157 | 1.05 | 28.09.2009 | 14.5 | 97.3 | 246 | 28.01.1994 |
| 3 | 0.157 | 1.05 | 18.08.2003 | 14.3 | 96.0 | 244 | 29.10.1998 |
| 4 | 0.160 | 1.07 | 04.08.1999 | 14.2 | 95.0 | 254 | 22.01.2008 |
| 5 | 0.160 | 1.07 | 21.08.1996 | 14.0 | 94.0 | 238 | 06.04.1994 |
| 6 | 0.161 | 1.08 | 09.07.1992 | 13.3 | 89.1 | 249 | 06.01.2012 |
| 7 | 0.181 | 1.21 | 03.09.1983 | 12.7 | 85.2 | 241 | 27.02.2002 |
| 8 | 0.189 | 1.27 | 13.07.1997 | 12.6 | 84.6 | 231 | 20.03.1994 |
| 9 | 0.190 | 1.28 | 23.07.2010 | 12.5 | 83.9 | 237 | 10.03.2000 |
| 10 | 0.202 | 1.36 | 27.07.2006 | 12.5 | 83.9 | 232 | 09.02.1995 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1983/2012 30 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 11.8 | 11.8 | | | |
| 364 | 11.5 | 11.5 | 15.6 | 9.63 | 5.04 |
| 363 | 11.4 | 11.4 | 15.6 | 8.54 | 4.90 |
| 362 | 11.4 | 11.4 | 14.2 | 7.93 | 4.69 |
| 361 | 11.4 | 11.4 | 10.9 | 7.47 | 4.32 |
| 360 | 9.90 | 9.90 | 10.1 | 7.08 | 3.60 |
| 359 | 9.54 | 9.54 | 9.54 | 6.69 | 3.38 |
| 358 | 8.36 | 8.36 | 8.56 | 6.41 | 3.01 |
| 357 | 8.31 | 8.31 | 8.55 | 6.04 | 2.85 |
| 356 | 7.68 | 7.68 | 8.41 | 5.75 | 2.56 |
| 350 | 5.84 | 5.39 | 7.77 | 4.81 | 2.08 |
| 340 | 4.79 | 3.95 | 5.45 | 3.80 | 1.65 |
| 330 | 4.17 | 3.16 | 4.81 | 3.24 | 1.49 |
| 320 | 3.64 | 2.69 | 4.20 | 2.83 | 1.40 |
| 300 | 2.66 | 1.98 | 3.41 | 2.31 | 1.18 |
| 270 | 1.60 | 1.45 | 2.96 | 1.85 | 0.933 |
| 240 | 1.31 | 1.25 | 2.52 | 1.54 | 0.842 |
| 210 | 1.10 | 1.10 | 2.28 | 1.32 | 0.753 |
| 183 | 0.944 | 0.956 | 2.02 | 1.17 | 0.662 |
| 150 | 0.817 | 0.835 | 1.67 | 0.986 | 0.555 |
| 130 | 0.789 | 0.792 | 1.47 | 0.885 | 0.502 |
| 120 | 0.773 | 0.772 | 1.36 | 0.838 | 0.419 |
| 110 | 0.752 | 0.741 | 1.28 | 0.795 | 0.388 |
| 100 | 0.705 | 0.705 | 1.24 | 0.751 | 0.360 |
| 90 | 0.659 | 0.659 | 1.17 | 0.701 | 0.330 |
| 80 | 0.622 | 0.622 | 1.15 | 0.649 | 0.310 |
| 70 | 0.568 | 0.568 | 1.10 | 0.603 | 0.282 |
| 60 | 0.533 | 0.533 | 1.07 | 0.553 | 0.256 |
| 50 | 0.482 | 0.482 | 1.00 | 0.508 | 0.243 |
| 40 | 0.451 | 0.451 | 0.940 | 0.458 | 0.226 |
| 30 | 0.411 | 0.411 | 0.870 | 0.404 | 0.208 |
| 25 | 0.398 | 0.398 | 0.848 | 0.374 | 0.200 |
| 20 | 0.386 | 0.386 | 0.829 | 0.342 | 0.195 |
| 15 | 0.368 | 0.368 | 0.826 | 0.307 | 0.183 |
| 10 | 0.358 | 0.358 | 0.816 | 0.269 | 0.181 |
| 9 | 0.356 | 0.356 | 0.803 | 0.260 | 0.176 |
| 8 | 0.355 | 0.355 | 0.783 | 0.251 | 0.174 |
| 7 | 0.351 | 0.351 | 0.779 | 0.243 | 0.173 |
| 6 | 0.351 | 0.351 | 0.779 | 0.235 | 0.166 |
| 5 | 0.351 | 0.351 | 0.779 | 0.226 | 0.164 |
| 4 | 0.342 | 0.342 | 0.739 | 0.217 | 0.162 |
| 3 | 0.341 | 0.341 | 0.738 | 0.197 | 0.160 |
| 2 | 0.327 | 0.327 | 0.719 | 0.184 | 0.159 |
| 1 | 0.322 | 0.322 | 0.714 | 0.172 | 0.158 |
| 0 | 0.314 | 0.314 | 0.675 | 0.150 | 0.150 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Wümmegeest

NLWKN

$A_{Eo}$ : 179 $km^2$

PNP : NN + 40.48 m

Lage: 139.7 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Bohmte Nr. 4961112

Gewässer : Hunte

Gebiet : Hunte

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.210 | 0.238 | 1.83 | 1.70 | 1.60 | 0.724 | 0.413 | 0.300 | 0.273 | 0.174 | 0.260 | 0.141 | 0.309 | 0.298 |
| 2. | 0.230 | 0.364 | 2.70 | 1.64 | 1.50 | 0.593 | 0.377 | 0.279 | 0.240 | 0.171 | 0.248 | 0.130 | 0.327 | 0.299 |
| 3. | 0.219 | 0.508 | 2.72 | 1.36 | 1.39 | 0.618 | 0.401 | 0.291 | 0.220 | 0.186 | 0.193 | 0.112 | 0.280 | 0.300 |
| 4. | 0.207 | 0.514 | 3.15 | 1.26 | 1.29 | 0.813 | 0.348 | 0.364 | 0.194 | 0.166 | 0.181 | 0.346 | 0.270 | 0.354 |
| 5. | 0.210 | 0.428 | 6.56 | 1.15 | 1.28 | 0.761 | 0.350 | 0.433 | 0.175 | 0.157 | 0.185 | 0.810 | 0.307 | 0.472 |
| 6. | 0.216 | 1.04 | 6.52 | 1.07 | 1.15 | 0.697 | 0.351 | 0.387 | 0.165 | 0.159 | 0.166 | 1.19 | 0.309 | 0.436 |
| 7. | 0.208 | 1.43 | 5.48 | 1.01 | 1.10 | 0.654 | 0.343 | 0.363 | 0.157 | 0.163 | 0.145 | 1.15 | 0.327 | 0.393 |
| 8. | 0.208 | 2.13 | 6.04 | 0.966 | 1.54 | 0.606 | 0.335 | 0.309 | 0.158 | 0.171 | 0.129 | 0.533 | 0.350 | 0.320 |
| 9. | 0.212 | 2.37 | 5.26 | 0.935 | 1.32 | 0.658 | 0.344 | 0.314 | 0.228 | 0.276 | 0.118 | 0.366 | 0.351 | 0.510 |
| 10. | 0.208 | 1.63 | 4.13 | 0.909 | 1.15 | 0.799 | 0.335 | 0.293 | 0.245 | 0.272 | 0.079 | 0.312 | 0.352 | 1.38 |
| 11. | 0.209 | 1.13 | 3.32 | 0.888 | 1.11 | 0.722 | 0.326 | 0.264 | 0.237 | 0.230 | 0.149 | 0.284 | 0.354 | 1.01 |
| 12. | 0.209 | 0.958 | 3.00 | 0.770 | 1.10 | 0.682 | 0.317 | 0.259 | 0.221 | 0.206 | 0.208 | 0.279 | 0.355 | 0.702 |
| 13. | 0.209 | 1.28 | 3.43 | 0.703 | 1.07 | 0.666 | 0.308 | 0.249 | 0.278 | 0.181 | 0.076 | 0.260 | 0.332 | 0.552 |
| 14. | 0.209 | 1.53 | 3.00 | 0.882 | 1.03 | 0.569 | 0.293 | 0.239 | 0.312 | 0.166 | 0.074 | 0.276 | 0.318 | 0.546 |
| 15. | 0.210 | 1.55 | 2.49 | 1.22 | 0.993 | 0.558 | 0.281 | 0.228 | 0.392 | 0.155 | 0.076 | 0.275 | 0.319 | 1.08 |
| 16. | 0.211 | 2.71 | 2.17 | 1.08 | 0.949 | 0.532 | 0.296 | 0.232 | 0.381 | 0.147 | 0.078 | 0.271 | 0.320 | 1.22 |
| 17. | 0.210 | 4.55 | 1.91 | 1.09 | 0.943 | 0.499 | 0.283 | 0.333 | 0.513 | 0.158 | 0.062 | 0.275 | 0.321 | 1.07 |
| 18. | 0.211 | 2.87 | 1.80 | 1.22 | 0.924 | 0.476 | 0.263 | 0.304 | 0.709 | 0.154 | 0.061 | 0.279 | 0.323 | 1.15 |
| 19. | 0.211 | 2.29 | 2.94 | 1.88 | 0.872 | 0.494 | 0.254 | 0.219 | 1.01 | 0.130 | 0.063 | 0.251 | 0.342 | 1.08 |
| 20. | 0.211 | 2.28 | 4.46 | 1.56 | 0.752 | 0.487 | 0.250 | 0.191 | 1.37 | 0.118 | 0.064 | 0.251 | 0.347 | 1.02 |
| 21. | 0.212 | 2.54 | 4.31 | 1.33 | 0.717 | 0.497 | 0.273 | 0.194 | 0.704 | 0.123 | 0.066 | 0.254 | 0.326 | 0.953 |
| 22. | 0.213 | 2.25 | 5.05 | 1.31 | 0.718 | 0.664 | 0.248 | 0.202 | 0.410 | 0.117 | 0.067 | 0.255 | 0.327 | 1.20 |
| 23. | 0.214 | 2.16 | 5.49 | 1.54 | 0.749 | 0.638 | 0.219 | 0.200 | 0.320 | 0.107 | 0.069 | 0.290 | 0.328 | 3.54 |
| 24. | 0.214 | 2.60 | 4.78 | 1.89 | 0.769 | 0.531 | 0.198 | 0.192 | 0.288 | 0.121 | 0.299 | 0.282 | 0.331 | 3.63 |
| 25. | 0.215 | 2.81 | 3.73 | 2.49 | 0.690 | 0.548 | 0.188 | 0.236 | 0.278 | 0.182 | 0.447 | 0.258 | 0.410 | 2.63 |
| 26. | 0.217 | 2.18 | 3.04 | 2.14 | 0.620 | 0.529 | 0.192 | 0.289 | 0.229 | 0.225 | 0.226 | 0.256 | 0.389 | 2.64 |
| 27. | 0.217 | 1.87 | 2.78 | 1.74 | 0.616 | 0.503 | 0.183 | 0.277 | 0.155 | 0.232 | 0.172 | 0.223 | 0.399 | 2.90 |
| 28. | 0.225 | 1.71 | 2.45 | 1.74 | 0.587 | 0.507 | 0.193 | 0.247 | 0.155 | 0.187 | 0.152 | 0.224 | 0.380 | 2.42 |
| 29. | 0.255 | 1.54 | 2.23 | 1.67 | 0.587 | 0.518 | 0.218 | 0.225 | 0.171 | 0.181 | 0.161 | 0.225 | 0.295 | 1.97 |
| 30. | 0.226 | 2.07 | 1.93 | | 0.695 | 0.461 | 0.222 | 0.239 | 0.181 | 0.189 | 0.178 | 0.316 | 0.296 | 1.80 |
| 31. | | 2.15 | 1.69 | | 0.782 | | 0.216 | | 0.174 | 0.198 | | 0.360 | | 1.84 |
| Tag | 4. | 1. | 31. | 13. | 28.+ | 30. | 27. | 20. | 27.+ | 23. | 18. | 3. | 4. | 1. |
| NQ | 0.207 | 0.238 | 1.69 | 0.703 | 0.587 | 0.461 | 0.183 | 0.191 | 0.155 | 0.107 | 0.061 | 0.112 | 0.270 | 0.298 |
| MQ | 0.215 | 1.80 | 3.56 | 1.35 | 0.987 | 0.600 | 0.284 | 0.272 | 0.340 | 0.174 | 0.148 | 0.346 | 0.333 | 1.28 |
| HQ | 0.255 | 5.32 | 8.56 | 2.61 | 1.63 | 0.907 | 0.438 | 0.456 | 1.64 | 0.309 | 0.475 | 1.51 | 0.419 | 4.57 |
| Tag | 30. | 17. | 5. | 25. | 1. | 4. | 3. | 5. | 20. | 10. | 25. | 7. | 28. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 3 | 27 | 53 | 19 | 15 | 9 | 4 | 4 | 5 | 3 | 2 | 5 | 5 | 19 |
| | 1961/2011 | | 1962/2012 | | | | | | 44 Jahre | | | | | |
| Jahr | 2011 | 1995 | 1996 | 1996 | 1963 | 1996 | 1977 | 1964 | 1976 | 1983 | 1967 | 2009 | 2011 | 1995 |
| NQ | 0.207 | 0.213 | 0.196 | 0.172 | 0.320 | 0.335 | 0.169 | 0.130 | 0.047 | 0.054 | 0.056 | 0.095 | 0.207 | 0.213 |
| MNQ | 0.608 | 0.965 | 1.35 | 1.35 | 1.24 | 0.901 | 0.572 | 0.395 | 0.297 | 0.260 | 0.285 | 0.420 | 0.585 | 0.906 |
| MQ | 1.31 | 2.12 | 2.70 | 2.41 | 2.29 | 1.58 | 0.970 | 0.717 | 0.672 | 0.579 | 0.597 | 0.751 | 1.25 | 2.00 |
| MHQ | 4.25 | 6.60 | 7.77 | 6.42 | 6.83 | 3.70 | 2.54 | 2.24 | 2.34 | 2.05 | 1.81 | 2.31 | 4.04 | 6.46 |
| HQ | 15.3 | 22.0 | 20.8 | 22.1 | 17.9 | 14.0 | 14.6 | 16.1 | 15.0 | 12.4 | 11.8 | 18.5 | 15.3 | 22.0 |
| Jahr | 1987 | 1986 | 1987 | 1966 | 1987 | 1967 | 1965+ | 1981 | 1981 | 2010 | 1967 | 1998 | 1987 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 19 | 32 | 40 | 34 | 34 | 23 | 15 | 10 | 10 | 9 | 9 | 11 | 18 | 30 |

## Hauptwerte

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.061 | am 18.09.2012 | 0.207 | 0.061 | 0.061 | am 18.09.2012 |
| MQ $m^3/s$ | 0.842 | | 1.43 | 0.261 | 0.809 | |
| HQ $m^3/s$ | 8.56 | am 05.01.2012 bei W= 241 cm | 8.56 | 1.64 | 8.56 | am 05.01.2012 bei W= 241 cm |
| Nq $l/(s km^2)$ | 0.341 | | 1.16 | 0.341 | 0.341 | |
| Mq $l/(s km^2)$ | 4.70 | | 7.99 | 1.46 | 4.52 | |
| Hq $l/(s km^2)$ | 47.8 | | 47.8 | 9.15 | 47.8 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 149 | | 126 | 23 | 143 | |
| | 1962/2012 (*) 45 Jahre | | | | 1962/2012 | |
| NQ $m^3/s$ | 0.047 | am 07.07.1976 | 0.172 | 0.047 | 0.047 | am 07.07.1976 |
| MNQ $m^3/s$ | 0.178 | | 0.523 | 0.182 | 0.180 | |
| MQ $m^3/s$ | 1.40 | | 2.08 | 0.727 | 1.37 | |
| MHQ $m^3/s$ | 11.9 | | 11.4 | 4.90 | 11.6 | |
| HQ $m^3/s$ | 26.1 | am 15.01.1968 | 26.1 | 18.5 | 22.1 | am 07.02.1966 |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 0.994 | | 2.92 | 1.02 | 1.01 | |
| Mq $l/(s km^2)$ | 7.82 | | 11.6 | 4.06 | 7.65 | |
| MHq $l/(s km^2)$ | 66.5 | | 63.7 | 27.4 | 64.8 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 247 | | 183 | 65 | 242 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.047 | 0.263 | 07.07.1976 | 22.0 | 123 | 345 | 31.12.1986 |
| 2 | 0.054 | 0.302 | 20.08.1983 | 19.7 | 110 | 334 | 28.01.1994 |
| 3 | 0.061 | 0.341 | 18.09.2012 | 18.5 | 103 | 363 | 28.10.1998 |
| 4 | 0.062 | 0.346 | 12.08.2003 | 17.9 | 100 | 324 | 18.03.1987 |
| 5 | 0.077 | 0.430 | 09.08.2006 | 17.8 | 99.4 | 323 | 12.03.1981 |
| 6 | 0.079 | 0.441 | 16.08.1989 | 16.9 | 94.4 | 324 | 04.03.1979 |
| 7 | 0.088 | 0.492 | 10.08.1975 | 16.1 | 89.9 | 327 | 30.06.1981 |
| 8 | 0.090 | 0.503 | 23.07.2010 | 16.0 | 89.4 | 311 | 19.03.1994 |
| 9 | 0.095 | 0.531 | 05.10.2009 | 16.0 | 89.4 | 311 | 31.12.1993 |
| 10 | 0.104 | 0.581 | 23.07.1991 | 15.3 | 85.5 | 311 | 21.11.1987 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1962/2012 44 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 6.56 | 6.56 | | | |
| 364 | 6.52 | 6.52 | 21.8 | 10.3 | 3.66 |
| 363 | 6.04 | 6.04 | 19.8 | 8.75 | 3.12 |
| 362 | 5.49 | 5.49 | 15.3 | 7.61 | 2.81 |
| 361 | 5.48 | 5.48 | 13.3 | 6.85 | 2.75 |
| 360 | 5.26 | 5.26 | 13.0 | 6.51 | 2.53 |
| 359 | 5.05 | 5.05 | 11.7 | 6.10 | 2.42 |
| 358 | 4.78 | 4.78 | 11.0 | 5.86 | 2.38 |
| 357 | 4.55 | 4.46 | 10.4 | 5.61 | 2.24 |
| 356 | 4.46 | 4.31 | 10.4 | 5.42 | 2.19 |
| 350 | 3.15 | 3.32 | 7.73 | 4.39 | 1.90 |
| 340 | 2.70 | 2.64 | 6.08 | 3.57 | 1.59 |
| 330 | 2.23 | 1.93 | 5.55 | 3.04 | 1.46 |
| 320 | 1.89 | 1.70 | 4.80 | 2.67 | 1.32 |
| 300 | 1.50 | 1.26 | 3.90 | 2.20 | 0.949 |
| 270 | 1.03 | 0.924 | 3.06 | 1.71 | 0.718 |
| 240 | 0.690 | 0.638 | 2.51 | 1.37 | 0.577 |
| 210 | 0.487 | 0.436 | 2.08 | 1.11 | 0.436 |
| 183 | 0.326 | 0.347 | 1.79 | 0.900 | 0.347 |
| 150 | 0.275 | 0.304 | 1.51 | 0.699 | 0.297 |
| 130 | 0.249 | 0.280 | 1.33 | 0.593 | 0.252 |
| 120 | 0.236 | 0.275 | 1.27 | 0.549 | 0.234 |
| 110 | 0.226 | 0.258 | 1.20 | 0.510 | 0.217 |
| 100 | 0.218 | 0.249 | 1.17 | 0.468 | 0.190 |
| 90 | 0.213 | 0.230 | 1.11 | 0.434 | 0.168 |
| 80 | 0.210 | 0.222 | 1.03 | 0.400 | 0.161 |
| 70 | 0.200 | 0.200 | 0.992 | 0.369 | 0.140 |
| 60 | 0.189 | 0.189 | 0.924 | 0.340 | 0.131 |
| 50 | 0.182 | 0.182 | 0.872 | 0.309 | 0.109 |
| 40 | 0.171 | 0.171 | 0.829 | 0.280 | 0.102 |
| 30 | 0.157 | 0.157 | 0.819 | 0.246 | 0.091 |
| 25 | 0.149 | 0.149 | 0.761 | 0.230 | 0.083 |
| 20 | 0.141 | 0.141 | 0.715 | 0.212 | 0.076 |
| 15 | 0.121 | 0.121 | 0.665 | 0.184 | 0.061 |
| 10 | 0.078 | 0.078 | 0.620 | 0.160 | 0.053 |
| 9 | 0.078 | 0.078 | 0.612 | 0.155 | 0.051 |
| 8 | 0.078 | 0.078 | 0.606 | 0.148 | 0.051 |
| 7 | 0.074 | 0.074 | 0.601 | 0.141 | 0.051 |
| 6 | 0.069 | 0.069 | 0.580 | 0.134 | 0.050 |
| 5 | 0.067 | 0.067 | 0.578 | 0.126 | 0.050 |
| 4 | 0.066 | 0.066 | 0.565 | 0.114 | 0.049 |
| 3 | 0.064 | 0.064 | 0.565 | 0.100 | 0.049 |
| 2 | 0.063 | 0.063 | 0.565 | 0.085 | 0.048 |
| 1 | 0.062 | 0.062 | 0.522 | 0.072 | 0.048 |
| 0 | 0.061 | 0.061 | 0.515 | 0.047 | 0.047 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1968-1974; AJ 1969-1974

Repräsentativ für die Hydrologische Landschaft Obere Hunte

NLWKN

$A_{Eo}$ : 772 $km^2$

PNP : NN + 29.95 m

Lage: 104.6 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Hoopen OP Nr. 4963101

Gewässer : Hunte

Gebiet : Hunte

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.94 | 1.77 | 13.4 | 10.3 | 8.09 | 3.80 | 2.30 | 1.69 | 1.12 | 1.03 | 0.508 | 0.635 | 2.31 | 1.67 |
| 2. | 6.62 | 1.81 | 14.8 | 9.55 | 8.16 | 4.16 | 2.17 | 1.49 | 1.11 | 0.974 | 0.626 | 0.704 | 5.54 | 1.66 |
| 3. | 7.32 | 2.06 | 16.5 | 9.29 | 7.82 | 4.19 | 2.31 | 1.45 | 1.10 | 0.921 | 0.640 | 0.580 | 5.43 | 3.02 |
| 4. | 6.84 | 2.30 | 17.5 | 8.83 | 7.78 | 3.38 | 2.38 | 1.49 | 1.09 | 0.872 | 0.570 | 1.32 | 5.23 | 5.10 |
| 5. | 6.24 | 2.58 | 21.9 | 7.98 | 7.45 | 3.11 | 2.18 | 1.46 | 1.05 | 1.00 | 0.490 | 2.39 | 5.34 | 5.20 |
| 6. | 5.76 | 4.73 | 22.1 | 7.33 | 7.37 | 3.07 | 2.17 | 1.44 | 1.04 | 0.808 | 0.452 | 4.46 | 5.37 | 5.26 |
| 7. | 5.28 | 5.66 | 20.7 | 7.31 | 7.04 | 2.91 | 2.15 | 1.47 | 0.876 | 0.938 | 0.416 | 4.39 | 5.26 | 5.90 |
| 8. | 5.08 | 7.02 | 24.6 | 7.88 | 6.94 | 2.82 | 2.12 | 2.37 | 0.994 | 0.875 | 0.384 | 3.49 | 5.05 | 4.52 |
| 9. | 5.04 | 8.76 | 24.7 | 7.86 | 6.76 | 3.17 | 2.07 | 2.22 | 1.07 | 0.800 | 0.377 | 2.67 | 2.78 | 5.80 |
| 10. | 4.67 | 8.67 | 22.3 | 7.49 | 6.25 | 5.47 | 2.14 | 2.05 | 0.973 | 0.788 | 0.369 | 2.26 | 1.92 | 7.08 |
| 11. | 3.12 | 7.96 | 19.9 | 7.47 | 5.45 | 4.38 | 2.53 | 1.91 | 0.943 | 0.750 | 0.380 | 2.01 | 1.73 | 6.93 |
| 12. | 2.45 | 7.21 | 18.9 | 7.21 | 5.13 | 3.66 | 2.17 | 1.80 | 0.952 | 0.651 | 0.382 | 1.92 | 1.63 | 6.58 |
| 13. | 2.23 | 8.04 | 18.7 | 7.14 | 5.02 | 3.50 | 1.95 | 1.65 | 1.08 | 0.644 | 0.398 | 1.91 | 1.60 | 6.26 |
| 14. | 2.22 | 8.75 | 17.6 | 6.96 | 4.79 | 3.36 | 1.87 | 1.63 | 0.897 | 0.641 | 0.349 | 1.92 | 1.66 | 5.92 |
| 15. | 2.22 | 10.1 | 16.2 | 7.48 | 4.77 | 3.10 | 1.77 | 1.62 | 0.898 | 0.575 | 0.313 | 1.85 | 1.66 | 6.98 |
| 16. | 2.22 | 11.1 | 15.0 | 7.43 | 4.51 | 3.06 | 1.77 | 1.60 | 0.873 | 0.623 | 0.279 | 1.93 | 1.55 | 7.31 |
| 17. | 2.19 | 15.9 | 14.2 | 7.56 | 4.33 | 3.08 | 1.86 | 1.58 | 1.10 | 0.629 | 0.276 | 3.59 | 1.49 | 6.97 |
| 18. | 1.81 | 14.3 | 13.5 | 7.07 | 4.36 | 3.07 | 1.78 | 1.57 | 1.32 | 0.572 | 0.250 | 4.37 | 1.54 | 6.86 |
| 19. | 1.65 | 13.0 | 14.9 | 7.88 | 4.24 | 2.93 | 1.76 | 1.57 | 1.35 | 0.529 | 0.239 | 4.27 | 1.61 | 6.52 |
| 20. | 1.64 | 12.8 | 19.2 | 7.77 | 4.00 | 2.80 | 1.77 | 1.43 | 1.56 | 0.525 | 0.238 | 4.06 | 1.65 | 5.11 |
| 21. | 1.64 | 12.8 | 20.1 | 7.23 | 3.96 | 2.90 | 1.83 | 1.38 | 1.54 | 0.522 | 0.237 | 4.04 | 1.65 | 4.61 |
| 22. | 1.64 | 12.4 | 22.9 | 7.23 | 3.83 | 3.16 | 1.61 | 1.37 | 1.47 | 0.446 | 0.237 | 3.95 | 1.50 | 4.76 |
| 23. | 1.70 | 12.8 | 26.0 | 7.42 | 3.62 | 3.46 | 1.52 | 1.34 | 1.45 | 0.431 | 0.237 | 3.72 | 1.58 | 10.2 |
| 24. | 1.82 | 12.9 | 23.3 | 6.74 | 3.58 | 3.87 | 1.45 | 1.36 | 1.30 | 0.428 | 0.780 | 3.17 | 1.55 | 12.8 |
| 25. | 1.74 | 13.2 | 20.5 | 7.74 | 3.54 | 4.03 | 1.52 | 1.41 | 1.32 | 0.503 | 0.628 | 2.04 | 1.75 | 11.8 |
| 26. | 1.64 | 12.5 | 18.6 | 7.30 | 3.50 | 3.99 | 1.42 | 1.39 | 1.42 | 0.503 | 0.724 | 1.81 | 1.86 | 12.8 |
| 27. | 1.76 | 11.7 | 17.8 | 6.89 | 3.42 | 3.52 | 1.34 | 1.31 | 1.24 | 0.500 | 0.824 | 1.74 | 1.86 | 13.5 |
| 28. | 1.81 | 11.1 | 16.8 | 6.94 | 3.42 | 3.10 | 1.26 | 1.30 | 1.34 | 0.511 | 0.668 | 1.74 | 1.86 | 12.0 |
| 29. | 1.74 | 10.8 | 15.6 | 7.19 | 3.38 | 2.47 | 1.26 | 1.29 | 1.13 | 0.524 | 0.973 | 1.74 | 1.80 | 11.2 |
| 30. | 1.70 | 13.7 | 13.9 | | 3.60 | 2.23 | 1.26 | 1.21 | 1.02 | 0.489 | 0.796 | 1.74 | 1.81 | 10.9 |
| 31. | | 14.8 | 9.79 | | 3.77 | | 1.50 | | 1.11 | 0.485 | | 1.74 | | 11.1 |
| Tag | 26. | 1. | 31. | 24. | 29. | 30. | 30. | 30. | 16. | 24. | 21.+ | 3. | 17. | 2. |
| NQ | 1.64 | 1.77 | 9.79 | 6.74 | 3.38 | 2.23 | 1.26 | 1.21 | 0.873 | 0.428 | 0.237 | 0.580 | 1.49 | 1.66 |
| MQ | 3.22 | 9.46 | 18.4 | 7.67 | 5.16 | 3.39 | 1.85 | 1.56 | 1.15 | 0.661 | 0.468 | 2.52 | 2.58 | 7.30 |
| HQ | 7.75 | 16.1 | 26.9 | 11.3 | 8.20 | 7.60 | 2.83 | 2.86 | 1.70 | 1.25 | 1.08 | 6.55 | 5.98 | 14.2 |
| Tag | 3. | 17. | 23. | 1. | 1. | 10. | 11. | 8. | 18. | 7. | 29. | 6. | 2. | 27. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 33 | 64 | 25 | 18 | 11 | 6 | 5 | 4 | 2 | 2 | 9 | 9 | 25 |
| | 1964/2011 | | 1965/2012 48 Jahre | | | | | | | | | | | |
| Jahr | 1964+ | 1995 | 1996 | 1996 | 1972 | 1991 | 1991 | 1973 | 1996 | 1976 | 1973 | 1983 | 1976 | 1995 |
| NQ | 0.900 | 1.36 | 0.860 | 0.860 | 2.00 | 1.41 | 0.899 | 0.100 | 0.070 | 0.050 | 0.050 | 0.070 | 0.900 | 1.36 |
| MNQ | 3.89 | 5.65 | 7.49 | 7.38 | 5.86 | 4.03 | 2.49 | 1.66 | 1.32 | 1.26 | 1.46 | 2.53 | 3.91 | 5.63 |
| MQ | 6.41 | 9.27 | 12.2 | 11.4 | 10.1 | 7.13 | 4.40 | 2.96 | 2.47 | 1.99 | 2.73 | 4.15 | 6.43 | 9.34 |
| MHQ | 10.7 | 16.5 | 19.8 | 18.2 | 17.5 | 12.2 | 8.39 | 5.98 | 4.75 | 3.58 | 4.96 | 7.32 | 10.7 | 16.6 |
| HQ | 37.9 | 36.8 | 40.1 | 35.7 | 40.0 | 32.7 | 27.4 | 20.4 | 17.7 | 12.6 | 16.8 | 39.0 | 37.9 | 36.8 |
| Jahr | 1998 | 1993 | 1987 | 1970 | 1981 | 1994 | 1975 | 1967+ | 1981 | 2002 | 1968 | 1998 | 1998 | 1993 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 22 | 32 | 42 | 37 | 35 | 24 | 15 | 10 | 9 | 7 | 9 | 14 | 22 | 32 |

## Hauptwerte

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.237 | am 21.09.2012 | 1.64 | 0.237 | 0.237 | am 21.09.2012 |
| MQ $m^3/s$ | 4.64 | | 7.94 | 1.37 | 4.41 | |
| HQ $m^3/s$ | 26.9 | am 23.01.2012 bei W= 391 cm | 26.9 | 6.55 | 26.9 | am 23.01.2012 bei W= 391 cm |
| Nq $l/(s km^2)$ | 0.307 | | 2.12 | 0.307 | 0.307 | |
| Mq $l/(s km^2)$ | 6.01 | | 10.3 | 1.77 | 5.71 | |
| Hq $l/(s km^2)$ | 34.9 | | 34.9 | 8.48 | 34.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 190 | | 162 | 28 | 181 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| NQ $m^3/s$ | 0.050 | am 05.09.1973 | 0.860 | 0.050 | 0.050 | am 05.09.1973 |
| MNQ $m^3/s$ | 0.776 | | 2.38 | 0.821 | 0.821 | |
| MQ $m^3/s$ | 6.25 | | 9.43 | 3.12 | 6.26 | |
| MHQ $m^3/s$ | 25.9 | | 25.1 | 11.5 | 26.8 | |
| HQ $m^3/s$ | 40.1 | am 14.01.1987 bei W= 415 cm | 40.1 | 39.0 | 40.1 | am 14.01.1987 bei W= 415 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.01 | | 3.08 | 1.06 | 1.06 | |
| Mq $l/(s km^2)$ | 8.10 | | 12.2 | 4.04 | 8.11 | |
| MHq $l/(s km^2)$ | 33.5 | | 32.5 | 14.9 | 34.7 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 256 | | 192 | 64 | 256 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.050 | 0.065 | 21.08.1976 | 40.1 | 51.9 | 415 | 14.01.1987 |
| 2 | 0.050 | 0.065 | 05.09.1973 | 40.0 | 51.8 | 415 | 12.03.1981 |
| 3 | 0.070 | 0.091 | 30.07.1996 | 40.0 | 51.8 | 415 | 15.01.1968 |
| 4 | 0.070 | 0.091 | 01.09.1991 | 39.0 | 50.5 | 413 | 28.10.1998 |
| 5 | 0.070 | 0.091 | 08.09.1983 | 39.0 | 50.5 | 413 | 06.01.1987 |
| 6 | 0.100 | 0.130 | 13.08.1982 | 37.4 | 48.4 | 410 | 28.01.1994 |
| 7 | 0.100 | 0.130 | 01.08.1974 | 36.8 | 47.7 | 409 | 10.11.1998 |
| 8 | 0.100 | 0.130 | 06.08.1971 | 36.8 | 47.7 | 409 | 19.03.1994 |
| 9 | 0.100 | 0.130 | 03.07.1970 | 36.8 | 47.7 | 409 | 31.12.1993 |
| 10 | 0.140 | 0.181 | 12.09.1999 | 36.3 | 47.0 | 406 | 03.01.2003 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1965/2012 48 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 26.0 | 26.0 | | | |
| 364 | 24.7 | 24.7 | 40.1 | 32.7 | 11.7 |
| 363 | 24.6 | 24.6 | 39.0 | 29.1 | 11.6 |
| 362 | 23.3 | 23.3 | 37.9 | 26.7 | 10.2 |
| 361 | 22.9 | 22.9 | 37.4 | 25.1 | 9.64 |
| 360 | 22.3 | 22.3 | 37.4 | 24.0 | 8.48 |
| 359 | 22.1 | 22.1 | 37.4 | 23.2 | 8.48 |
| 358 | 21.9 | 21.9 | 36.3 | 22.5 | 8.48 |
| 357 | 20.7 | 20.7 | 36.3 | 21.9 | 8.48 |
| 356 | 20.5 | 20.5 | 35.7 | 21.0 | 8.48 |
| 350 | 18.6 | 18.6 | 35.1 | 18.4 | 7.32 |
| 340 | 14.9 | 14.8 | 28.4 | 15.7 | 6.74 |
| 330 | 13.0 | 11.2 | 25.4 | 13.9 | 6.16 |
| 320 | 10.8 | 8.09 | 23.5 | 12.8 | 5.58 |
| 300 | 7.77 | 7.30 | 20.6 | 11.0 | 5.00 |
| 270 | 6.62 | 5.37 | 14.6 | 8.70 | 3.52 |
| 240 | 4.03 | 4.00 | 12.7 | 7.16 | 2.40 |
| 210 | 3.11 | 3.11 | 10.8 | 5.42 | 2.14 |
| 183 | 2.23 | 2.18 | 9.51 | 4.28 | 2.14 |
| 150 | 1.78 | 1.75 | 8.69 | 3.25 | 1.61 |
| 130 | 1.65 | 1.60 | 8.29 | 2.93 | 1.36 |
| 120 | 1.54 | 1.54 | 7.90 | 2.67 | 1.16 |
| 110 | 1.46 | 1.46 | 7.15 | 2.41 | 0.900 |
| 100 | 1.36 | 1.36 | 6.78 | 2.18 | 0.900 |
| 90 | 1.31 | 1.31 | 6.07 | 2.15 | 0.630 |
| 80 | 1.12 | 1.12 | 5.39 | 1.92 | 0.630 |
| 70 | 1.00 | 1.00 | 4.74 | 1.85 | 0.630 |
| 60 | 0.897 | 0.897 | 4.12 | 1.62 | 0.370 |
| 50 | 0.780 | 0.780 | 3.96 | 1.37 | 0.370 |
| 40 | 0.629 | 0.629 | 3.52 | 1.16 | 0.370 |
| 30 | 0.524 | 0.524 | 3.24 | 0.903 | 0.370 |
| 25 | 0.508 | 0.508 | 3.24 | 0.866 | 0.370 |
| 20 | 0.452 | 0.452 | 2.95 | 0.724 | 0.370 |
| 15 | 0.398 | 0.398 | 2.95 | 0.631 | 0.140 |
| 10 | 0.369 | 0.369 | 2.67 | 0.396 | 0.140 |
| 9 | 0.349 | 0.349 | 2.67 | 0.382 | 0.140 |
| 8 | 0.313 | 0.313 | 2.67 | 0.378 | 0.140 |
| 7 | 0.279 | 0.279 | 2.67 | 0.372 | 0.140 |
| 6 | 0.276 | 0.276 | 2.67 | 0.282 | 0.100 |
| 5 | 0.250 | 0.250 | 2.67 | 0.237 | 0.100 |
| 4 | 0.239 | 0.239 | 2.67 | 0.237 | 0.100 |
| 3 | 0.238 | 0.238 | 2.45 | 0.140 | 0.100 |
| 2 | 0.238 | 0.238 | 2.42 | 0.140 | 0.100 |
| 1 | 0.238 | 0.238 | 2.40 | 0.100 | 0.100 |
| 0 | 0.237 | 0.237 | 2.33 | 0.050 | 0.050 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Hunte

NLWKN

$A_{Eo}$ : 1318 $km^2$

PNP : NN + 18.99 m

Lage: 80.1 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Colnrade OP Nr. 4965116

Gewässer : Hunte

Gebiet : Hunte

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.02 | 3.41 | 21.2 | 13.6 | 12.8 | 5.30 | 4.08 | 3.66 | 2.77 | 2.60 | 2.09 | 2.46 | 3.41 | 3.68 |
| 2. | 6.41 | 3.41 | 24.8 | 13.0 | 13.0 | 5.34 | 4.22 | 3.41 | 2.60 | 2.60 | 2.08 | 2.38 | 5.32 | 3.68 |
| 3. | 7.95 | 3.53 | 27.4 | 12.8 | 12.7 | 5.77 | 5.47 | 3.28 | 2.60 | 2.48 | 2.31 | 2.38 | 6.85 | 3.75 |
| 4. | 8.12 | 3.73 | 30.8 | 12.1 | 12.2 | 5.29 | 5.50 | 3.41 | 2.60 | 2.38 | 2.28 | 3.11 | 6.71 | 6.09 |
| 5. | 8.04 | 4.30 | 40.5 | 10.8 | 11.7 | 5.03 | 4.89 | 3.47 | 2.49 | 2.38 | 2.16 | 4.20 | 6.71 | 6.71 |
| 6. | 7.65 | 6.53 | 43.2 | 9.74 | 11.4 | 5.03 | 4.63 | 3.41 | 2.38 | 2.44 | 2.09 | 6.50 | 6.71 | 6.71 |
| 7. | 6.94 | 8.20 | 36.3 | 9.08 | 10.8 | 5.03 | 4.49 | 3.61 | 2.38 | 2.38 | 1.94 | 7.16 | 7.08 | 7.41 |
| 8. | 6.71 | 11.4 | 42.0 | 9.06 | 12.3 | 5.03 | 4.32 | 4.32 | 2.42 | 2.58 | 1.94 | 5.74 | 6.71 | 6.00 |
| 9. | 6.71 | 14.5 | 41.6 | 9.06 | 12.0 | 4.89 | 4.22 | 3.78 | 2.60 | 2.60 | 1.94 | 4.83 | 5.13 | 7.21 |
| 10. | 6.45 | 15.0 | 36.3 | 9.06 | 10.7 | 5.76 | 4.24 | 3.62 | 2.50 | 2.60 | 1.94 | 4.36 | 4.05 | 9.82 |
| 11. | 5.26 | 13.8 | 31.2 | 8.74 | 9.35 | 7.42 | 4.94 | 3.60 | 2.38 | 2.60 | 1.98 | 4.03 | 3.79 | 10.4 |
| 12. | 4.33 | 11.9 | 28.5 | 8.59 | 8.45 | 5.91 | 4.60 | 3.55 | 2.44 | 2.44 | 2.36 | 3.92 | 3.56 | 9.74 |
| 13. | 4.09 | 11.8 | 29.1 | 8.31 | 8.12 | 5.77 | 4.22 | 3.41 | 2.48 | 2.27 | 2.45 | 3.95 | 3.68 | 9.22 |
| 14. | 3.95 | 13.5 | 27.0 | 8.12 | 7.66 | 5.45 | 4.05 | 3.26 | 2.68 | 2.16 | 2.42 | 3.95 | 3.68 | 8.65 |
| 15. | 3.95 | 16.0 | 24.0 | 9.12 | 7.65 | 5.30 | 3.80 | 3.14 | 2.60 | 2.16 | 2.38 | 3.76 | 3.50 | 10.5 |
| 16. | 3.95 | 18.3 | 22.0 | 9.30 | 7.33 | 4.84 | 3.95 | 3.14 | 2.66 | 2.16 | 2.25 | 3.68 | 3.41 | 11.5 |
| 17. | 3.84 | 26.8 | 20.7 | 9.50 | 6.72 | 4.76 | 3.81 | 3.14 | 3.01 | 2.16 | 2.16 | 4.31 | 3.41 | 11.2 |
| 18. | 3.68 | 22.2 | 19.7 | 10.0 | 6.71 | 4.76 | 3.95 | 2.95 | 3.17 | 2.07 | 2.16 | 5.16 | 3.41 | 11.0 |
| 19. | 3.55 | 19.7 | 21.6 | 12.1 | 6.40 | 4.76 | 3.80 | 2.87 | 3.16 | 1.94 | 2.05 | 5.30 | 3.41 | 10.8 |
| 20. | 3.41 | 19.2 | 33.1 | 11.9 | 6.24 | 4.76 | 3.68 | 2.87 | 3.41 | 2.39 | 2.10 | 5.25 | 3.41 | 8.93 |
| 21. | 3.41 | 19.5 | 40.5 | 10.6 | 6.24 | 4.76 | 3.89 | 2.87 | 3.41 | 2.39 | 2.30 | 5.03 | 3.46 | 8.12 |
| 22. | 3.41 | 18.7 | 47.3 | 10.5 | 5.51 | 4.89 | 3.75 | 2.87 | 3.41 | 2.05 | 2.15 | 5.03 | 3.41 | 7.70 |
| 23. | 3.41 | 19.8 | 55.9 | 11.1 | 5.30 | 5.30 | 3.43 | 2.76 | 3.29 | 1.82 | 1.94 | 5.03 | 3.41 | 15.0 |
| 24. | 3.41 | 20.1 | 43.5 | 11.9 | 5.30 | 5.56 | 3.23 | 2.85 | 3.14 | 1.72 | 2.79 | 4.96 | 3.41 | 21.2 |
| 25. | 3.41 | 20.6 | 34.7 | 14.9 | 5.30 | 5.77 | 3.14 | 3.15 | 3.12 | 1.72 | 2.92 | 3.82 | 3.73 | 18.9 |
| 26. | 3.41 | 18.9 | 29.5 | 14.4 | 5.11 | 5.77 | 3.14 | 3.14 | 3.00 | 1.72 | 2.60 | 3.45 | 3.88 | 19.4 |
| 27. | 3.41 | 17.5 | 27.0 | 12.8 | 5.03 | 5.43 | 2.90 | 3.14 | 2.98 | 1.87 | 2.76 | 3.29 | 3.95 | 19.6 |
| 28. | 3.41 | 16.3 | 25.3 | 12.5 | 5.03 | 5.03 | 2.87 | 3.14 | 3.34 | 1.94 | 2.77 | 3.14 | 3.95 | 17.9 |
| 29. | 3.41 | 15.7 | 22.6 | 12.5 | 5.03 | 4.77 | 2.87 | 2.88 | 3.02 | 2.06 | 2.73 | 3.28 | 3.78 | 16.0 |
| 30. | 3.41 | 22.3 | 20.1 | | 5.03 | 4.30 | 2.87 | 2.87 | 2.81 | 2.41 | 2.64 | 3.41 | 3.68 | 15.4 |
| 31. | | 24.7 | 13.8 | | 5.18 | | 3.08 | | 2.60 | 2.38 | | 3.41 | | 15.0 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 20.+ | 1.+ | 31. | 14. | 27.+ | 30. | 28.+ | 23. | 6.+ | 24.+ | 7.+ | 2.+ | 1.+ | 1.+ |
| NQ | 3.41 | 3.41 | 13.8 | 8.12 | 5.03 | 4.30 | 2.87 | 2.76 | 2.38 | 1.72 | 1.94 | 2.38 | 3.41 | 3.68 |
| MQ | 4.80 | 14.9 | 31.0 | 10.9 | 8.14 | 5.26 | 3.94 | 3.25 | 2.82 | 2.24 | 2.29 | 4.20 | 4.35 | 10.9 |
| HQ | 8.12 | 27.6 | 57.8 | 15.0 | 13.0 | 8.59 | 7.65 | 4.76 | 3.95 | 3.68 | 3.14 | 9.06 | 7.18 | 22.8 |
| Tag | 3. | 17. | 23. | 25. | 1. | 11. | 3. | 8. | 28. | 20. | 24. | 6. | 2. | 23. |
| $h_N$ mm / $h_A$ mm | 9 | 30 | 63 | 21 | 17 | 10 | 8 | 6 | 6 | 5 | 5 | 9 | 9 | 22 |
| | 1957/2011 | | 1958/2012 | | | | | | 55 Jahre | | | | | |
| Jahr | 1959 | 1959 | 1960 | 1960+ | 1975 | 1960 | 1959+ | 1960 | 1964 | 1964 | 1964 | 1959 | 1959 | 1959 |
| NQ | 1.72 | 1.28 | 2.38 | 2.87 | 1.72 | 2.87 | 1.94 | 0.840 | 0.160 | 0.160 | 0.500 | 0.840 | 1.72 | 1.28 |
| MNQ | 6.27 | 8.46 | 10.7 | 11.0 | 9.24 | 6.96 | 4.76 | 3.48 | 3.08 | 2.97 | 3.37 | 4.44 | 6.22 | 8.36 |
| MQ | 10.3 | 15.0 | 19.0 | 17.6 | 16.0 | 11.4 | 7.51 | 5.24 | 4.58 | 4.23 | 4.93 | 6.75 | 10.2 | 15.0 |
| MHQ | 19.4 | 29.5 | 35.9 | 32.1 | 31.7 | 20.7 | 14.3 | 10.6 | 8.62 | 7.58 | 8.49 | 12.7 | 19.3 | 29.5 |
| HQ | 80.4 | 69.1 | 76.4 | 75.3 | 92.2 | 67.4 | 49.0 | 45.5 | 40.1 | 19.8 | 53.3 | 95.0 | 80.4 | 69.1 |
| Jahr | 1998 | 1986 | 1968 | 1970 | 1981 | 1994 | 1975 | 1981 | 1981 | 1958+ | 1993 | 1998 | 1998 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 20 | 30 | 39 | 33 | 33 | 22 | 15 | 10 | 9 | 9 | 10 | 14 | 20 | 30 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 1.72 | am 24.08.2012 | 3.41 | 1.72 | 1.72 | am 24.08.2012 |
| MQ $m^3/s$ | 7.83 | | 12.6 | 3.13 | 7.46 | |
| HQ $m^3/s$ | 57.8 | am 23.01.2012 bei W= 385 cm | 57.8 | 9.06 | 57.8 | am 23.01.2012 bei W= 385 cm |
| Nq $l/(s km^2)$ | 1.31 | | 2.59 | 1.31 | 1.31 | |
| Mq $l/(s km^2)$ | 5.94 | | 9.56 | 2.37 | 5.66 | |
| Hq $l/(s km^2)$ | 43.9 | | 43.9 | 6.87 | 43.9 | |
| $h_N$ mm / $h_A$ mm | 188 | | 150 | 38 | 179 | |
| | 1958/2012 (*) 55 Jahre | | | | 1958/2012 | |
| NQ $m^3/s$ | 0.160 | am 30.07.1964 | 1.28 | 0.160 | 0.160 | am 30.07.1964 |
| MNQ $m^3/s$ | 2.39 | | 4.52 | 2.43 | 2.41 | |
| MQ $m^3/s$ | 10.2 | | 14.9 | 5.55 | 10.2 | |
| MHQ $m^3/s$ | 49.6 | | 47.7 | 20.3 | 50.8 | |
| HQ $m^3/s$ | 95.0 | am 29.10.1998 bei W= 451 cm | 92.2 | 95.0 | 95.0 | am 29.10.1998 bei W= 451 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.81 | | 3.43 | 1.84 | 1.83 | |
| Mq $l/(s km^2)$ | 7.74 | | 11.3 | 4.21 | 7.74 | |
| MHq $l/(s km^2)$ | 37.6 | | 36.2 | 15.4 | 38.5 | |
| $Mh_N$ mm / $Mh_A$ mm | 245 | | 178 | 67 | 245 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.160 | 0.121 | 30.07.1964 | 95.0 | 72.1 | 451 | 29.10.1998 |
| 2 | 0.300 | 0.228 | 10.08.1963 | 92.2 | 70.0 | 446 | 13.03.1981 |
| 3 | 0.840 | 0.637 | 27.06.1960 | 76.4 | 58.0 | 418 | 16.01.1968 |
| 4 | 0.840 | 0.637 | 21.10.1959 | 75.3 | 57.1 | 416 | 24.02.1970 |
| 5 | 1.28 | 0.971 | 10.07.1976 | 74.7 | 56.7 | 415 | 20.03.1994 |
| 6 | 1.50 | 1.14 | 13.08.2003 | 72.5 | 55.0 | 411 | 29.01.1994 |
| 7 | 1.50 | 1.14 | 24.08.1973 | 70.2 | 53.3 | 407 | 22.01.2008 |
| 8 | 1.72 | 1.31 | 24.08.2012 | 70.2 | 53.3 | 407 | 07.01.1987 |
| 9 | 1.72 | 1.31 | 02.09.2009 | 69.7 | 52.9 | 406 | 04.01.2003 |
| 10 | 1.72 | 1.31 | 03.08.1996 | 69.7 | 52.9 | 406 | 01.01.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1958/2012 55 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 55.9 | 55.9 | | | |
| 364 | 47.3 | 47.3 | 93.3 | 56.7 | 14.5 |
| 363 | 43.5 | 43.5 | 87.1 | 51.6 | 14.5 |
| 362 | 43.2 | 43.2 | 80.9 | 48.3 | 14.5 |
| 361 | 42.0 | 42.0 | 79.2 | 45.7 | 14.5 |
| 360 | 41.6 | 41.6 | 78.1 | 43.1 | 14.0 |
| 359 | 41.6 | 41.6 | 73.6 | 41.3 | 14.0 |
| 358 | 41.6 | 41.6 | 69.7 | 39.8 | 14.0 |
| 357 | 40.5 | 40.5 | 69.1 | 37.6 | 13.0 |
| 356 | 40.5 | 40.5 | 67.4 | 36.3 | 12.5 |
| 350 | 29.1 | 29.1 | 58.4 | 30.5 | 12.0 |
| 340 | 22.6 | 21.6 | 46.8 | 24.7 | 10.5 |
| 330 | 19.8 | 16.0 | 43.4 | 21.7 | 9.53 |
| 320 | 16.0 | 13.0 | 38.1 | 19.3 | 9.06 |
| 300 | 12.2 | 11.0 | 30.3 | 16.3 | 8.59 |
| 270 | 8.20 | 7.66 | 22.8 | 13.1 | 5.03 |
| 240 | 5.74 | 5.56 | 18.6 | 10.6 | 3.95 |
| 210 | 5.11 | 5.11 | 15.6 | 8.60 | 2.87 |
| 183 | 4.24 | 4.24 | 14.0 | 7.19 | 2.38 |
| 150 | 3.60 | 3.66 | 12.0 | 5.32 | 2.16 |
| 130 | 3.43 | 3.43 | 11.5 | 4.77 | 1.94 |
| 120 | 3.34 | 3.34 | 11.0 | 4.51 | 1.94 |
| 110 | 3.15 | 3.15 | 11.0 | 4.30 | 1.94 |
| 100 | 3.11 | 3.11 | 10.0 | 4.23 | 1.60 |
| 90 | 2.88 | 2.88 | 9.53 | 3.97 | 1.60 |
| 80 | 2.79 | 2.79 | 9.53 | 3.69 | 1.60 |
| 70 | 2.64 | 2.64 | 9.06 | 3.42 | 1.50 |
| 60 | 2.64 | 2.64 | 8.12 | 3.28 | 1.50 |
| 50 | 2.45 | 2.45 | 7.65 | 3.15 | 1.50 |
| 40 | 2.39 | 2.39 | 6.71 | 2.88 | 1.48 |
| 30 | 2.27 | 2.27 | 6.42 | 2.61 | 1.12 |
| 25 | 2.25 | 2.25 | 6.20 | 2.39 | 1.00 |
| 20 | 2.10 | 2.10 | 5.90 | 2.21 | 0.910 |
| 15 | 2.06 | 2.06 | 5.77 | 2.17 | 0.820 |
| 10 | 1.98 | 1.98 | 5.55 | 1.95 | 0.500 |
| 9 | 1.98 | 1.98 | 5.30 | 1.95 | 0.500 |
| 8 | 1.98 | 1.98 | 5.30 | 1.91 | 0.480 |
| 7 | 1.98 | 1.98 | 5.30 | 1.74 | 0.480 |
| 6 | 1.98 | 1.98 | 5.30 | 1.74 | 0.480 |
| 5 | 1.98 | 1.98 | 5.30 | 1.72 | 0.480 |
| 4 | 1.87 | 1.87 | 5.30 | 1.51 | 0.340 |
| 3 | 1.82 | 1.82 | 5.30 | 1.51 | 0.200 |
| 2 | 1.82 | 1.82 | 5.30 | 1.34 | 0.180 |
| 1 | 1.82 | 1.82 | 4.97 | 1.08 | 0.180 |
| 0 | 1.72 | 1.72 | 4.54 | 0.160 | 0.160 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Hunte

NLWKN

$A_{Eo}$ : 160 $km^2$

PNP : NN + 0.00 m

Lage: 5.9 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Oberlethe Nr. 4966112

Gewässer : Lethe

Gebiet : Hunte

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.916 | 0.815 | 2.49 | 1.76 | 1.80 | 1.36 | 0.970 | 0.817 | 0.679 | 0.647 | 0.479 | 0.747 | 0.861 | 0.907 |
| 2. | 0.928 | 1.15 | 3.12 | 1.73 | 1.77 | 1.35 | 0.961 | 0.768 | 0.652 | 0.635 | 0.481 | 0.816 | 0.788 | 0.914 |
| 3. | 0.912 | 1.10 | 3.01 | 1.71 | 1.76 | 1.31 | 0.972 | 0.746 | 0.651 | 0.622 | 0.481 | 0.880 | 0.788 | 0.926 |
| 4. | 0.887 | 1.17 | 3.29 | 1.69 | 1.73 | 1.26 | 0.964 | 0.747 | 0.652 | 0.614 | 0.483 | 0.910 | 0.793 | 0.954 |
| 5. | 0.888 | 1.18 | 3.90 | 1.67 | 1.74 | 1.23 | 0.941 | 0.746 | 0.653 | 0.605 | 0.492 | 0.972 | 0.825 | 0.960 |
| 6. | 0.870 | 1.43 | 3.14 | 1.64 | 1.70 | 1.22 | 0.917 | 0.735 | 0.655 | 0.596 | 0.488 | 1.10 | 0.868 | 0.974 |
| 7. | 0.854 | 1.59 | 2.89 | 1.74 | 1.70 | 1.22 | 0.905 | 0.731 | 0.656 | 0.592 | 0.489 | 1.01 | 0.876 | 0.969 |
| 8. | 0.854 | 2.70 | 3.15 | 1.63 | 1.82 | 1.20 | 0.894 | 0.735 | 0.662 | 0.586 | 0.498 | 0.935 | 0.931 | 0.968 |
| 9. | 0.855 | 2.60 | 2.80 | 1.62 | 1.72 | 1.20 | 0.916 | 0.726 | 0.696 | 0.583 | 0.508 | 0.916 | 0.938 | 1.03 |
| 10. | 0.865 | 2.15 | 2.56 | 1.60 | 1.69 | 1.24 | 0.984 | 0.712 | 0.716 | 0.568 | 0.507 | 0.923 | 0.957 | 1.21 |
| 11. | 0.868 | 1.80 | 2.40 | 1.59 | 1.65 | 1.24 | 0.943 | 0.712 | 0.693 | 0.559 | 0.519 | 0.945 | 0.934 | 1.18 |
| 12. | 0.855 | 1.68 | 2.36 | 1.57 | 1.63 | 1.22 | 0.908 | 0.712 | 0.703 | 0.551 | 0.527 | 0.926 | 0.926 | 1.19 |
| 13. | 0.856 | 1.84 | 2.33 | 1.58 | 1.60 | 1.21 | 0.885 | 0.710 | 0.697 | 0.538 | 0.539 | 0.957 | 0.932 | 1.21 |
| 14. | 0.856 | 2.40 | 2.18 | 1.60 | 1.59 | 1.17 | 0.873 | 0.710 | 0.697 | 0.527 | 0.548 | 0.963 | 0.932 | 1.21 |
| 15. | 0.836 | 2.28 | 2.07 | 1.67 | 1.58 | 1.16 | 0.862 | 0.717 | 0.699 | 0.515 | 0.566 | 0.925 | 0.914 | 1.43 |
| 16. | 0.827 | 2.91 | 1.98 | 1.61 | 1.57 | 1.14 | 0.858 | 0.733 | 0.698 | 0.504 | 0.578 | 0.872 | 0.849 | 1.42 |
| 17. | 0.827 | 3.07 | 1.91 | 1.67 | 1.56 | 1.12 | 0.841 | 0.742 | 0.705 | 0.495 | 0.590 | 0.874 | 0.848 | 1.41 |
| 18. | 0.828 | 2.29 | 1.86 | 1.68 | 1.55 | 1.12 | 0.825 | 0.755 | 0.716 | 0.487 | 0.599 | 0.866 | 0.846 | 1.50 |
| 19. | 0.828 | 2.08 | 2.03 | 1.76 | 1.51 | 1.10 | 0.815 | 0.766 | 0.753 | 0.478 | 0.606 | 0.910 | 0.861 | 1.48 |
| 20. | 0.828 | 2.02 | 2.22 | 1.68 | 1.50 | 1.08 | 0.822 | 0.766 | 0.733 | 0.470 | 0.623 | 0.911 | 0.873 | 1.44 |
| 21. | 0.828 | 1.97 | 2.35 | 1.68 | 1.47 | 1.06 | 0.833 | 0.766 | 0.703 | 0.461 | 0.640 | 0.891 | 0.889 | 1.43 |
| 22. | 0.829 | 2.00 | 3.04 | 1.68 | 1.47 | 1.05 | 0.825 | 0.768 | 0.690 | 0.462 | 0.654 | 0.881 | 0.870 | 1.43 |
| 23. | 0.820 | 2.05 | 3.72 | 1.78 | 1.45 | 1.05 | 0.801 | 0.777 | 0.679 | 0.453 | 0.662 | 0.883 | 0.869 | 1.84 |
| 24. | 0.800 | 2.51 | 2.44 | 1.84 | 1.42 | 1.05 | 0.771 | 0.817 | 0.672 | 0.452 | 0.709 | 0.887 | 0.874 | 1.84 |
| 25. | 0.800 | 2.20 | 2.18 | 1.91 | 1.41 | 1.03 | 0.744 | 0.897 | 0.661 | 0.453 | 0.785 | 0.913 | 0.904 | 1.99 |
| 26. | 0.800 | 1.94 | 2.06 | 1.84 | 1.40 | 1.01 | 0.746 | 0.836 | 0.654 | 0.464 | 0.763 | 0.903 | 0.915 | 2.01 |
| 27. | 0.800 | 1.79 | 2.04 | 1.81 | 1.39 | 0.989 | 0.740 | 0.801 | 0.647 | 0.477 | 0.744 | 0.902 | 0.935 | 1.98 |
| 28. | 0.801 | 1.69 | 1.98 | 1.81 | 1.36 | 0.991 | 0.742 | 0.779 | 0.656 | 0.474 | 0.742 | 0.898 | 0.945 | 1.86 |
| 29. | 0.801 | 1.65 | 1.92 | 1.81 | 1.37 | 0.990 | 0.746 | 0.743 | 0.671 | 0.473 | 0.737 | 0.885 | 0.929 | 1.85 |
| 30. | 0.801 | 4.14 | 1.86 | | 1.37 | 0.980 | 0.760 | 0.709 | 0.660 | 0.476 | 0.742 | 0.893 | 0.913 | 1.82 |
| 31. | | 2.77 | 1.81 | | 1.36 | | 0.782 | | 0.651 | 0.478 | | 0.890 | | 1.82 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24.+ | 1. | 31. | 12. | 28.+ | 30. | 27. | 30. | 27. | 24. | 1. | 1. | 2.+ | 1. |
| NQ | 0.800 | 0.815 | 1.81 | 1.57 | 1.36 | 0.980 | 0.740 | 0.709 | 0.647 | 0.452 | 0.479 | 0.747 | 0.788 | 0.907 |
| MQ | 0.844 | 2.03 | 2.49 | 1.70 | 1.57 | 1.14 | 0.856 | 0.756 | 0.681 | 0.526 | 0.593 | 0.909 | 0.886 | 1.39 |
| HQ | 0.989 | 5.62 | 5.09 | 2.10 | 1.86 | 1.36 | 1.04 | 0.913 | 0.767 | 0.649 | 0.797 | 1.17 | 0.979 | 2.18 |
| Tag | 3. | 30. | 22. | 7. | 8. | 1. | 9. | 25. | 19. | 1. | 25. | 6. | 10. | 25. |
| $h_N$ mm / $h_A$ mm | 14 | 34 | 42 | 27 | 26 | 18 | 14 | 12 | 11 | 9 | 10 | 15 | 14 | 23 |

| | 1972/2011 | | 1973/2012 40 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1977 | 1977 | 1978 | 1978 | 1978 | 1978 | 1990 | 1976 | 1989 | 1980 | 1983 | 1983 | 1977 | 1977 |
| NQ | 0.430 | 0.360 | 0.340 | 0.640 | 0.840 | 0.280 | 0.468 | 0.170 | 0.154 | 0.240 | 0.237 | 0.249 | 0.430 | 0.360 |
| MNQ | 1.14 | 1.30 | 1.46 | 1.48 | 1.41 | 1.12 | 0.887 | 0.735 | 0.647 | 0.645 | 0.726 | 0.950 | 1.13 | 1.29 |
| MQ | 1.44 | 1.69 | 1.92 | 1.85 | 1.81 | 1.40 | 1.10 | 0.949 | 0.871 | 0.869 | 0.973 | 1.23 | 1.42 | 1.70 |
| MHQ | 2.21 | 2.87 | 3.34 | 3.01 | 3.37 | 1.95 | 1.55 | 1.51 | 1.38 | 1.34 | 1.56 | 2.13 | 2.16 | 2.88 |
| HQ | 5.16 | 6.01 | 9.37 | 7.07 | 12.8 | 5.15 | 3.54 | 8.65 | 4.98 | 4.37 | 7.49 | 13.7 | 5.16 | 6.01 |
| Jahr | 2010 | 2007 | 2008 | 1995 | 1981 | 1994 | 1983 | 1981 | 1981 | 1987 | 1993 | 1998 | 2010 | 2007 |
| $Mh_N$ mm / $Mh_A$ mm | 23 | 28 | 32 | 29 | 30 | 23 | 18 | 15 | 15 | 15 | 16 | 21 | 23 | 28 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.452 | am 24.08.2012 | 0.800 | 0.452 | 0.452 | am 24.08.2012 |
| MQ $m^3/s$ | 1.18 | | 1.64 | 0.721 | 1.13 | |
| HQ $m^3/s$ | 5.62 | am 30.12.2011 bei W= 420 cm | 5.62 | 1.17 | 5.09 | am 22.01.2012 bei W= 451 cm |
| Nq $l/(s km^2)$ | 2.82 | | 5.00 | 2.82 | 2.82 | |
| Mq $l/(s km^2)$ | 7.38 | | 10.2 | 4.51 | 7.06 | |
| Hq $l/(s km^2)$ | 35.1 | | 35.1 | 7.32 | 31.8 | |
| $h_N$ mm / $h_A$ mm | 233 | | 161 | 72 | 223 | |
| | 1973/2012 (*) 40 Jahre | | | | 1973/2012 | |
| NQ $m^3/s$ | 0.154 | am 17.07.1989 | 0.280 | 0.154 | 0.154 | am 17.07.1989 |
| MNQ $m^3/s$ | 0.523 | | 0.985 | 0.528 | 0.520 | |
| MQ $m^3/s$ | 1.34 | | 1.69 | 0.999 | 1.34 | |
| MHQ $m^3/s$ | 5.24 | | 4.70 | 2.88 | 5.29 | |
| HQ $m^3/s$ | 13.7 | am 28.10.1998 bei W= 510 cm | 12.8 | 13.7 | 13.7 | am 28.10.1998 bei W= 510 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.27 | | 6.16 | 3.30 | 3.25 | |
| Mq $l/(s km^2)$ | 8.38 | | 10.6 | 6.24 | 8.38 | |
| MHq $l/(s km^2)$ | 32.8 | | 29.4 | 18.0 | 33.1 | |
| $Mh_N$ mm / $Mh_A$ mm | 265 | | 166 | 99 | 265 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.154 | 0.962 | 17.07.1989 | 13.7 | 85.6 | 510 | 28.10.1998 |
| 2 | 0.170 | 1.06 | 29.06.1976 | 12.8 | 80.0 | 507 | 12.03.1981 |
| 3 | 0.237 | 1.48 | 30.09.1983 | 12.0 | 75.0 | 500 | 14.10.1993 |
| 4 | 0.240 | 1.50 | 26.08.1980 | 9.37 | 58.5 | 456 | 22.01.2008 |
| 5 | 0.280 | 1.75 | 23.04.1978 | 8.65 | 54.1 | 495 | 30.06.1981 |
| 6 | 0.315 | 1.97 | 22.07.2006 | 8.13 | 50.8 | 464 | 18.03.1987 |
| 7 | 0.340 | 2.12 | 16.01.1978 | 7.57 | 47.3 | 463 | 04.03.1979 |
| 8 | 0.418 | 2.61 | 04.08.1982 | 7.49 | 46.8 | 480 | 25.09.1993 |
| 9 | 0.420 | 2.62 | 19.08.1975 | 7.07 | 44.2 | 431 | 08.02.1995 |
| 10 | 0.438 | 2.74 | 04.08.2011 | 7.02 | 43.9 | 433 | 18.01.2007 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1973/2012 40 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.14 | 3.90 | | | |
| 364 | 3.90 | 3.72 | 10.3 | 4.47 | 1.65 |
| 363 | 3.72 | 3.29 | 8.69 | 4.03 | 1.61 |
| 362 | 3.29 | 3.15 | 6.73 | 3.74 | 1.56 |
| 361 | 3.15 | 3.14 | 6.64 | 3.60 | 1.55 |
| 360 | 3.14 | 3.12 | 5.18 | 3.47 | 1.55 |
| 359 | 3.12 | 3.04 | 4.96 | 3.36 | 1.55 |
| 358 | 3.07 | 3.01 | 4.86 | 3.29 | 1.54 |
| 357 | 3.04 | 2.89 | 4.84 | 3.22 | 1.53 |
| 356 | 3.01 | 2.80 | 4.68 | 3.15 | 1.49 |
| 350 | 2.60 | 2.35 | 4.46 | 2.81 | 1.43 |
| 340 | 2.29 | 1.99 | 4.09 | 2.44 | 1.30 |
| 330 | 2.05 | 1.85 | 3.62 | 2.20 | 1.27 |
| 320 | 1.92 | 1.82 | 3.25 | 2.04 | 1.22 |
| 300 | 1.76 | 1.69 | 2.90 | 1.83 | 1.16 |
| 270 | 1.60 | 1.44 | 2.44 | 1.59 | 1.09 |
| 240 | 1.23 | 1.18 | 2.26 | 1.43 | 0.959 |
| 210 | 0.980 | 0.961 | 2.10 | 1.30 | 0.905 |
| 183 | 0.898 | 0.915 | 1.84 | 1.20 | 0.790 |
| 150 | 0.829 | 0.868 | 1.58 | 1.08 | 0.700 |
| 130 | 0.815 | 0.815 | 1.52 | 0.996 | 0.670 |
| 120 | 0.771 | 0.771 | 1.49 | 0.962 | 0.670 |
| 110 | 0.753 | 0.753 | 1.45 | 0.929 | 0.650 |
| 100 | 0.743 | 0.743 | 1.41 | 0.901 | 0.630 |
| 90 | 0.717 | 0.717 | 1.33 | 0.871 | 0.620 |
| 80 | 0.705 | 0.705 | 1.30 | 0.841 | 0.590 |
| 70 | 0.690 | 0.690 | 1.27 | 0.811 | 0.580 |
| 60 | 0.655 | 0.655 | 1.21 | 0.780 | 0.570 |
| 50 | 0.640 | 0.640 | 1.16 | 0.737 | 0.559 |
| 40 | 0.590 | 0.590 | 1.07 | 0.694 | 0.480 |
| 30 | 0.538 | 0.538 | 1.03 | 0.654 | 0.420 |
| 25 | 0.508 | 0.508 | 1.01 | 0.631 | 0.420 |
| 20 | 0.492 | 0.492 | 1.00 | 0.603 | 0.390 |
| 15 | 0.483 | 0.483 | 0.990 | 0.570 | 0.360 |
| 10 | 0.477 | 0.477 | 0.980 | 0.528 | 0.350 |
| 9 | 0.476 | 0.476 | 0.970 | 0.521 | 0.331 |
| 8 | 0.474 | 0.474 | 0.970 | 0.512 | 0.293 |
| 7 | 0.473 | 0.473 | 0.970 | 0.507 | 0.256 |
| 6 | 0.470 | 0.470 | 0.970 | 0.500 | 0.232 |
| 5 | 0.464 | 0.464 | 0.960 | 0.487 | 0.217 |
| 4 | 0.462 | 0.462 | 0.960 | 0.475 | 0.186 |
| 3 | 0.461 | 0.461 | 0.940 | 0.460 | 0.181 |
| 2 | 0.461 | 0.461 | 0.890 | 0.410 | 0.178 |
| 1 | 0.461 | 0.461 | 0.890 | 0.352 | 0.156 |
| 0 | 0.452 | 0.452 | 0.802 | 0.154 | 0.154 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Dwergter Geest

NLWKN

$A_{Eo}$ : 40.0 $km^2$

PNP : NN + 4.20 m

Lage: 17.1 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Dorfhagen Nr. 4976103

Gewässer : Drepte

Gebiet : Unterweser

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.144 | 0.113 | 0.501 | 0.128 | 0.292 | 0.151 | 0.156 | 0.260 | 0.117 | 0.124 | 0.110 | 0.121 | 0.167 | 0.137 |
| 2. | 0.144 | 0.694 | 2.66 | 0.108 | 0.264 | 0.149 | 0.152 | 0.134 | 0.138 | 0.113 | 0.105 | 0.122 | 0.195 | 0.167 |
| 3. | 0.144 | 0.502 | 2.49 | 0.103 | 0.242 | 0.148 | 0.152 | 0.120 | 0.122 | 0.113 | 0.103 | 0.134 | 0.204 | 0.193 |
| 4. | 0.143 | 0.435 | 2.70 | 0.094 | 0.227 | 0.146 | 0.153 | 0.110 | 0.113 | 0.117 | 0.101 | 0.237 | 0.287 | 0.304 |
| 5. | 0.143 | 0.836 | 3.23 | 0.085 | 0.228 | 0.141 | 0.154 | 0.114 | 0.110 | 0.110 | 0.096 | 0.468 | 0.259 | 0.402 |
| 6. | 0.139 | 1.63 | 4.25 | 0.082 | 0.209 | 0.142 | 0.141 | 0.115 | 0.114 | 0.171 | 0.105 | 0.924 | 0.240 | 0.227 |
| 7. | 0.142 | 2.70 | 1.40 | 0.072 | 0.217 | 0.148 | 0.145 | 0.124 | 0.108 | 0.209 | 0.103 | 0.671 | 0.332 | 0.181 |
| 8. | 0.143 | 3.42 | 1.16 | 0.073 | 0.831 | 0.139 | 0.149 | 0.123 | 0.111 | 0.413 | 0.104 | 0.271 | 0.328 | 0.149 |
| 9. | 0.142 | 2.75 | 0.757 | 0.085 | 0.388 | 0.142 | 0.167 | 0.115 | 0.118 | 0.272 | 0.101 | 0.207 | 0.267 | 0.280 |
| 10. | 0.141 | 3.78 | 0.702 | 0.087 | 0.318 | 0.200 | 0.183 | 0.110 | 0.137 | 0.152 | 0.099 | 0.174 | 0.224 | 1.26 |
| 11. | 0.130 | 1.77 | 0.375 | 0.089 | 0.285 | 0.215 | 0.187 | 0.116 | 0.118 | 0.127 | 0.102 | 0.169 | 0.205 | 0.482 |
| 12. | 0.130 | 0.473 | 0.336 | 0.090 | 0.251 | 0.196 | 0.160 | 0.108 | 0.125 | 0.109 | 0.106 | 0.163 | 0.179 | 0.258 |
| 13. | 0.123 | 0.614 | 0.465 | 0.096 | 0.238 | 0.171 | 0.148 | 0.108 | 0.131 | 0.103 | 0.106 | 0.259 | 0.166 | 0.224 |
| 14. | 0.118 | 0.714 | 0.337 | 0.116 | 0.225 | 0.143 | 0.148 | 0.106 | 0.182 | 0.095 | 0.105 | 0.224 | 0.158 | 0.199 |
| 15. | 0.117 | 0.997 | 0.235 | 0.186 | 0.220 | 0.149 | 0.151 | 0.102 | 0.148 | 0.091 | 0.105 | 0.199 | 0.142 | 1.02 |
| 16. | 0.117 | 1.14 | 0.190 | 0.159 | 0.207 | 0.162 | 0.162 | 0.195 | 0.135 | 0.115 | 0.104 | 0.201 | 0.140 | 0.578 |
| 17. | 0.111 | 2.87 | 0.194 | 0.262 | 0.202 | 0.139 | 0.150 | 0.219 | 0.147 | 0.106 | 0.104 | 0.195 | 0.138 | 0.392 |
| 18. | 0.110 | 2.26 | 0.167 | 0.258 | 0.205 | 0.122 | 0.151 | 0.113 | 0.147 | 0.093 | 0.104 | 0.176 | 0.143 | 0.316 |
| 19. | 0.113 | 1.87 | 0.457 | 0.346 | 0.185 | 0.118 | 0.144 | 0.107 | 0.217 | 0.089 | 0.103 | 0.165 | 0.170 | 0.256 |
| 20. | 0.108 | 0.754 | 1.33 | 0.278 | 0.169 | 0.117 | 0.145 | 0.106 | 0.219 | 0.087 | 0.103 | 0.155 | 0.159 | 0.214 |
| 21. | 0.108 | 0.811 | 1.40 | 0.312 | 0.172 | 0.116 | 0.145 | 0.114 | 0.158 | 0.086 | 0.102 | 0.145 | 0.150 | 0.195 |
| 22. | 0.103 | 0.857 | 1.81 | 0.421 | 0.174 | 0.116 | 0.141 | 0.116 | 0.140 | 0.118 | 0.115 | 0.143 | 0.137 | 0.177 |
| 23. | 0.105 | 1.12 | 3.30 | 0.403 | 0.177 | 0.142 | 0.128 | 0.118 | 0.128 | 0.109 | 0.117 | 0.144 | 0.137 | 0.964 |
| 24. | 0.101 | 1.27 | 3.19 | 0.415 | 0.180 | 0.146 | 0.122 | 0.209 | 0.117 | 0.108 | 0.157 | 0.145 | 0.154 | 1.48 |
| 25. | 0.101 | 1.40 | 1.04 | 0.727 | 0.171 | 0.155 | 0.113 | 0.331 | 0.105 | 0.103 | 0.193 | 0.146 | 0.188 | 0.841 |
| 26. | 0.108 | 0.391 | 0.427 | 0.416 | 0.161 | 0.154 | 0.112 | 0.180 | 0.103 | 0.112 | 0.159 | 0.153 | 0.192 | 1.06 |
| 27. | 0.111 | 0.242 | 0.340 | 0.343 | 0.161 | 0.148 | 0.111 | 0.153 | 0.102 | 0.112 | 0.154 | 0.148 | 0.195 | 0.661 |
| 28. | 0.124 | 0.193 | 0.341 | 0.351 | 0.158 | 0.166 | 0.111 | 0.183 | 0.629 | 0.107 | 0.159 | 0.149 | 0.175 | 0.402 |
| 29. | 0.121 | 0.179 | 0.256 | 0.320 | 0.156 | 0.171 | 0.111 | 0.148 | 0.503 | 0.105 | 0.146 | 0.150 | 0.160 | 0.315 |
| 30. | 0.116 | 1.78 | 0.195 | | 0.155 | 0.165 | 0.109 | 0.125 | 0.192 | 0.097 | 0.131 | 0.159 | 0.146 | 0.316 |
| 31. | | 1.28 | 0.146 | | 0.161 | | 0.148 | | 0.147 | 0.108 | | 0.168 | | 0.804 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24.+ | 1. | 31. | 7. | 30. | 21.+ | 30. | 15. | 27. | 21. | 5. | 1. | 22.+ | 1. |
| NQ | 0.101 | 0.113 | 0.146 | 0.072 | 0.155 | 0.116 | 0.109 | 0.102 | 0.102 | 0.086 | 0.096 | 0.121 | 0.137 | 0.137 |
| MQ | 0.123 | 1.29 | 1.17 | 0.224 | 0.233 | 0.151 | 0.144 | 0.143 | 0.164 | 0.128 | 0.117 | 0.222 | 0.191 | 0.466 |
| HQ | 0.144 | 4.20 | 4.75 | 0.960 | 1.14 | 0.249 | 0.306 | 0.824 | 1.30 | 0.767 | 0.230 | 1.28 | 0.460 | 2.12 |
| Tag | 1. | 10. | 6. | 25. | 8. | 11. | 31. | 16. | 28. | 8. | 24. | 7. | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 86 | 78 | 14 | 16 | 10 | 10 | 9 | 11 | 9 | 8 | 15 | 12 | 31 |
| | 1980/2011 | | 1981/2012 | | | | | | 32 Jahre | | | | | |
| Jahr | 1999 | 1999 | 2010 | 2012 | 2011 | 2011 | 2004 | 1992 | 1983 | 2009 | 2009 | 2010 | 1999 | 1999 |
| NQ | 0.093 | 0.090 | 0.073 | 0.072 | 0.127 | 0.095 | 0.085 | 0.080 | 0.048 | 0.068 | 0.063 | 0.039 | 0.093 | 0.090 |
| MNQ | 0.158 | 0.177 | 0.209 | 0.207 | 0.217 | 0.181 | 0.150 | 0.126 | 0.113 | 0.112 | 0.114 | 0.124 | 0.157 | 0.174 |
| MQ | 0.359 | 0.463 | 0.565 | 0.467 | 0.475 | 0.283 | 0.221 | 0.200 | 0.198 | 0.190 | 0.224 | 0.253 | 0.352 | 0.461 |
| MHQ | 1.48 | 2.15 | 2.43 | 1.96 | 2.02 | 0.942 | 0.656 | 0.821 | 1.03 | 0.766 | 0.857 | 1.22 | 1.44 | 2.14 |
| HQ | 3.44 | 4.90 | 6.39 | 4.41 | 4.73 | 2.91 | 2.90 | 4.18 | 4.18 | 4.29 | 4.33 | 5.18 | 3.44 | 4.90 |
| Jahr | 1984 | 2007 | 2008 | 2011 | 1981 | 2006 | 2006 | 1981 | 1981+ | 2002 | 2001 | 1993 | 1984 | 2007 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 23 | 31 | 38 | 29 | 32 | 18 | 15 | 13 | 13 | 13 | 15 | 17 | 23 | 31 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.072 | am 07.02.2012 | 0.072 | 0.086 | 0.072 | am 07.02.2012 |
| MQ $m^3/s$ | 0.345 | | 0.539 | 0.153 | 0.281 | |
| HQ $m^3/s$ | 4.75 | am 06.01.2012 bei W= 128 cm | 4.75 | 1.30 | 4.75 | am 06.01.2012 bei W= 128 cm |
| Nq $l/(s km^2)$ | 1.80 | | 1.80 | 2.15 | 1.80 | |
| Mq $l/(s km^2)$ | 8.62 | | 13.5 | 3.82 | 7.02 | |
| Hq $l/(s km^2)$ | 119 | | 119 | 32.5 | 119 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 273 | | 212 | 61 | 222 | |
| | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
| NQ $m^3/s$ | 0.039 | am 15.10.2010 | 0.072 | 0.039 | 0.039 | am 15.10.2010 |
| MNQ $m^3/s$ | 0.090 | | 0.138 | 0.091 | 0.090 | |
| MQ $m^3/s$ | 0.324 | | 0.436 | 0.214 | 0.324 | |
| MHQ $m^3/s$ | 3.64 | | 3.38 | 2.20 | 3.64 | |
| HQ $m^3/s$ | 6.39 | am 22.01.2008 bei W= 148 cm | 6.39 | 5.18 | 6.39 | am 22.01.2008 bei W= 148 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.25 | | 3.45 | 2.28 | 2.25 | |
| Mq $l/(s km^2)$ | 8.10 | | 10.9 | 5.35 | 8.10 | |
| MHq $l/(s km^2)$ | 91.0 | | 84.5 | 55.0 | 91.0 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 256 | | 171 | 85 | 256 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.039 | 0.975 | 15.10.2010 | 6.39 | 160 | 148 | 22.01.2008 |
| 2 | 0.048 | 1.20 | 13.07.1983 | 5.18 | 130 | 132 | 15.10.1993 |
| 3 | 0.055 | 1.38 | 05.10.1988 | 4.90 | 122 | 131 | 08.12.2007 |
| 4 | 0.063 | 1.58 | 27.09.2009 | 4.86 | 122 | 127 | 19.01.2007 |
| 5 | 0.072 | 1.80 | 07.02.2012 | 4.82 | 120 | 135 | 13.12.1998 |
| 6 | 0.076 | 1.90 | 29.09.1997 | 4.75 | 119 | 128 | 06.01.2012 |
| 7 | 0.078 | 1.95 | 09.09.1999 | 4.73 | 118 | 127 | 28.10.1998 |
| 8 | 0.079 | 1.98 | 01.07.1992 | 4.73 | 118 | 139 | 12.03.1981 |
| 9 | 0.080 | 2.00 | 26.08.1996 | 4.70 | 118 | 125 | 14.01.2003 |
| 10 | 0.080 | 2.00 | 04.07.1993 | 4.66 | 116 | 126 | 23.03.1988 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1981/2012 32 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.25 | 4.25 | | | |
| 364 | 3.78 | 3.30 | 4.71 | 2.89 | 1.15 |
| 363 | 3.42 | 3.23 | 4.39 | 2.42 | 1.07 |
| 362 | 3.30 | 3.19 | 3.44 | 2.15 | 0.915 |
| 361 | 3.23 | 2.70 | 3.21 | 1.99 | 0.847 |
| 360 | 3.19 | 2.66 | 2.94 | 1.84 | 0.674 |
| 359 | 2.87 | 2.49 | 2.87 | 1.71 | 0.566 |
| 358 | 2.75 | 1.81 | 2.77 | 1.56 | 0.523 |
| 357 | 2.75 | 1.48 | 2.75 | 1.48 | 0.455 |
| 356 | 2.75 | 1.48 | 2.70 | 1.41 | 0.420 |
| 350 | 1.78 | 1.04 | 1.87 | 1.09 | 0.390 |
| 340 | 1.14 | 0.671 | 1.54 | 0.809 | 0.313 |
| 330 | 0.754 | 0.427 | 1.18 | 0.636 | 0.262 |
| 320 | 0.501 | 0.375 | 1.01 | 0.539 | 0.241 |
| 300 | 0.337 | 0.285 | 0.638 | 0.414 | 0.217 |
| 270 | 0.219 | 0.220 | 0.458 | 0.319 | 0.183 |
| 240 | 0.179 | 0.190 | 0.367 | 0.267 | 0.166 |
| 210 | 0.159 | 0.168 | 0.317 | 0.232 | 0.157 |
| 183 | 0.149 | 0.155 | 0.292 | 0.209 | 0.138 |
| 150 | 0.143 | 0.147 | 0.253 | 0.184 | 0.123 |
| 130 | 0.130 | 0.142 | 0.238 | 0.171 | 0.117 |
| 120 | 0.123 | 0.138 | 0.230 | 0.165 | 0.110 |
| 110 | 0.120 | 0.131 | 0.223 | 0.159 | 0.106 |
| 100 | 0.117 | 0.123 | 0.217 | 0.153 | 0.102 |
| 90 | 0.115 | 0.118 | 0.213 | 0.147 | 0.100 |
| 80 | 0.113 | 0.116 | 0.210 | 0.142 | 0.097 |
| 70 | 0.111 | 0.113 | 0.204 | 0.135 | 0.095 |
| 60 | 0.109 | 0.111 | 0.195 | 0.129 | 0.090 |
| 50 | 0.107 | 0.109 | 0.192 | 0.122 | 0.086 |
| 40 | 0.106 | 0.106 | 0.185 | 0.115 | 0.079 |
| 30 | 0.104 | 0.104 | 0.181 | 0.108 | 0.074 |
| 25 | 0.103 | 0.104 | 0.178 | 0.105 | 0.073 |
| 20 | 0.102 | 0.102 | 0.172 | 0.101 | 0.070 |
| 15 | 0.097 | 0.097 | 0.169 | 0.097 | 0.061 |
| 10 | 0.090 | 0.090 | 0.165 | 0.092 | 0.049 |
| 9 | 0.090 | 0.090 | 0.163 | 0.091 | 0.048 |
| 8 | 0.090 | 0.090 | 0.162 | 0.089 | 0.046 |
| 7 | 0.089 | 0.089 | 0.161 | 0.088 | 0.045 |
| 6 | 0.089 | 0.089 | 0.161 | 0.086 | 0.045 |
| 5 | 0.086 | 0.086 | 0.157 | 0.084 | 0.045 |
| 4 | 0.086 | 0.086 | 0.155 | 0.082 | 0.043 |
| 3 | 0.086 | 0.086 | 0.155 | 0.079 | 0.042 |
| 2 | 0.082 | 0.082 | 0.155 | 0.074 | 0.041 |
| 1 | 0.073 | 0.073 | 0.153 | 0.066 | 0.040 |
| 0 | 0.072 | 0.072 | 0.150 | 0.039 | 0.039 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Wesermünder Geest

NLWKN

# Grundwassermeßstellen

## Stammdaten

| Meßstelle | | | Lage | | Höhe (NN+m) | | Stock- | Druck- | Geologie | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nummer | Bezeichnung | Art | TK 25 | Rechtswert Hochwert | Gelände Meßpunkt | UK-Filter | werk | verhält-nisse | Gestein Formation | Grundwasser-Landschaft | Land | Daten verfügbar bei |
| 26184561 | Axstedt | R | 2618 | 3485440<br>5912250 | 19,80<br>20,48 | 2,71 | 2 | f | Untere Sande<br>Quartär | Bederkesa-Zeverner Geest | NI | NLWKN-BSt. Stade<br>NLWKN |
| 28244571 | Reinsehlen I | R | 2824 | 3553280<br>5891000 | 72,24<br>72,15 | 44,75 | 2 | f | Mittelsand<br>Quartär | Lüneburger Heide-Görde | NI | Hamb.Wasserwerke<br>NLWKN BSt. VER |
| 31165531 | Rechterfeld | R | 3116 | 3458560<br>5856850 | 46,52<br>47,08 | 38,72 | 2 | f | Untere Sande<br>Quartär | Hümmling-Cloppenburg-Bassumer Geest | NI | NLWKN-BSt. CLP<br>NLWKN |
| 33225991 | Büren I | R | 3322 | 3533520<br>5829190 | 59,40<br>60,33 | 23,33 | 2 | | Mittelsand<br>Quartär | Rehburger Stadium | NI | NLWKN-BSt. Hi-H<br>NLWKN |
| 39284451 | Groß Mahner | R | 3928 | 3597810<br>5770210 | 107,89<br>108,34 | 103,18 | 2 | g | Untere Sande<br>Quartär | Kluft-Grund-wasserleiter | NI | NLWKN-BSt. Süd<br>NLWKN |
| 434027 | Schönberg | R | 5121 | 3521280<br>5635580 | 248,83<br>249,43 | 196,73 | | | Sandstein<br>Mittlerer Bunt-sandstein | Fulda-Bergland mit Knüll | HE | RPU Kassel<br>HLUG Wiesbaden |
| 55290500 | Themar | R | 5529 | 4403000<br>5596460 | 354,44<br>355,77 | 240,27 | 1 | f | Sandstein<br>Mittlerer Bunt-sandstein | Tafeldeckgeb. Meininger Mulde | TH | SUA Suhl<br>TLUG Jena |

# Quellschüttungsmeßstellen

## Stammdaten

| Meßstelle | | | Lage | | | Austritts- | Geologie | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nummer | Bezeichnung | Art | Gebiets-kennzahl | TK 25 | Rechtswert Hochwert | höhe NN+m | Gestein Formation | Grundwasser- Landschaft | Land | Daten verfügbar bei |
| 38224041 | Hamelquelle | $Qu_f$ | 4572110 | 3822 | 352775 578456 | 152,00 | Weißjura Jura | Kluftgrundwasser-leiter | NI | NLWKN Bst. Hann-Hild NLWKN |
| 38264751 | Herrenquelle | $Qu_f$ | 4886380 | 3826 | 357514 577770 | 170,00 | Weißjura Jura | Schichtgebundener GW-Abfluß | NI | NLWKN Bst. Hann-Hild NLWKN |
| 44254621 | Springmühle Grone | $Qu_f$ | 4881752 | 4425 | 356092 571129 | 160,00 | Muschelkalk Trias | Schichtgebundener GW-Abfluß | NI | NLWKN Bst. Süd, GÖ NLWKN |
| 384509 | Glockenbrunnen Calden | $Qu_a$ | 4481142 | 4522 | 352812 569750 | 233,00 | Muschelkalk Trias | Diemelplatte | HE | RPU Kassel HLUG Wiesbaden |
| 410503 | Kressenteichquelle Breitau | $Qu_f$ | 4186473 | 4926 | 357026 565927 | 241,00 | Muschelkalk Trias | Ringgau | HE | RPU Kassel HLUG Wiesbaden |
| 462528 | Schwarzbachquelle Grebenau | $Qu_f$ | 4254150 | 5222 | 353499 562152 | 317,70 | Buntsandstein Trias | Mittelhessische Senke | HE | RPU Marburg HLUG Wiesbaden |
| 463502 | Hünbornquelle Großentaft | $Qu_a$ | 4183000 | 5225 | 356131 562364 | 300,00 | Muschelkalk Trias | Rhön | HE7 | RPU Fulda HLUG Wiesbaden |
| 488501 | Fuldaquelle Gersfeld | $Qu_f$ | 4211100 | 5525 | 356773 559557 | 860,00 | Basalt | Rhön | HE | RPU Fulda HLUG Wiesbaden |

Q Qu

Hauptwerte l/s

| | Kalenderjahr | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Abflußjahr * | | | | | | | | | | | | | | | | | | |
| Zeit- | NOV | DEZ | JAN | FEB | MRZ | APR | MAI | JUN | JUL | AUG | SEP | OKT | NOV | DEZ | Kalenderjahr | | | | Meßstellen- |
| Spanne | Monatsmittel (MQ) | | | | | | | | | | | | | | NQ | MQ | MQ * | HQ | Nummer |
| 2012 | | | | | | | | | | | | | | | | | | | 38224041 |
| 2008/2012 | | | | | | | | | | | | | | | | | | | |
| 1954/2012 | | | | | | | | | | | | | | | | | | | |
| 2012 | | | | | | | | | | | | | | | | | | | 38264751 |
| 2008/2012 | | | | | | | | | | | | | | | | | | | |
| 1962/2012 | | | | | | | | | | | | | | | | | | | |
| 2012 | 156,00 | 151,00 | 282,00 | 342,00 | 317,00 | 199,00 | 191,00 | 204,00 | 169,00 | 204,00 | 203,00 | 163,00 | 165,00 | 166,00 | 158,00 | 217,00 | 215,00 | 366,00 | 44254621 |
| 2008/2012 | 194,00 | 184,00 | 316,00 | 358,00 | 367,00 | 215,00 | 205,00 | 217,00 | 180,00 | 216,00 | 204,00 | 164,00 | 164,00 | 255,00 | 132,00 | 231,00 | 235,00 | 451,00 | |
| 1952/2012 | 226,00 | 224,00 | 251,00 | 269,00 | 281,00 | 271,00 | 268,00 | 255,00 | 243,00 | 239,00 | 232,00 | 225,00 | 226,00 | 223,00 | 114,00 | 249,00 | 249,00 | 451,00 | |
| 2012 | 8,01 | 8,09 | 16,40 | 21,83 | 23,60 | 20,46 | 16,40 | 15,43 | 14,56 | 13,40 | 11,23 | 8,02 | 6,57 | 8,29 | 6,05 | 14,68 | 14,76 | 23,70 | 384509 |
| 2008/2012 | 13,75 | 15,17 | 19,59 | 23,51 | 28,13 | 26,75 | 22,48 | 19,69 | 16,09 | 13,65 | 11,63 | 9,88 | 9,22 | 10,52 | 6,05 | 17,58 | 18,34 | 38,30 | |
| 1961/2012 | 11,72 | 13,77 | 17,65 | 20,89 | 24,22 | 24,84 | 22,26 | 19,77 | 17,55 | 14,92 | 12,82 | 11,59 | 11,67 | 13,64 | 0,20 | 17,63 | 17,65 | 44,00 | |
| 2012 | 154,00 | 332,00 | 637,00 | 409,00 | 315,00 | 258,00 | 241,00 | 229,00 | 336,00 | 244,00 | 212,00 | 204,00 | 211,00 | 412,00 | 168,00 | 317,00 | 302,00 | 730,00 | 410503 |
| 2007/2012 | 266,00 | 401,00 | 486,00 | 366,00 | 480,00 | 385,00 | 267,00 | 192,00 | 195,00 | 178,00 | 178,00 | 179,00 | 224,00 | 375,00 | 112,00 | 295,00 | 301,00 | 960,00 | |
| 1961/2012 | 208,00 | 309,00 | 375,00 | 412,00 | 453,00 | 434,00 | 349,00 | 286,00 | 228,00 | 184,00 | 154,00 | 159,00 | 205,00 | 309,00 | 48,00 | 295,00 | 295,00 | 994,00 | |
| 2012 | 0,10 | 0,15 | 0,88 | 0,59 | 0,26 | 0,31 | 0,33 | 0,31 | 0,84 | 1,01 | 0,60 | 0,17 | 0,47 | 0,54 | 0,11 | 0,53 | 0,47 | 1,53 | 462528 |
| 2008/2012 | 0,37 | 0,64 | 0,88 | 0,78 | 0,98 | 0,89 | 0,72 | 0,54 | 0,45 | 0,46 | 0,32 | 0,20 | 0,32 | 0,46 | 0,08 | 0,59 | 0,61 | 1,86 | |
| 1961/2012 | 0,35 | 0,57 | 0,73 | 0,88 | 1,05 | 1,13 | 1,02 | 0,74 | 0,50 | 0,37 | 0,27 | 0,25 | 0,36 | 0,55 | 0,02 | 0,65 | 0,65 | 2,61 | |
| 2012 | 1,57 | 15,90 | 32,00 | 29,23 | 19,30 | 17,74 | 16,70 | 16,70 | 9,60 | 1,25 | 0,97 | 1,41 | 0,94 | 57,70 | 0,30 | 14,75 | 12,13 | 61,60 | 463502 |
| 2008/2012 | 19,08 | 27,39 | 32,49 | 30,96 | 30,45 | 29,22 | 23,22 | 19,15 | 13,50 | 13,29 | 11,40 | 10,25 | 12,84 | 31,18 | 0,30 | 21,35 | 21,73 | 85,60 | |
| 1961/2012 | 14,44 | 22,65 | 25,85 | 27,25 | 28,98 | 25,45 | 19,56 | 16,55 | 11,61 | 9,93 | 8,01 | 9,08 | 14,02 | 22,99 | 0,30 | 18,15 | 18,17 | 180,00 | |
| 2012 | 1,18 | 1,16 | 1,83 | 1,32 | 1,28 | 1,18 | 1,12 | 0,89 | 0,75 | 0,56 | 0,42 | 0,35 | 0,38 | 0,39 | 0,35 | 0,88 | 1,01 | 2,00 | 488501 |
| 2008/2012 | 1,83 | 2,62 | 2,82 | 2,22 | 2,43 | 3,07 | 1,98 | 1,22 | 0,96 | 1,00 | 1,35 | 1,21 | 1,31 | 1,96 | 0,35 | 1,79 | 1,89 | 6,67 | |
| 1961/2012 | 1,90 | 2,60 | 2,84 | 2,80 | 3,13 | 3,87 | 2,66 | 2,03 | 1,76 | 1,47 | 1,40 | 1,56 | 1,83 | 2,54 | 0,03 | 2,32 | 2,33 | 17,20 | |

* Abflußjahr: 1.11. des Vorjahres bis 31.10.

Die Daten der Hamelquelle (38224041) und der Herrenquelle (38264751) können im Jahrbuch 2012 nicht veröffentlicht werden.

$A_{Eo}$ : 5.497 km²

Lage : 0,5 km oberhalb der Mündung

Messstelle: **Hann.-Münden.W.** Nr. **41906100**
Gewässer: Werra
Gebiet: Werra

| Bezeichnung | Zeitspanne | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Kalenderjahr 2012 | | | | | | | | | | | | | |
| | | Abflussjahr * 2012 | | | | | | | | | | | | | |
| S-Konzentration mittlere g/m³ | 2012 | 28 | 49 | 81 | 27 | 20 | 25 | 31 | 21 | 26 | 30 | 24 | 14 | 14 | 43 |
| | 1966/2012 | 40 | 52 | 50 | 46 | 53 | 47 | 49 | 62 | 62 | 59 | 75 | 45 | 39 | 49 |
| größte g/m³ | 2012 | 75 | 121 | 267 | 68 | 26 | 48 | 55 | 29 | 62 | 79 | 67 | 53 | 23 | 122 |
| | 1966/2012 | 523 | 1430 | 995 | 612 | 736 | 1198 | 1503 | 1459 | 408 | 663 | 1410 | 714 | 523 | 1430 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 16,4 | 55,2 | 125 | 50,1 | 47,3 | 29,2 | 23,3 | 25,9 | 36,7 | 22,0 | 17,3 | 17,7 | 24,2 | 90,8 |
| MQ | 1966/2012 | 41,6 | 65,3 | 77,3 | 72,7 | 83,3 | 74,9 | 48,8 | 40,2 | 31,8 | 26,3 | 25,1 | 29,6 | 41,4 | 63,5 |
| S-Transport kg/s | 2012 | 0,45 | 2,64² | 11,12 | 1,33 | 0,92 | 0,72 | 0,73 | 0,55 | 1,04 | 0,68 | 0,40 | 0,26 | 0,34 | 3,37² |
| | 1966/2012 | 2,09 | 4,96 | 5,46 | 4,26 | 6,08 | 4,69 | 2,65 | 3,36 | 2,17 | 1,67 | 1,68 | 1,58 | 2,04 | 4,33 |
| S-Fracht t | 2012 | 1154 | 5249 | 28817 | 3341 | 2461 | 1877 | 1961 | 1421 | 2785 | 1826 | 1033 | 686 | 889 | 6107 |
| | 1966/2012 | 5408 | 13215² | 14583 | 10396 | 16279 | 12155 | 7097 | 8532 | 5679 | 4459 | 4361 | 4231 | 5273 | 11453² |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 31 | | 29 | |
| | 1966/2012 | 53 | | 53 | |
| größte g/m³ | 2012 | 267 | 10.01.2012 | 267 | 10.01.2012 |
| | 1966/2012 | 1503 | 14.05.1985 | 1503 | 14.05.1985 |
| Messungen | | 264 | | 263 | |
| Abfluss mł/s MQ | 2012 | 39,0 | | 42,7 | |
| MQ | 1966/2012 | 51,4 | | 51,2 | |
| S-Transport kg/s | 2012 | 1,66² | | 1,68² | |
| | 1966/2012 | 3,40 | | 3,34 | |
| S-Fracht t | 2012 | 52610² | | 53203² | |
| | 1966/2012 | 107361 | | 105568 | |
| S-Abtrag t/km² | 2012 | 9,57² | | 9,68² | |
| | 1966/2012 | 19,53 | | 19,20 | |

Bezugspegel: Letzter Heller Nr. 41900206
$A_{Eo}$ = 5.487 km²
PNP = NN + 117,40 m
Lage : 2,3 km oberhalb der Mündung links

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1966/2012 | Kalenderj. 1966/2012 |
|---|---|---|---|---|
| NQ | 13,4 | 14,6 | 10,1 | 10,1 |
| MNQ | | | 15,3 | 16,1 |
| MQ | 39,0 | 42,7 | 51,4 | 51,2 |
| MHQ | | | 261 | 256 |
| HQ | 212 | 228 | 464 | 464 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

² Diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke im Dezember)

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 6.947 km²

Lage : 1,0 km oberhalb der Mündung

Messstelle: **Hann.-Münden.F.** Nr. **42906106**
Gewässer: Fulda
Gebiet: Fulda

| Bezeichnung | Zeitspanne | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Kalenderjahr 2012 | | | | | | | | | | | | | |
| | | Abflussjahr * 2012 | | | | | | | | | | | | | |
| S-Konzentration mittlere g/m³ | 2012 | 8 | 18 | 40 | 8 | 12 | 28 | 26 | 9 | 11 | 7 | 7 | 10 | 8 | 18 |
| | 1966/2012 | 14 | 21 | 24 | 23 | 26 | 25 | 30 | 30 | 30 | 27 | 21 | 17 | 14 | 20 |
| größte g/m³ | 2012 | 15 | 43 | 140 | 15 | 29 | 40 | 40 | 13 | 28 | 14 | 10 | 53 | 19 | 66 |
| | 1966/2012 | 190 | 280 | 651 | 605 | 522 | 1177 | 497 | 205 | 592 | 298 | 133 | 233 | 190 | 257 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 23,5 | 62,2 | 179 | 50,5 | 36,2 | 29,8 | 34,3 | 35,8 | 48,5 | 35,6 | 39,7 | 38,6 | 34,5 | 94,3 |
| MQ | 1966/2012 | 55,7 | 83,1 | 102 | 95,2 | 97,9 | 74,2 | 50,7 | 45,6 | 42,7 | 41,3 | 40,5 | 43,7 | 55,5 | 79,5 |
| S-Transport kg/s | 2012 | 0,20 | 1,16² | 8,20 | 0,42 | 0,39 | 0,83 | 0,90 | 0,32 | 0,65 | 0,26 | 0,29 | 0,38 | 0,27 | 1,89² |
| | 1966/2012 | 1,22 | 2,99 | 4,31 | 3,79 | 4,32 | 2,80 | 1,79 | 1,60 | 1,56 | 1,18 | 0,89 | 1,04 | 1,20 | 2,48 |
| S-Fracht t | 2012 | 507 | 2298² | 21246 | 1041 | 1044 | 2151 | 2401 | 824 | 1729 | 685 | 761 | 1005 | 689 | 3430² |
| | 1966/2012 | 3153 | 7971 | 11532 | 9240 | 11574 | 7251 | 4788 | 4054 | 4092 | 3148 | 2305 | 2791 | 3104 | 6583 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 15 | | 15 | |
| | 1966/2012 | 24 | | 24 | |
| größte g/m³ | 2012 | 140 | 12.01.2012 | 140 | 12.01.2012 |
| | 1966/2012 | 1177 | 02.04.1986 | 1177 | 02.04.1986 |
| Messungen | | 265 | | 265 | |
| Abfluss mł/s MQ | 2012 | 51,4 | | 55,0 | |
| MQ | 1966/2012 | 64,3 | | 64,0 | |
| S-Transport kg/s | 2012 | 1,13² | | 1,17² | |
| | 1966/2012 | 2,30 | | 2,25 | |
| S-Fracht t | 2012 | 35691 | | 37006 | |
| | 1966/2012 | 72713 | | 71244 | |
| S-Abtrag t/km² | 2012 | 5,14 | | 5,33 | |
| | 1966/2012 | 10,47 | | 10,26 | |

Bezugspegel: Bonaforth Nr. 42900201
$A_{Eo}$ = 6.933 km²
PNP = NN + 117,77 m
Lage : 3,6 km oberhalb der Mündung links

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1966/2012 | Kalenderj. 1966/2012 |
|---|---|---|---|---|
| NQ | 21,6 | 25,8 | 8,90 | 8,90 |
| MNQ | | | 20,3 | 21,9 |
| MQ | 51,4 | 55,0 | 64,3 | 64,0 |
| MHQ | | | 353 | 330 |
| HQ | 291 | 291 | 780 | 780 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

² Diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke im Dezember)

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 21.815 km²

Lage : 268,1 km unterh. Werra + Fulda

Messstelle: **Nienburg** Nr. **47906103**
Gewässer: Weser
Gebiet: Mittelweser

| Bezeichnung | Zeitspanne | | | Kalenderjahr 2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Abflussjahr * 2012 | | | | | | | | | | | | | |
| | | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
| S-Konzentration mittlere g/m³ | 2012 | 10 | 27 | 38 | 19 | 11 | 29 | 26 | 21 | 18 | 18 | 8 | 4 | 3 | 13 |
| | 1986/2012 | 24 | 34 | 35 | 34 | 36 | 35 | 37 | 33 | 33 | 26 | 24 | 24 | 24 | 33 |
| größte g/m³ | 2012 | 15 | 66 | 111 | 51 | 23 | 43 | 37 | 35 | 28 | 43 | 15 | 12 | 5 | 57 |
| | 1986/2012 | 221 | 500 | 259 | 813 | 340 | 485 | 395 | 176 | 921 | 210 | 173 | 196 | 221 | 500 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 83,1 | 191 | 505 | 215 | 171 | 120 | 106 | 105 | 129 | 97,8 | 90,7 | 97,6 | 95,9 | 238 |
| MQ | 1986/2012 | 187 | 244 | 349 | 317 | 348 | 255 | 161 | 133 | 112 | 106 | 109 | 129 | 187 | 245 |
| S-Transport kg/s | 2012 | 0,85 | 6,15 | 20,50 | 4,12 | 1,77 | 3,50 | 2,72 | 2,25 | 2,36 | 1,75 | 0,76 | 0,44 | 0,30 | 2,81² |
| | 1986/2012 | 7,27 | 11,33 | 15,54 | 13,11 | 16,17 | 10,68 | 6,27 | 4,93 | 3,92 | 2,91 | 2,91 | 4,29 | 7,23 | 11,06 |
| S-Fracht t | 2012 | 2206 | 16460 | 54894 | 10323 | 4747 | 9063 | 7284 | 5828 | 6332 | 4687 | 1980 | 1178 | 774 | 5098² |
| | 1986/2012 | 18062 | 27968 | 40844 | 30816 | 43320 | 27683 | 16805 | 12301 | 10115 | 7794 | 7259 | 11056 | 17974 | 27189 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 19 | | 17 | |
| | 1986/2012 | 31 | | 31 | |
| größte g/m³ | 2012 | 111 | 06.01.2012 | 111 | 06.01.2012 |
| | 1986/2012 | 921 | 17.07.1987 | 921 | 17.07.1987 |
| Messungen | | 253 | | 254 | |
| Abfluss mł/s MQ | 2012 | 160 | | 165 | |
| MQ | 1986/2012 | 204 | | 204 | |
| S-Transport kg/s | 2012 | 3,95 | | 3,55² | |
| | 1986/2012 | 8,46 | | 8,37 | |
| S-Fracht t | 2012 | 124981 | | 112188² | |
| | 1986/2012 | 267526 | | 264523 | |
| S-Abtrag t/km² | 2012 | 5,73 | | 5,14² | |
| | 1986/2012 | 12,26 | | 12,13 | |

Bezugspegel: Dörverden Nr. 47900209
$A_{Eo}$ = 22.110 km²
PNP = NN + 7,99 m
Lage : 309 km unterh. Werra + Fulda rechts

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1986/2012 | Kalenderj. 1986/2012 |
|---|---|---|---|---|
| NQ | 79,3 | 85,0 | 37,2 | 37,2 |
| MNQ | | | 72,9 | 75,5 |
| MQ | 160 | 165 | 204 | 204 |
| MHQ | | | 846 | 840 |
| HQ | 704 | 704 | 1310 | 1310 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

² Diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke im Dezember)

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 15.924 km²

Lage : 110,7 km unterh. Werra + Fulda

Messstelle: **Bodenwerder** Nr. **45306105**
Gewässer: Weser
Gebiet: Mittelweser

| Bezeichnung | Zeitspanne | | | Kalenderjahr 2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Abflussjahr * 2012 | | | | | | | | | | | | | |
| | | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
| S-Konzentration mittlere g/m³ | 2012 | 12 | 21 | 27 | 12 | 11 | 23 | 23 | 12 | 14 | 12 | 11 | 10 | 9 | 18 |
| | 1986/2012 | 21 | 29 | 32 | 33 | 36 | 32 | 39 | 45 | 42 | 37 | 29 | 23 | 21 | 29 |
| größte g/m³ | 2012 | 17 | 48 | 60 | 21 | 23 | 42 | 35 | 18 | 24 | 22 | 23 | 28 | 32 | 66 |
| | 1986/2012 | 300 | 331 | 463 | 522 | 849 | 596 | 783 | 1000 | 280 | 333 | 236 | 296 | 300 | 331 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 46,6 | 135 | 387 | 142 | 110 | 78,0 | 72,8 | 77,5 | 103 | 72,7 | 68,4 | 68,0 | 69,3 | 205 |
| MQ | 1986/2012 | 125 | 188 | 233 | 220 | 238 | 198 | 135 | 115 | 102 | 89,7 | 86,5 | 95,9 | 125 | 190 |
| S-Transport kg/s | 2012 | 0,55 | 3,08 | 10,92 | 1,83² | 1,19 | 1,74 | 1,69 | 0,94 | 1,35 | 0,90 | 0,73 | 0,66 | 0,64 | 5,60² |
| | 1986/2012 | 3,45 | 8,44 | 10,44 | 10,17 | 12,50 | 7,68 | 5,94 | 6,71 | 4,97 | 3,71 | 2,56 | 2,64 | 3,42 | 8,53 |
| S-Fracht t | 2012 | 1435 | 8260 | 29257 | 2528² | 3193 | 4519 | 4523 | 2431 | 3622 | 2398 | 1889 | 1766 | 1661 | 15005 |
| | 1986/2012 | 8930 | 22112 | 27785 | 24806 | 33471 | 19874 | 15908 | 17001 | 12996 | 9907 | 6624 | 7060 | 8862 | 22377 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 16 | | 15 | |
| | 1986/2012 | 33 | | 33 | |
| größte g/m³ | 2012 | 60 | 06.01.2012 | 66 | 25.12.2012 |
| | 1986/2012 | 1000 | 07.05.1986 | 1000 | 07.05.1986 |
| Messungen | | 256 | | 264 | |
| Abfluss mł/s MQ | 2012 | 114 | | 122 | |
| MQ | 1986/2012 | 152 | | 152 | |
| S-Transport kg/s | 2012 | 2,08² | | 2,30² | |
| | 1986/2012 | 6,78 | | 6,72 | |
| S-Fracht t | 2012 | 65820² | | 72791² | |
| | 1986/2012 | 214494 | | 212485 | |
| S-Abtrag t/km² | 2012 | 4,30² | | 4,76² | |
| | 1986/2012 | 13,47 | | 13,89 | |

Bezugspegel: Bodenwerder Nr. 45300200
$A_{Eo}$ = 15.924 km²
PNP = NN + 69,39 m
Lage : 110,7 km unterh. Werra + Fulda rechts

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1986/2012 | Kalenderj. 1986/2012 |
|---|---|---|---|---|
| NQ | 41,0 | 60,5 | 30,9 | 30,9 |
| MNQ | | | 53,5 | 58,2 |
| MQ | 114 | 122 | 152 | 152 |
| MHQ | | | 706 | 690 |
| HQ | 577 | 577 | 1210 | 1210 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

² Diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke im Februar & Dezember)

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 37.720 km²

Lage : 329,5 km unterh. Werra + Fulda

Messstelle: **Intschede** Nr. **49106108**
Gewässer: Weser
Gebiet: Mittelweser

| Bezeichnung | Zeitspanne | Kalenderjahr 2012 / Abflussjahr * 2012 Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 10 | 29 | 56 | 10 | 9 | 18 | 18 | 14 | 13 | 11 | 9 | 6 | 6 | 41 |
| | 1970/2012 | 29 | 40 | 44 | 45 | 44 | 39 | 40 | 39 | 36 | 33 | 28 | 27 | 29 | 41 |
| größte g/m³ | 2012 | 31 | 100 | 203 | 14 | 21 | 27 | 44 | 30 | 34 | 18 | 27 | 11 | 14 | 151 |
| | 1970/2012 | 297 | 400 | 445 | 744 | 487 | 624 | 456 | 325 | 254 | 262 | 248 | 851 | 297 | 400 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 107 | 278 | 757 | 334 | 276 | 189 | 151 | 147 | 184 | 127 | 112 | 137 | 137 | 333 |
| MQ | 1970/2012 | 279 | 371 | 500 | 491 | 518 | 417 | 280 | 231 | 196 | 175 | 171 | 198 | 278 | 374 |
| S-Transport kg/s | 2012 | 1,09 | 10,20 | 44,20 | 3,33 | 2,35 | 3,30 | 2,63 | 2,04 | 2,80 | 1,47 | 0,95 | 0,88 | 0,84 | 21,15 |
| | 1970/2012 | 11,11 | 20,37 | 29,69 | 28,07 | 29,94 | 19,08 | 12,80 | 10,66 | 8,04 | 6,51 | 5,38 | 6,92 | 11,12 | 20,84 |
| S-Fracht t | 2012 | 2833 | 27321 | 118392 | 8333 | 6307 | 8565 | 7053 | 5300 | 7495 | 3949 | 2472 | 2363 | 2183 | 56648 |
| | 1970/2012 | 28805 | 54275 | 79519 | 68576 | 80200 | 49462 | 34294 | 26977 | 21039 | 17322 | 13933 | 18530 | 28826 | 55532 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 17 | | 18 | |
| | 1970/2012 | 37 | | 37 | |
| größte g/m³ | 2012 | 203 | 07.01.2012 | 203 | 07.01.2012 |
| | 1970/2012 | 851 | 06.10.1993 | 851 | 06.10.1993 |
| Messungen | | 262 | | 263 | |
| Abfluss mł/s MQ | 2012 | 234 | | 241 | |
| MQ | 1970/2012 | 319 | | 319 | |
| S-Transport kg/s | 2012 | 6,34 | | 7,24 | |
| | 1970/2012 | 15,75 | | 15,81 | |
| S-Fracht t | 2012 | 200383 | | 229059 | |
| | 1970/2012 | 497999 | | 500012 | |
| S-Abtrag t/km² | 2012 | 5,31 | | 6,07 | |
| | 1970/2012 | 13,20 | | 13,26 | |

Bezugspegel: Intschede Nr. 49100101
$A_{Eo}$ = 37.720 km²
PNP = NN + 4,79 m
Lage : 331,3 km unterh. Werra + Fulda links

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1970/2012 | Kalenderj. 1970/2012 |
|---|---|---|---|---|
| NQ | 98,2 | 101 | 71,1 | 71,1 |
| MNQ | | | 113 | 119 |
| MQ | 234 | 241 | 319 | 319 |
| MHQ | | | 1240 | 1230 |
| HQ | 1010 | 1010 | 2400 | 2400 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 7.209 km²

Lage : 75,9 km oberhalb der Mündung

Messstelle: **Marklendorf** Nr. **48706100**
Gewässer: Aller
Gebiet: Aller

| Bezeichnung | Zeitspanne | Kalenderjahr 2012 / Abflussjahr * 2012 Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 9 | 14 | 20 | 9 | 10 | 10 | 13 | 8 | 7 | 4 | 5 | 6 | 6 | 13 |
| | 1970/2012 | 11 | 15 | 16 | 17 | 17 | 16 | 17 | 18 | 17 | 17 | 14 | 12 | 11 | 15 |
| größte g/m³ | 2012 | 21 | 41 | 58 | 12 | 11 | 21 | 18 | 18 | 14 | 6 | 7 | 10 | 8 | 34 |
| | 1970/2012 | 48 | 81 | 92 | 86 | 139 | 110 | 73 | 91 | 70 | 95 | 48 | 65 | 48 | 81 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 19,3 | 39,7 | 94,3 | 43,0 | 30,1 | 22,5 | 21,4 | 19,2 | 24,9 | 16,6 | 16,2 | 23,6 | 22,7 | 38,7 |
| MQ | 1970/2012 | 35,9 | 46,2 | 64,5 | 61,4 | 65,8 | 53,6 | 35,1 | 28,8 | 23,8 | 21,3 | 21,9 | 26,4 | 35,9 | 46,2 |
| S-Transport kg/s | 2012 | 0,18 | 0,62 | 2,06 | 0,40 | 0,28 | 0,22 | 0,27 | 0,16 | 0,18 | 0,07 | 0,08 | 0,15 | 0,12² | 0,44² |
| | 1970/2012 | 0,48 | 0,74 | 1,08 | 1,06 | 1,18 | 0,95 | 0,62 | 0,56 | 0,41 | 0,38 | 0,31 | 0,36 | 0,48 | 0,74 |
| S-Fracht t | 2012 | 456 | 1664 | 5527 | 1010 | 762 | 583 | 724 | 418 | 488 | 182 | 197 | 404 | 247² | 793² |
| | 1970/2012 | 1232 | 1896 | 2849 | 2360 | 3150 | 2464 | 1658 | 1412 | 1067 | 1024 | 809 | 936 | 1233 | 1881 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 10 | | 9 | |
| | 1970/2012 | 16 | | 16 | |
| größte g/m³ | 2012 | 58 | 26.01.2012 | 58 | 26.01.2012 |
| | 1970/2012 | 139 | 08.03.1974 | 139 | 08.03.1974 |
| Messungen | | 253 | | 259 | |
| Abfluss mł/s MQ | 2012 | 31,0 | | 31,2 | |
| MQ | 1970/2012 | 40,2 | | 40,2 | |
| S-Transport kg/s | 2012 | 0,39 | | 0,36² | |
| | 1970/2012 | 0,68 | | 0,68 | |
| S-Fracht t | 2012 | 12415 | | 11335² | |
| | 1970/2012 | 21466 | | 21524 | |
| S-Abtrag t/km² | 2012 | 1,72 | | 1,57² | |
| | 1970/2012 | 2,98 | | 2,99 | |

Bezugspegel: Marklendorf Nr. 48700103
$A_{Eo}$ = 7.209 km²
PNP = NN + 23,01 m
Lage : 75,7 km oberhalb der Mündung rechts

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1970/2012 | Kalenderj. 1970/2012 |
|---|---|---|---|---|
| NQ | 12,4 | 11,3 | 4,00 | 4,00 |
| MNQ | | | 10,7 | 11,1 |
| MQ | 31,0 | 31,2 | 40,2 | 40,2 |
| MHQ | | | 159 | 159 |
| HQ | 155 | 155 | 378 | 378 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

² Diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke in November & Dezember)

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 14.730 km²

Lage : 34,2 km oberhalb der Mündung

Messstelle: **Rethem** Nr. **48906109**
Gewässer: Aller
Gebiet: Aller

| Bezeichnung | Zeit-spanne | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Kalenderjahr 2012 | | | | | | | | | | | | | |
| | | Abflussjahr * 2012 | | | | | | | | | | | | | |
| S-Konzentration mittlere g/m³ | 2012 | 10 | 22 | 15 | 14 | 10 | 8 | 12 | 14 | 10 | 5 | 4 | 5 | 6 | 13 |
| | 1973/2012 | 18 | 22 | 24 | 23 | 24 | 23 | 26 | 28 | 24 | 23 | 20 | 18 | 18 | 22 |
| größte g/m³ | 2012 | 13 | 56 | 43 | 24 | 16 | 19 | 17 | 29 | 17 | 21 | 9 | 13 | 21 | 27 |
| | 1973/2012 | 334 | 164 | 593 | 194 | 160 | 106 | 263 | 144 | 142 | 146 | 160 | 123 | 334 | 164 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 44,2 | 93,3 | 240 | 121 | 105 | 73,8 | 56,4 | 50,5 | 59,6 | 41,5 | 38,2 | 47,8 | 47,0 | 95,9 |
| MQ | 1973/2012 | 96,0 | 128 | 186 | 173 | 186 | 147 | 99,1 | 82,1 | 70,4 | 60,7 | 60,5 | 69,0 | 94,8 | 127 |
| S-Transport kg/s | 2012 | 0,45 | 2,27 | 3,53 | 1,65 | 1,07 | 0,61 | 0,65 | 0,72 | 0,61 | 0,23² | 0,16 | 0,24 | 0,28 | 1,62 |
| | 1973/2012 | 1,92 | 2,96 | 4,30 | 3,91 | 4,39 | 3,51 | 2,75 | 2,48 | 1,63 | 1,44 | 1,29 | 1,36 | 1,87 | 2,92 |
| S-Fracht t | 2012 | 1158 | 6091 | 9460 | 4123 | 2878 | 1570 | 1752 | 1857 | 1634 | 472² | 411 | 644 | 722 | 4327 |
| | 1973/2012 | 4842 | 7554 | 10859 | 9296 | 11456 | 8844 | 7170 | 6100 | 4136 | 3655 | 3252 | 3542 | 4860 | 7662 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 11 | | 10 | |
| | 1973/2012 | 23 | | 23 | |
| größte g/m³ | 2012 | 56 | 19.12.2011 | 43 | 07.01.2012 |
| | 1973/2012 | 593 | 18.01.1979 | 593 | 18.01.1979 |
| Messungen | | 262 | | 259 | |
| Abfluss mł/s MQ | 2012 | 81,0 | | 81,4 | |
| MQ | 1973/2012 | 113 | | 113 | |
| S-Transport kg/s | 2012 | 1,01² | | 0,94² | |
| | 1973/2012 | 2,69 | | 2,61 | |
| S-Fracht t | 2012 | 32050² | | 29851² | |
| | 1973/2012 | 85214 | | 82407 | |
| S-Abtrag t/km² | 2012 | 2,18 | | 2,03² | |
| | 1973/2012 | 5,79 | | 5,59 | |

Bezugspegel: Rethem Nr. 48900204
$A_{Eo}$ = 14.730 km²
PNP = NN + 14,31 m
Lage : 34,2 km oberhalb der Mündung links

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1973/2012 | Kalenderj. 1973/2012 |
|---|---|---|---|---|
| NQ | 35,4 | 35,4 | 29,6 | 29,6 |
| MNQ | | | 40,4 | 43,1 |
| MQ | 81,0 | 81,4 | 113 | 113 |
| MHQ | | | 425 | 426 |
| HQ | 327 | 327 | 1050 | 1050 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

² Diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke im August)

Bundesanstalt für Gewässerkunde

# Emsgebiet

# Hydrographisches Verzeichnis der Pegel

**Abflussjahr 2012**

| Meßstelle Nummer | Gewässer Gewässerteil (nachfolgende Gewässer) | Meßstelle Nummer | Ergänzende Einrichtungen | Höhe des PNP in NN+m bzw.HN+m | Oberirdisches Einzugsgebiet in km² | Lage am Gewässer in km | Gebietskennzahl | Lagekoordinaten TK 25 | Rechtswert Hochwert | Daten vorhanden seit | veröffentlicht Art | veröffentlicht Seite |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 | 11 | 12 |
| 3113000000100 | **Ems** | Steinhorst | Ss2 | 84.54 | 98.8 | 344.3 | 3113000 | 4117 | 346795<br>574283 | 01.11.1974 | Q | 256 |
| 3119000000200 | **Ems** | Rheda | Ss2 | 65.28 | 342 | 324.2 | 3119000 | 4115 | 345157<br>574671 | 01.11.1950 | Q | 257 |
| 3171000000100 | **Ems** | Einen | Ss2 | 45.26 | 1486 | 284.6 | 3171000 | 4013 | 342437<br>576043 | 01.11.1953<br>01.11.1945 | Q<br>W | 258<br>235 |
| 33300101 | **Ems** | Greven | Dd2 | 32.71 | 2842 | 113.4 | 3331000 | 3911 | 340432<br>577432 | 01.11.1940<br>01.01.1871 | Q<br>W | 259<br>236 |
| 33900200 | **Ems** | Rheine | Dd2 | 24.19 | 3740 | 153.0 | 3391000 | 3710 | 259790<br>579594 | 01.11.1900<br>01.11.1874 | Q<br>W | 260<br>237 |
| 37306100 | **Ems** | Lathen | | | 8686 | 191.0 | 373739 | 3109 | 258829<br>586055 | 02.03.1998 | S | 286 |
| 35500407 | **Ems** | Dalum | Ds2 | 12.42 | 4981 | 212.0 | 3559000 | 3409 | 258465<br>582992 | 01.11.1964<br>01.11.1925 | Q<br>W | 261<br>238 |
| 37300103 | **Ems** | Versen-Wehrdurchstich | Ds2 | 6.71 | 8369 | 234.8 | 3731100 | 3209 | 258390<br>584522 | 01.11.1925<br>01.11.1901 | Q<br>W | 262<br>239 |
| 37900100 | **Ems** | Papenburg | SsA | -5.02 | 9455 | 0.4 | 3791000 | 2810 | 259149<br>588709 | 18.03.1896 | W | 244 |
| 39100105 | **Ems** | Leerort | Ss | -5.02 | 11668 | 14.7 | 3911000 | 2710 | 259530<br>589906 | 23.04.1896 | W | 247 |
| 39700102 | **Ems** | Emden, Neue Seeschleuse | Ss2 | -5.00 | 12546 | 40.5 | 3972900 | 2609 | 257906<br>591232 | 13.03.1920 | W | 250 |
| 37700300 | **Ems** | Herbrum-Hafendamm | Ds2 | -5.02 | 9231 | 283.1 | 3773000 | 2909 | 258841<br>587960 | 01.11.1924 | W | 241 |
| 3169000000100 | **Hessel**<br>(Ems) | Milte | Ss | 49.58 | 205 | 4.3 | 3169000 | 4013 | 342794<br>576281 | 01.11.1969 | Q | 263 |
| 3211000000300 | **Werse**<br>(Ems) | Ahlen | Ss | 73.56 | 46.6 | 52.2 | 3211000 | 4213 | 342554<br>573502 | 01.11.1975 | Q | 264 |
| 3259000000100 | **Werse**<br>(Ems) | Albersloh | Ss2 | 48.70 | 321 | 27.5 | 3259000 | 4112 | 341249<br>575075 | 01.11.1959 | Q | 265 |
| 3267000000100 | **Emmerbach**<br>(Werse, Ems) | Amelsbüren | Ss | 54.99 | 77.7 | 11.1 | 3267000 | 4111 | 340159<br>575002 | 01.11.1967 | Q | 266 |
| 3283000000100 | **Angel**<br>(Werse, Ems) | Sendenhorst | Ss | 62.31 | 67.8 | 19.5 | 3283000 | 4113 | 342296<br>574497 | 01.11.1959 | Q | 267 |
| 3289000000100 | **Angel**<br>(Werse, Ems) | Wolbeck | Ss2 | 51.80 | 161 | 7.6 | 3289100 | 4012 | 341619<br>575280 | 01.11.1956 | Q | 268 |
| 3445900000199 | **Hopstener Aa**<br>(Große Aa, Ems) | Hopsten | SsA | 37.81 | 152 | 22.3 | 3445900 | 3611 | 340468<br>580539 | 01.11.1972 | Q | 269 |
| 3448310000600 | **Ibbenbürener Aa**<br>(Große Aa, Ems) | Lehen II | Ss | 62.12 | 34.1 | 17.5 | 3448300 | 3712 | 341400<br>579272 | 01.11.1977 | Q | 270 |
| 3448390000200 | **Hörsteler Aa**<br>(Große Aa, Ems) | Hörstel | SsF | 40.05 | 88.6 | 10.5 | 3448300 | 3611 | 340380<br>579948 | 01.11.1979 | Q | 271 |
| 3633101 | **Hase**<br>(Ems) | Bramsche | Ds2 | 41.64 | 682 | 114.5 | 3633100 | 3513 | 343068<br>580815 | 01.11.1958 | Q | 272 |
| 3655101 | **Hase**<br>(Ems) | Bunnen | Ds2 | 17.37 | 1778 | 66.2 | 3655000 | 3213 | 342160<br>584358 | 01.11.1954 | Q | 273 |
| 3671101 | **Hase**<br>(Ems) | Herzlake | Ds2 | 13.50 | 2226 | 43.9 | 3671000 | 3311 | 340556<br>583976 | 01.11.1937<br>01.11.1937 | Q<br>W | 274<br>240 |
| 3629101 | **Düte**<br>(Hase, Ems) | Wersen | Dsd2 | 51.19 | 228 | 1.5 | 3629000 | 3613 | 342868<br>579908 | 01.11.1957 | Q | 275 |
| 3647101 | **Lager Hase**<br>(Hase, Ems) | Uptloh | Ds2 | 19.00 | 506 | 7.4 | 3647000 | 3214 | 343284<br>584240 | 01.08.1962 | Q | 276 |
| 3672106 | **Südradde**<br>(Hase, Ems) | Augustenfeld | Dsd | 22.10 | 81.7 | 17.5 | 3672500 | 3212 | 341456<br>584962 | 01.11.1958 | Q | 277 |
| 3676106 | **Lotter Beeke**<br>(Hase, Ems) | Lotten | Ds | 16.42 | 86.9 | 3.2 | 3676900 | 3310 | 260123<br>584307 | 01.11.1972 | Q | 278 |
| 3889102 | **Jümme**<br>(Leda, Ems) | Nortmoor | DsF | -5.00 | 1327 | 4.9 | 3889300 | 2711 | 340496<br>590016 | 01.11.1974<br>01.11.1967 | Q<br>W | 283<br>253 |
| 3723105 | **Nordradde**<br>(Hase, Ems) | Apeldorn | Ds | 14.00 | 127 | 9.4 | 3723000 | 3210 | 259225<br>584716 | 01.11.1976 | Q | 279 |
| 3749101 | **Walchumer Schloot**<br>(Hase, Ems) | Walchum | Ds | 3.92 | 72.8 | 1.6 | 3749000 | 3009 | 258525<br>586857 | 01.11.1981 | Q | 280 |
| 3881105 | **Soeste**<br>(Barßeler Tief, Jümme, Leda, Ems) | Stedingsmühlen | DsdA | 25.16 | 75.4 | 51.0 | 3881190 | 3113 | 342917<br>586009 | 01.11.1961 | Q | 281 |
| 3895101 | **Leda**<br>(Ems) | Leer | DsF | -5.00 | 2078 | 3.6 | 3895000 | 2710 | 259860<br>589916 | 01.11.1983 | Q | 284 |
| 3926104 | **Bagbander Tier**<br>(Leda, Ems) | Bagband | Ds | -5.00 | 47.6 | 9.5 | 3926300 | 2611 | 340718<br>591347 | 01.11.1980 | Q | 282 |

# Witterungsverhältnisse, oberirdische Gewässer, Grundwasser, Schwebstoffe

## Witterungsverhältnisse

Als Grundlage für die nachfolgenden Betrachtungen der Witterungsverhältnisse im Emseinzugsgebiet dienten die Klimadaten des Deutschen Wetterdienstes. Zum Vergleich mit dem zu beschreibenden Jahr wurde für die Lufttemperatur und für die Gebietsniederschlagshöhen die Reihe 1951/2012 herangezogen. Die Beschreibung der Witterungsverhältnisse wird ergänzt durch die auf den Seiten 226 und 227 dargestellten Lufttemperaturen und Niederschlagshöhen der ausgewählten Klimastationen Münster (obere Ems), Lingen und Emden (untere Ems), deren punktuelle Information als weitgehend repräsentativ für das Gesamteinzugsgebiet angesehen werden kann.

Im **Abflussjahr** 2012 lag die Lufttemperatur mit 10,3°C im Vergleich zur Periode 1951/2012 um 0,9°C über dem Mittelwert. Die durchschnittliche Gebietsniederschlagshöhe der Reihe 1951/2012 von 776 mm wurde für das Emsgebiet mit 704 mm um ca. 9 % unterschritten. Insgesamt kann das Abflussjahr als zu warm und geringfügig zu trocken eingestuft werden.

Im **Winterhalbjahr** (November 2011 bis April 2012) lag die Durchschnittstemperatur mit 5,8°C um ca. 1,4°C über dem Wert der mehrjährigen Reihe, es kann somit als zu warm eingestuft werden. Deutlich zu kühl war der Februar, wobei die durchschnittliche Temperatur um 1,9°C unterschritten wurde. Temperaturen, die deutlich über den Durchschnittswerten lagen, wurden im Dezember 2011 und Januar beobachtet, der mit 9,6°C um 7,6°C zu warm war . Die Gebietsniederschlagshöhe lag mit 314 mm um ca. 12 % unter dem mehrjährigen Reihenwert von 356 mm. Das Winterhalbjahr war damit zu trocken. Lediglich im Dezember 2011 und Januar gab es Niederschlagsüberschüsse. Größere Niederschlagsdefizite gab es im November 2011 und von Februar bis März.

Die durchschnittliche Temperatur lag im **Sommerhalbjahr** (Mai bis Oktober 2012) mit 14,9°C um 0,3 über dem Wert der mehrjährigen Reihe. Von Juni bis Juli und von September bis Oktober wurden Temperaturen beobachtet, die meist leicht unter den Durchschnittswerten lagen. Im Mai und August wurde die durchschnittliche Temperatur um 1,8°C bzw. 1,6°C überschritten. Die Gebietsniederschlagshöhe erreichte mit 390 mm 93 % des Reihenwert 1951/2012, wobei die Niederschlagsdurchschnittswerte in den Monaten Mai, August und September deutlich unterschritten wurden. Deutliche Niederschlagsüberschüsse gab es im Mai und Oktober. Das Sommerhalbjahr war somit etwas zu warm und annähernd durchschnittlich feucht.

Der monatliche Witterungsverlauf im Emsgebiet ist vergleichbar dem des benachbarten Wesergebietes. Auf eine Beschreibung wird deshalb an dieser Stelle verzichtet.

## Oberirdische Gewässer

Die folgende Beschreibung der größeren Gewässer im Einzugsgebiet der Ems enthält allgemeine Aussagen über das Abflussverhalten des Berichtsjahres im Vergleich zu den mehrjährigen Mittelwerten. Weitere Einzelheiten können den nachfolgenden Tabellen und Abbildungen entnommen werden. Genauere bzw. regional begrenzte Betrachtungen lassen sich anhand der bei den zuständigen Dienststellen vorliegenden, umfangreichen Datenbeständen durchführen.

**Ems**

Die Ems entspringt in der Senne (NW) und mündet nach ca. 370 km Lauflänge bei Emden in die Nordsee. Die Gesamteinzugsgebietsgröße beträgt ca. 13.150 km$^2$.

Die Abflusswerte der Gewässer im Emsgebiet lagen bei leicht unterdurchschnittlichen Niederschlägen, bezogen auf das Abflussjahr, deutlich unter den langjährigen Mittelwerten. Im Winterhalbjahr lagen die Niederschläge leicht unter den Durchschnittswerten, wobei die Abflusswerte meist deutlich unter den Durchschnittswerten lagen. Im Sommerhalbjahr lagen die Niederschläge auch leicht unter den Durchschnittswerten, wobei die Abflusswerte in diesem Zeitraum ebenfalls meist deutlich unter den Mittelwerten lagen.

Der mittlere Jahresabfluss (MQ) erreichte an den Pegeln der Ems ca. 66 - 83 % der mehrjährigen Vergleichswerte. Im Winterhalbjahr lagen die Abflusswerte im Mittel ca. 20 % unter den mehrjährigen Mittelwerten. Im Sommerhalbjahr lagen sie deutlich um durchschnittlich 29 % unter den mehrjährigen Vergleichswerten.

Am Pegel Versen mit einer Einzugsgebietsgröße von 8.469 km$^2$ betrug der mittlere Jahresabfluss 66,6 m$^3$/s und lag damit um 16,5 % unter dem mehrjährigen Mittel von 79,8 m$^3$/s. Im Winterhalbjahr wurden die Vergleichswerte um ca. 17 % unterschritten; im Sommerhalbjahr wurden sie um ca. 16 % unterschritten. Der niedrigste Abflusswert wurde am 10.09.2012 mit 23,6 m$^3$/s ermittelt und lag damit um ca. 41 % über dem Mittelwert des mehrjährigen Niedrigwasserabflusses (MNQ) von 16,7 m$^3$/s. Der höchste Abfluss wurde am 10.01.2012 mit 277 m$^3$/s gemessen und lag damit um 24 % unter dem mehrjährigen mittleren Hochwasserabfluss (MHQ) von 365 m$^3$/s.

**Hase**

Die Hase entspringt am Nordrand des Teutoburger Waldes und mündet nach etwa 165 km mit einem $A_{E0}$ von 3.107 km$^2$ bei Meppen in die Ems.

Zur Beurteilung des Abflussverhaltens der Hase wird der Pegel Herzlake mit einer Einzugsgebietsgröße von ca. 2.226 km$^2$ herangezogen. Der mittlere Jahresabfluss lag mit 17,3 m$^3$/s um ca. 19 % unter dem mehrjährigen Vergleichswert (MQ) von 21,3 m$^3$/s. Das mehrjährige Wintermittel wurde um ca. 15 % unterschritten; das Sommermittel wurde um ca. 30 % unterschritten. Der niedrigste Abflusswert wurde am 22.09.2012 mit 4,20 m³/s gemessen, der damit um ca. 12 % unter dem Reihenwert von 4,79 m³/s lag. Der höchste Wert wurde am 06.01.2012 mit 87,9 m³/s gemessen und lag damit um ca. 6 % unter dem mehrjährigen mittleren Hochwasserabfluss (MHQ) von 93,9 m$^3$/s.

**Leda und Jümme**

Die Leda und Jümme entwässern die weiträumigen Flussmarschen rechts der Ems im Gebiet der Unteren Ems. Durch die Gezeiten wird das Abflussverhalten von Leda und Jümme bis weit in die Flussläufe hinein beeinflusst. Gegen einlaufende Sturmfluten wird das Ledagebiet durch ein Sperrwerk geschützt. Durch den Betrieb dieses Sperrwerkes sind Aussagen über unbeeinflusste Hochwasserabflüsse kaum zu treffen.

Der Mittelwasserabfluss betrug am Pegel Nortmoor 10,7 m$^3$/s und lag damit um ca. 30 % über dem mittleren Niedrigwasserabfluss (MNQ) von 8,3 m³/s der Reihe 2003/2012. Das Wintermittel von17,1 m³/s überschritt den mehrjährigen Reihenwert um 32,6 %; das Sommermittel von 4,2 m³/s überschritt den mehrjährigen Reihenwert um ca. 10 %.

## Grundwasser

Das Einzugsgebiet der Ems ist bezüglich der Grundwasserregionen nicht so unterschiedlich geprägt wie das benachbarte Wesergebiet. Abgesehen von den Höhenzügen des Teutoburger Waldes südlich von Osnabrück (bis NN + 331 m) und des Wiehengebirges nördlich von Osnabrück (bis NN + 148 m) sowie den Ankumer Höhen (bis NN + 140 m) fällt das Emsgebiet von der Quelle bei ca. NN + 120 m gleichmäßig bis zur Mündung bei Normalnull ab und besteht hauptsächlich aus quartärem Lockergestein. Die Grundwasserregionen sind vor allem durch ausgedehnte Sandflächen der Münsterschen Bucht im Oberlauf, durch Talsandebenen und Moränengebiete bzw. durch das hochflächenartige Osnabrücker Lößhügelland (Hasegebiet) im Mittellauf sowie durch die Moorniederungen und Marschen und kleinflächig werdende Talsandgebiete im Unterlauf geprägt.

Im Emsgebiet gehören ca. 650 Messstellen zu den Landesgrundwasserdiensten (Grundmessnetze). Im niedersächsischen Teil gibt es außerdem ca. 500 staatliche Sondermessstellen. Daneben existiert eine große Zahl von Sondermessstellen Dritter (Wasserwerks-, Deponiebetreiber usw.).

Die meisten Messstellen der Landesgrundwasserdienste sind in den 50er- und 60er-Jahren eingerichtet worden. Die Messstelle Senne 205 flach wird seit 1912 beobachtet.

Die 4 Grundwassermessstellen Groß Oldendorf, Esterwegen II, Langwege und Senne 205 flach, deren Daten von 1991 bis 2010 auf den Seiten 233 und 234 in Form von Ganglinien dargestellt sind, haben eine lange Beobachtungsdauer, sind repräsentativ für größere Grundwasserregionen und ungestört von anthropogenen Einflüssen.

Die Stammdaten dieser Messstellen sind auf Seite 285 aufgelistet.

Die nachfolgenden Aussagen über die Grundwassersituation 2012 im Emsgebiet können nur das Durchschnittsverhalten des Grundwassers wiedergeben. Für genauere bzw. regional begrenzte Aussagen über die Veränderung von Grundwasserständen müssen die Daten aller Grundwassermessstellen der Landesgrundwasserdienste und Sondermessnetze herangezogen werden.

Bezogen auf die langjährigen Monatsmittelwerte waren die Abweichungen der diesjährigen Grundwasserstände im Dezember am höchsten (- 42,4 cm unter dem langjährigen Monatsmittelwert für alle 4 Messstellen). Die minimale Abweichung ergab sich im Januar mit - 3,5 cm

unter dem langjährigen Monatsmittelwert für alle 4 Messstellen. Dieser Monat weist zugleich die höchste Schwankungsbreite in den Abweichungen auf: - 38,5 cm in Esterwegen bis + 24,0 cm in Groß Oldendorf und Langwege. Die geringste Schwankungsbreite ergab sich im September mit Werten von - 44,0 cm (Esterwegen) bis - 17,0 cm (Groß Oldendorf).

Insgesamt lagen die Jahresniederschläge im Emsgebiet unter dem langjährigen Mittel. Der Jahresmittelwert der Abweichungen für die untersuchten Grundwassermessstellen lag mit - 25,3 cm ebenfalls unter dem langjährigen Jahresmittel.

NLWKN Betriebsstelle Hannover-Hildesheim

## Schwebstoffe

Im Emsgebiet bestehen Schwebstoffmessstellen in Rheine (Ems-km 153,0) und in Versen (Ems-km 234,4) bis 1997. Danach wurde die Schwebstoffmessstelle aus organisatorischen Gründen von Versen nach Lathen (Ems-km 253,3) verlegt. Für die Schwebstofftransportberechnungen wird für die Messstelle Lathen der gleiche Abflusspegel von der vorhergehenden Messstelle in Versen angewendet. Für die langjährigen Betrachtungen werden daher auch die Messwerte der früheren Messstelle in Versen herangezogen.

Die Schwebstoffdaten der o.g. Messstellen werden im vorliegenden Jahrbuch veröffentlicht.

Die Ermittlung der Schwebstoffkonzentration erfolgte entsprechend den Richtlinien für Schwebstoffmessungen (DVWK-Regeln zur Wasserwirtschaft, Schwebstoffmessungen, H. 125/1986) aufgrund von Einpunktmessungen als Oberflächenentnahme von je 5 l-Schöpfproben und Filterung an den Messstellen (gravimetrische Filtermethode).

Die Probenahme wurde durchgeführt:

- Rheine vom rechten Ufer
- Lathen vom rechten Ufer

Für die Messstelle Lathen können auf Grund von Datenlücken keine Angaben gemacht werden.

Die **jährliche Schwebstofffracht** lag in Rheine rd. 65 % unter dem langjährigen Mittelwert.

Die höchste **monatliche Schwebstofffracht** war in Rheine mit rd. 40 % im Januar an der Jahresschwebstofffracht beteiligt. Die niedrigste monatliche Schwebstofffracht lag in Rheine bei 1,9 % der entsprechenden Jahresschwebstofffracht; sie wurde im November beobachtet.

Die höchste **tägliche Schwebstofffracht** wurde in Rheine mit 509 t am 28. Dezember ermittelt. Die niedrigste tägliche Schwebstofffracht lag bei 1 t in Rheine, die Werte traten mehrfach im August und September auf.

Die mittlere **jährliche Schwebstoffkonzentration** (arithmetisches Mittel der Tageswerte) lag in Rheine mit 15 g/m$^3$ rd. 46 % unter dem langjährigen Mittelwert.

Die größte **tägliche Schwebstoffkonzentration** wurde in Rheine mit 164 g/m$^3$ am 2. Oktober beobachtet.

BfG Koblenz

Hinweis:
Die Einarbeitung der Niederschlagsdaten des Deutschen Wetterdienstes konnte für das DGJ 2012 wegen fehlender Daten nicht durgeführt werden.

# Übersichtskarte

## Meßstellen, von denen Daten nachfolgend graphisch dargestellt sind

### Meteorologische Stationen

Klimahauptstationen des DWD

Münster
Lingen
Emden

### Gewässerkundliche Meßstellen

Oberirdische Gewässer

Greven
Versen
Herzlake
Wersen

Grundwasser

Gr. Oldendorf
Esterwegen
Langwege
Senne 205 flach

# Hydrologischer Längsschnitt der Ems

# Lufttemperaturen $T_L$ und Niederschlagshöhen $h_N$ ab 1978

Monatsmittel, Jahresmittel Jahressumme aus Monatsummen

Nach Unterlagen des DWD

# Lufttemperaturen $T_L$ und Niederschlagshöhen $h_N$ im Berichtszeitraum

Tagesmittel, mittl. Jahresgang Monatsummen aus Tagessummen

Nach Unterlagen des DWD

# Abflüsse Q und Abflussspenden q ab 1978

Monatsmittel, Jahresmittel, mehrjährige Mittel

# Abflüsse Q und Abflussspenden q im Berichtszeitraum

Tagesmittel, Monatsmittel, Dauerlinien

# Abflüsse Q und Abflußspenden q ab 1978

Monatsmittel, Jahresmittel, langjähriges Mittel

# Abflüsse Q und Abflußspenden q im Berichtszeitraum

Tagesmittel, Monatsmittel, Dauerlinien

# Abflüsse Q und Schwebstoffe ab 1978

Monatsmittel, Jahresmittel, mehrjährige Mittel

## Lathen / Ems (bis 1997 Versen)

$A_{Eo}$ = 8686 km²

# Grundwasserstände $W_{Gw}$ ab 1993

Monatsmittel, mehrjährige Monatsmittel

# Grundwasserstände $W_{Gw}$ ab 1993

Monatsmittel, mehrjährige Monatsmittel

$A_{Eo}$ : 1485.77 km²
PNP : NHN+ 45.23 m
Lage : 284.37 km

# W

cm

Pegel : Einen Nr. 3171000000100
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 76 | 75 | 163 | 122 | 151 | 97 | 85 | 92 | 76 | 76 | 66 | 71 | 82 | 81 |
| 2. | 76 | 82 | 218 | 116 | 143 | 91 | 84 | 79 | 74 | 73 | 64 | 70 | 82 | 83 |
| 3. | 77 | 87 | 220 | 115 | 136 | 93 | 96 | 78 | 73 | 73 | 64 | 73 | 81 | 89 |
| 4. | 77 | 96 | 204 | 108 | 133 | 99 | 89 | 94 | 71 | 74 | 64 | 108 | 87 | 91 |
| 5. | 76 | 96 | 255 | 105 | 145 | 94 | 89 | 105 | 71 | 74 | 64 | 133 | 89 | 103 |
| 6. | 74 | 100 | 303 | 103 | 147 | 93 | 94 | 97 | 71 | 77 | 64 | 116 | 88 | 99 |
| 7. | 76 | 115 | 251 | 102 | 133 | 91 | 90 | 94 | 69 | 76 | 63 | 113 | 87 | 91 |
| 8. | 77 | 125 | 242 | 96 | 151 | 91 | 87 | 86 | 80 | 74 | 63 | 95 | 90 | 87 |
| 9. | 76 | 119 | 222 | 96 | 143 | 92 | 86 | 82 | 84 | 71 | 63 | 88 | 85 | 87 |
| 10. | 75 | 112 | 204 | 95 | 130 | 99 | 89 | 78 | 76 | 71 | 61 | 83 | 85 | 128 |
| 11. | 74 | 102 | 182 | 96 | 128 | 97 | 138 | 77 | 85 | 70 | 63 | 82 | 86 | 133 |
| 12. | 73 | 102 | 174 | 90 | 125 | 96 | 114 | 75 | 93 | 70 | 73 | 80 | 84 | 115 |
| 13. | 71 | 112 | 184 | 91 | 122 | 94 | 99 | 87 | 109 | 68 | 76 | 84 | 82 | 108 |
| 14. | 74 | 128 | 168 | 105 | 119 | 93 | 94 | 82 | 109 | 68 | 65 | 84 | 81 | 105 |
| 15. | 74 | 131 | 155 | 119 | 117 | 92 | 91 | 78 | 115 | 67 | 60 | 83 | 83 | 158 |
| 16. | 74 | 155 | 148 | 115 | 116 | 92 | 95 | 84 | 107 | 70 | 63 | 80 | 77 | 158 |
| 17. | 74 | 224 | 141 | 117 | 111 | 85 | 94 | 85 | 147 | 66 | 63 | 80 | 80 | 164 |
| 18. | 74 | 180 | 134 | 123 | 110 | 87 | 87 | 78 | 145 | 66 | 68 | 78 | 81 | 154 |
| 19. | 75 | 161 | 185 | 139 | 110 | 88 | 83 | 75 | 121 | 64 | 67 | 78 | 81 | 172 |
| 20. | 74 | 156 | 281 | 139 | 106 | 86 | 83 | 74 | 118 | 64 | 64 | 77 | 80 | 156 |
| 21. | 74 | 199 | 238 | 130 | 103 | 89 | 82 | 76 | 101 | 64 | 65 | 77 | 80 | 146 |
| 22. | 74 | 179 | 268 | 129 | 102 | 97 | 79 | 77 | 93 | 64 | 65 | 76 | 80 | 162 |
| 23. | 75 | 187 | 254 | 138 | 101 | 98 | 79 | 69 | 89 | 64 | 63 | 77 | 77 | 234 |
| 24. | 74 | 184 | 221 | 154 | 98 | 94 | 76 | 72 | 85 | 64 | 81 | 76 | 82 | 303 |
| 25. | 75 | 188 | 191 | 182 | 97 | 97 | 73 | 88 | 82 | 64 | 85 | 76 | 85 | 257 |
| 26. | 75 | 162 | 172 | 166 | 98 | 94 | 72 | 81 | 79 | 66 | 75 | 75 | 82 | 222 |
| 27. | 74 | 151 | 165 | 156 | 98 | 90 | 70 | 76 | 76 | 71 | 80 | 75 | 87 | 220 |
| 28. | 75 | 143 | 153 | 150 | 90 | 93 | 71 | 80 | 80 | 68 | 83 | 75 | 85 | 240 |
| 29. | 75 | 139 | 146 | 154 | 93 | 92 | 70 | 81 | 80 | 66 | 75 | 75 | 83 | 200 |
| 30. | 75 | 167 | 140 | | 99 | 88 | 73 | 88 | 78 | 66 | 72 | 85 | 82 | 180 |
| 31. | | 166 | 131 | | 99 | | 68 | | 77 | 65 | | 89 | | 170 |
| Tag | 13. | 1. | 31. | 12. | 28. | 17. | 31. | 23. | 7. | 21.+ | 15. | 2. | 16.+ | 1. |
| NW | 71 | 75 | 131 | 90 | 90 | 85 | 68 | 69 | 69 | 64 | 60 | 70 | 77 | 81 |
| MW | 75 | 139 | 197 | 122 | 118 | 93 | 86 | 82 | 91 | 69 | 68 | 84 | 83 | 152 |
| HW | 81 | 247 | 332 | 190 | 160 | 105 | 156 | 110 | 172 | 86 | 102 | 153 | 96 | 308 |
| Tag | 25.+ | 17. | 6. | 25. | 5. | 4. | 11. | 5. | 17. | 6. | 28. | 4.+ | 7. | 24. |

## Hauptwerte

| | 2001/2011 | | 2002/2012 11 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2012 | 2011 | 2009 | 2011 | 2010 | 2010 | 2003 | 2012 | 2009 | 2011 | 2011 |
| NW | 72 | 75 | 79 | 90 | 88 | 77 | 67 | 65 | 58 | 57 | 60 | 68 | 72 | 75 |
| MNW | 88 | 96 | 109 | 107 | 105 | 90 | 78 | 73 | 69 | 71 | 73 | 78 | 88 | 95 |
| MW | 118 | 131 | 156 | 144 | 131 | 103 | 97 | 84 | 84 | 89 | 86 | 93 | 116 | 131 |
| MHW | 217 | 256 | 305 | 257 | 216 | 140 | 162 | 121 | 128 | 151 | 146 | 149 | 211 | 258 |
| HW | 364 | 414 | 437 | 364 | 286 | 209 | 288 | 149 | 235 | 382 | 333 | 286 | 364 | 414 |
| Jahr | 2010 | 2002 | 2003 | 2002 | 2007 | 2006 | 2004 | 2006 | 2002 | 2007 | 2007 | 2007 | 2010 | 2002 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 60 | am 15.09.2012 | 71 | 60 | 60 | am 15.09.2012 |
| MW cm | 102 | | 125 | 80 | 104 | |
| HW cm | 332 | am 06.01.2012 | 332 | 172 | 332 | am 06.01.2012 |
| | 2002/2012 (*) 11 Jahre | | | | 2002/2012 | |
| NW cm | 57 | am 09.08.2003 | 71 | 57 | 57 | am 09.08.2003 |
| MNW cm | 65 | | 83 | 65 | 65 | |
| MW cm | 109 | | 131 | 89 | 109 | |
| MHW cm | 331 | | 331 | 204 | 345 | |
| HW cm | 437 | am 03.01.2003 | 437 | 382 | 437 | am 03.01.2003 |
| $HW_1$ cm | 332 | | | | | |
| $HW_5$ cm | 396 | | | | | |

## Extremwerte

| | Niedrigwasser (n) cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 57 | 09.08.2003 | 437 | 03.01.2003 |
| 2 | 58 | 09.07.2010 | 395 | 09.01.2011 |
| 3 | 60 | 15.09.2012 | 389 | 14.01.2011 |
| 4 | 61 | 19.08.2009 | 383 | 19.01.2007 |
| 5 | 63 | 30.07.2011 | 382 | 22.08.2007 |
| 6 | 64 | 19.07.2006 | 377 | 07.12.2007 |
| 7 | 65 | 21.07.2005 | 364 | 14.11.2010 |
| 8 | 67 | 16.09.2008 | 364 | 26.02.2002 |
| 9 | 70 | 10.08.2004 | 358 | 17.11.2002 |
| 10 | 74 | 04.06.2002 | 353 | 22.01.2008 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2002/2012 11 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 303 | 303 | 426 | 345 | 217 |
| 363 | 281 | 303 | 425 | 312 | 216 |
| 362 | 268 | 281 | 365 | 284 | 199 |
| 361 | 255 | 268 | 360 | 265 | 198 |
| 360 | 254 | 257 | 350 | 254 | 189 |
| 359 | 251 | 255 | 318 | 248 | 187 |
| 358 | 242 | 254 | 298 | 242 | 183 |
| 357 | 238 | 251 | 289 | 236 | 181 |
| 356 | 224 | 242 | 284 | 228 | 181 |
| 350 | 204 | 221 | 251 | 197 | 167 |
| 340 | 180 | 182 | 221 | 172 | 147 |
| 330 | 162 | 164 | 193 | 158 | 139 |
| 320 | 151 | 154 | 174 | 147 | 132 |
| 300 | 134 | 136 | 156 | 133 | 124 |
| 270 | 114 | 113 | 139 | 121 | 103 |
| 240 | 98 | 98 | 130 | 113 | 93 |
| 210 | 93 | 93 | 123 | 105 | 88 |
| 183 | 88 | 88 | 118 | 98 | 81 |
| 150 | 82 | 84 | 114 | 92 | 78 |
| 130 | 78 | 82 | 111 | 89 | 76 |
| 120 | 77 | 80 | 108 | 87 | 75 |
| 110 | 76 | 80 | 107 | 86 | 75 |
| 100 | 76 | 78 | 104 | 84 | 73 |
| 90 | 75 | 77 | 102 | 82 | 72 |
| 80 | 74 | 76 | 99 | 81 | 70 |
| 70 | 74 | 75 | 98 | 79 | 69 |
| 60 | 73 | 73 | 96 | 77 | 68 |
| 50 | 71 | 71 | 95 | 75 | 67 |
| 40 | 70 | 70 | 94 | 73 | 66 |
| 30 | 66 | 66 | 92 | 71 | 65 |
| 25 | 66 | 66 | 91 | 70 | 63 |
| 20 | 64 | 64 | 90 | 68 | 62 |
| 15 | 64 | 64 | 87 | 67 | 59 |
| 10 | 64 | 64 | 85 | 64 | 58 |
| 9 | 64 | 64 | 84 | 64 | 58 |
| 8 | 64 | 64 | 83 | 64 | 58 |
| 7 | 63 | 63 | 83 | 63 | 58 |
| 6 | 63 | 63 | 83 | 63 | 57 |
| 5 | 63 | 63 | 83 | 63 | 57 |
| 4 | 63 | 63 | 83 | 62 | 57 |
| 3 | 63 | 63 | 82 | 62 | 57 |
| 2 | 63 | 63 | 82 | 60 | 57 |
| 1 | 63 | 63 | 81 | 58 | 57 |
| 0 | 60 | 60 | 79 | 57 | 57 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HW1: DGJ, 4.3.3; HW5: Empirik

LANUV NRW

$A_{Eo}$ : 2842.10 km²
PNP : NHN+ 32.70 m
Lage : 113.44 km oberhalb der Mündung links

# W

cm

Pegel : Greven Nr. 3331000000100
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 110 | 100 | 372 | 253 | 290 | 163 | 138 | 145 | 122 | 111 | 82 | 94 | 119 | 115 |
| 2. | 109 | 112 | 440 | 224 | 274 | 155 | 135 | 138 | 106 | 110 | 82 | 89 | 116 | 122 |
| 3. | 109 | 136 | 546 | 219 | 259 | 150 | 159 | 116 | 105 | 104 | 79 | 93 | 114 | 135 |
| 4. | 111 | 151 | 533 | 211 | 246 | 158 | 154 | 148 | 100 | 103 | 78 | 149 | 123 | 136 |
| 5. | 109 | 147 | 542 | 202 | 268 | 165 | 142 | 188 | 99 | 110 | 76 | 256 | 138 | 159 |
| 6. | 107 | 157 | 631 | 196 | 311 | 149 | 159 | 185 | 96 | 106 | 77 | 219 | 154 | 165 |
| 7. | 106 | 186 | 650 | 183 | 266 | 146 | 148 | 176 | 97 | 115 | 73 | 216 | 134 | 149 |
| 8. | 106 | 223 | 627 | 177 | 288 | 147 | 143 | 157 | 120 | 108 | 75 | 172 | 136 | 135 |
| 9. | 105 | 204 | 604 | 178 | 304 | 146 | 138 | 144 | 158 | 102 | 74 | 145 | 123 | 132 |
| 10. | 103 | 203 | 558 | 173 | 262 | 164 | 138 | 129 | 134 | 96 | 74 | 133 | 116 | 184 |
| 11. | 104 | 177 | 491 | 169 | 245 | 162 | 222 | 121 | 140 | 94 | 78 | 125 | 121 | 241 |
| 12. | 102 | 166 | 419 | 164 | 234 | 161 | 244 | 120 | 169 | 90 | 94 | 120 | 126 | 206 |
| 13. | 98 | 188 | 405 | 164 | 221 | 167 | 185 | 133 | 203 | 89 | 103 | 123 | 118 | 186 |
| 14. | 98 | 231 | 390 | 173 | 214 | 155 | 165 | 138 | 232 | 86 | 93 | 125 | 114 | 176 |
| 15. | 103 | 250 | 351 | 193 | 210 | 161 | 153 | 125 | 232 | 86 | 79 | 126 | 114 | 263 |
| 16. | 99 | 284 | 320 | 201 | 206 | 153 | 155 | 139 | 214 | 86 | 78 | 118 | 112 | 339 |
| 17. | 99 | 478 | 295 | 190 | 201 | 148 | 155 | 157 | 259 | 91 | 80 | 115 | 109 | 339 |
| 18. | 103 | 459 | 274 | 214 | 197 | 142 | 142 | 135 | 315 | 84 | 79 | 115 | 114 | 334 |
| 19. | 103 | 361 | 319 | 235 | 192 | 146 | 133 | 124 | 257 | 82 | 89 | 110 | 117 | 332 |
| 20. | 100 | 313 | 535 | 263 | 183 | 143 | 127 | 116 | 231 | 81 | 84 | 105 | 116 | 329 |
| 21. | 100 | 369 | 586 | 234 | 178 | 147 | 126 | 115 | 200 | 78 | 81 | 105 | 115 | 287 |
| 22. | 102 | 400 | 589 | 226 | 175 | 160 | 120 | 115 | 170 | 79 | 82 | 103 | 110 | 302 |
| 23. | 100 | 388 | 605 | 234 | 173 | 168 | 117 | 119 | 153 | 79 | 78 | 103 | 108 | 409 |
| 24. | 102 | 384 | 592 | 276 | 168 | 162 | 112 | 101 | 144 | 80 | 110 | 100 | 112 | 576 |
| 25. | 100 | 405 | 538 | 341 | 163 | 171 | 107 | 138 | 133 | 83 | 152 | 102 | 123 | 634 |
| 26. | 100 | 358 | 459 | 350 | 162 | 163 | 103 | 140 | 125 | 92 | 117 | 100 | 120 | 604 |
| 27. | 100 | 315 | 396 | 313 | 162 | 157 | 99 | 118 | 118 | 118 | 122 | 99 | 123 | 559 |
| 28. | 100 | 293 | 359 | 293 | 151 | 151 | 97 | 119 | 124 | 103 | 126 | 97 | 124 | 560 |
| 29. | 102 | 276 | 328 | 288 | 153 | 164 | 95 | 118 | 129 | 88 | 114 | 99 | 120 | 539 |
| 30. | 101 | 326 | 307 | | 162 | 147 | 98 | 138 | 120 | 82 | 100 | 111 | 117 | 460 |
| 31. | | 402 | 282 | | 169 | | 101 | | 119 | 81 | | 134 | | 397 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 14.+ | 1. | 18. | 13.+ | 28. | 18. | 29. | 24. | 6. | 21. | 7. | 2. | 23. | 1. |
| NW | 98 | 100 | 274 | 164 | 151 | 142 | 95 | 101 | 96 | 78 | 73 | 89 | 108 | 115 |
| MW | 103 | 272 | 463 | 226 | 216 | 156 | 139 | 135 | 159 | 93 | 90 | 126 | 120 | 307 |
| HW | 119 | 511 | 656 | 371 | 326 | 182 | 292 | 197 | 331 | 141 | 160 | 273 | 186 | 638 |
| Tag | 4. | 17. | 7. | 25.+ | 8.+ | 5. | 11. | 5. | 18. | 27.+ | 25. | 5. | 6. | 25. |

| | 2001/2011 | | 2002/2012 11 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2006 | 2012 | 2007 | 2012 | 2010 | 2010 | 2012 | 2012 | 2009 | 2011 | 2011 |
| NW | 98 | 100 | 134 | 157 | 151 | 124 | 95 | 88 | 85 | 78 | 74 | 86 | 98 | 100 |
| MNW | 144 | 177 | 220 | 222 | 215 | 163 | 127 | 111 | 105 | 106 | 110 | 115 | 143 | 170 |
| MW | 241 | 288 | 365 | 342 | 304 | 208 | 182 | 143 | 143 | 161 | 143 | 159 | 233 | 284 |
| MHW | 440 | 531 | 622 | 563 | 500 | 338 | 343 | 225 | 249 | 321 | 269 | 307 | 418 | 534 |
| HW | 703 | 733 | 749 | 691 | 657 | 512 | 587 | 285 | 400 | 683 | 587 | 597 | 703 | 733 |
| Jahr | 2010 | 2002 | 2003 | 2002 | 2002 | 2006 | 2004 | 2007 | 2002+ | 2007 | 2007 | 2007 | 2010 | 2002 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 73 | am 07.09.2012 | 98 | 73 | 73 | am 07.09.2012 |
| MW cm | 182 | | 241 | 124 | 186 | |
| HW cm | 656 | am 07.01.2012 | 656 | 331 | 656 | am 07.01.2012 |
| | 2002/2012 (*) 11 Jahre | | | | 2002/2012 | |
| NW cm | 73 | am 07.09.2012 | 98 | 73 | 73 | am 07.09.2012 |
| MNW cm | 93 | | 133 | 95 | 95 | |
| MW cm | 223 | | 291 | 155 | 222 | |
| MHW cm | 654 | | 654 | 439 | 673 | |
| HW cm | 749 | am 04.01.2003 | 749 | 683 | 749 | am 04.01.2003 |
| $HW_1$ cm | 656 | | | | | |
| $HW_5$ cm | 703 | | | | | |

## Extremwerte

| | Niedrigwasser (n) cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 73 | 07.09.2012 | 749 | 04.01.2003 |
| 2 | 79 | 12.09.2009 | 723 | 10.01.2011 |
| 3 | 85 | 20.07.2010 | 703 | 15.11.2010 |
| 4 | 88 | 03.08.2011 | 702 | 22.01.2008 |
| 5 | 91 | 20.07.2005 | 702 | 09.12.2007 |
| 6 | 91 | 17.08.2003 | 691 | 27.02.2002 |
| 7 | 93 | 20.07.2006 | 688 | 20.01.2007 |
| 8 | 94 | 10.08.2004 | 683 | 24.08.2007 |
| 9 | 100 | 17.09.2008 | 678 | 13.12.2010 |
| 10 | 117 | 06.05.2007 | 669 | 19.11.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | Unterschrittene Wasserstände cm 2002/2012 11 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 650 | 650 | 746 | 694 | 532 |
| 363 | 631 | 634 | 734 | 674 | 514 |
| 362 | 627 | 631 | 725 | 648 | 512 |
| 361 | 605 | 627 | 720 | 631 | 509 |
| 360 | 604 | 605 | 707 | 611 | 501 |
| 359 | 592 | 604 | 688 | 603 | 497 |
| 358 | 589 | 604 | 659 | 589 | 494 |
| 357 | 586 | 592 | 648 | 580 | 480 |
| 356 | 558 | 589 | 639 | 568 | 469 |
| 350 | 491 | 546 | 611 | 520 | 441 |
| 340 | 396 | 419 | 555 | 451 | 381 |
| 330 | 350 | 341 | 526 | 401 | 339 |
| 320 | 311 | 313 | 472 | 364 | 311 |
| 300 | 259 | 259 | 400 | 314 | 259 |
| 270 | 204 | 203 | 344 | 267 | 203 |
| 240 | 170 | 169 | 302 | 235 | 169 |
| 210 | 157 | 157 | 274 | 206 | 155 |
| 183 | 146 | 145 | 255 | 182 | 136 |
| 150 | 126 | 132 | 234 | 162 | 122 |
| 130 | 119 | 122 | 225 | 151 | 117 |
| 120 | 115 | 120 | 216 | 146 | 114 |
| 110 | 111 | 118 | 209 | 141 | 113 |
| 100 | 107 | 116 | 200 | 136 | 111 |
| 90 | 104 | 114 | 193 | 131 | 105 |
| 80 | 103 | 110 | 186 | 126 | 102 |
| 70 | 101 | 105 | 178 | 122 | 97 |
| 60 | 100 | 102 | 172 | 117 | 95 |
| 50 | 98 | 99 | 166 | 113 | 92 |
| 40 | 94 | 94 | 164 | 107 | 91 |
| 30 | 86 | 86 | 157 | 102 | 86 |
| 25 | 83 | 83 | 154 | 100 | 83 |
| 20 | 82 | 82 | 151 | 97 | 82 |
| 15 | 80 | 80 | 146 | 95 | 80 |
| 10 | 79 | 79 | 143 | 91 | 79 |
| 9 | 78 | 78 | 142 | 91 | 78 |
| 8 | 78 | 78 | 140 | 90 | 78 |
| 7 | 78 | 78 | 140 | 89 | 78 |
| 6 | 78 | 78 | 139 | 88 | 78 |
| 5 | 78 | 78 | 137 | 87 | 78 |
| 4 | 77 | 77 | 137 | 86 | 77 |
| 3 | 76 | 76 | 137 | 84 | 76 |
| 2 | 75 | 75 | 137 | 81 | 75 |
| 1 | 74 | 74 | 136 | 79 | 74 |
| 0 | 73 | 73 | 134 | 73 | 73 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HW1: DGJ, 4.3.3; HW5: Empirik

LANUV NRW

$A_{Eo}$ : 3740 km²
PNP : NN + 24.19 m
Lage: 153.0 km Lauflänge ab Quelle, rechts

W
cm

Pegel : Rheine Unterschl. UP Nr. 33900200
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 198 | 196 | 341 | 285 | 294 | 229 | 217 | 202 | 207 | 203 | 185 | 193 | 209 | 205 |
| 2. | 199 | 199 | 353 | 272 | 288 | 225 | 215 | 214 | 199 | 200 | 185 | 190 | 205 | 206 |
| 3. | 199 | 208 | 399 | R 267 | 280 | 222 | 217 | 206 | 195 | 201 | 185 | 190 | 203 | 212 |
| 4. | 199 | 220 | 428 | R 260 | 274 | 223 | 224 | 208 | 195 | 197 | 184 | 205 | 205 | 215 |
| 5. | 199 | 222 | 445 | R 253 | 278 | 229 | 218 | 227 | 193 | 198 | 183 | 246 | 213 | 222 |
| 6. | 198 | 225 | 463 | R 249 | 299 | 222 | 220 | 233 | 191 | 199 | 184 | 261 | 217 | 230 |
| 7. | 197 | 234 | 483 | R 244 | 290 | 219 | 221 | 232 | 192 | 199 | 182 | 256 | 221 | 225 |
| 8. | 197 | 259 | 503 | R 240 | 288 | 219 | 217 | 232 | 196 | 199 | 182 | 242 | 215 | 218 |
| 9. | 197 | 258 | 504 | R 238 | 304 | 219 | 215 | 220 | 217 | 196 | 179 | 226 | 214 | 216 |
| 10. | 195 | 255 | 489 | R 237 | 288 | 228 | 214 | 212 | 214 | 194 | 182 | 217 | 209 | 234 |
| 11. | 197 | 244 | 458 | R 236 | 276 | 232 | 224 | 207 | 206 | 191 | 183 | 212 | 208 | 262 |
| 12. | 195 | 235 | 410 | R 232 | 269 | 230 | 264 | 207 | 213 | 190 | 190 | 210 | 209 | 260 |
| 13. | 194 | 240 | 371 | R 231 | 263 | 233 | 241 | 216 | 225 | 189 | 192 | 209 | 209 | 247 |
| 14. | 193 | 260 | 358 | R 234 | 258 | 228 | 227 | 216 | 240 | 188 | 193 | 210 | 206 | 241 |
| 15. | 195 | 274 | 337 | R 240 | 255 | 230 | 222 | 210 | 245 | 188 | 186 | 210 | 204 | 258 |
| 16. | 195 | 285 | 316 | R 248 | 253 | 228 | 218 | 209 | 245 | 188 | 184 | 208 | 205 | 305 |
| 17. | 194 | 351 | 305 | R 244 | 251 | 224 | 220 | 221 | 251 | 190 | 184 | 206 | 202 | 304 |
| 18. | 194 | 387 | 293 | R 253 | 248 | 220 | 217 | 220 | 279 | 186 | 184 | 205 | 202 | 312 |
| 19. | 196 | 354 | 302 | R 262 | 246 | 222 | 212 | 213 | 273 | 186 | 186 | 203 | 206 | 305 |
| 20. | 195 | 314 | 382 | R 280 | 242 | 220 | 208 | 206 | 257 | 185 | 187 | 201 | 206 | 307 |
| 21. | 194 | 323 | 437 | 268 | 238 | 219 | 206 | 203 | 247 | 185 | 185 | 199 | 205 | 294 |
| 22. | 194 | 351 | 462 | 265 | 236 | 224 | 206 | 204 | 231 | 184 | 185 | 199 | 204 | 294 |
| 23. | 195 | 344 | 474 | 266 | 235 | 230 | 203 | 203 | 222 | 184 | 184 | 198 | 202 | 336 |
| 24. | 196 | 347 | 482 | 281 | 233 | 229 | 206 | 199 | 217 | 184 | 193 | 198 | 202 | 397 |
| 25. | 194 | 350 | 475 | 306 | 230 | 230 | 200 | 205 | 211 | 186 | 210 | 197 | 205 | 436 |
| 26. | 195 | 344 | 442 | 327 | 228 | 228 | 199 | 214 | 207 | 188 | 208 | 196 | 208 | 464 |
| 27. | 194 | 316 | 387 | 311 | 228 | 226 | 194 | 207 | 204 | 200 | 202 | 196 | 208 | 470 |
| 28. | 195 | 303 | 348 | 299 | 226 | 223 | 193 | 202 | 205 | 196 | 205 | 196 | 210 | 458 |
| 29. | 195 | 294 | 324 | 293 | 221 | 226 | 193 | 202 | 214 | 190 | 202 | 195 | 208 | 448 |
| 30. | 195 | 298 | 309 | | 226 | 223 | 192 | 203 | 208 | 187 | 195 | 199 | 207 | 428 |
| 31. | | 340 | 298 | | 231 | | 194 | | 205 | 185 | | 207 | | 380 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 14. | 1. | 18. | 13. | 29. | 7.+ | 30. | 24. | 6. | 22.+ | 9. | 2.+ | 17.+ | 1. |
| NW | 193 | 196 | 293 | 231 | 221 | 219 | 192 | 199 | 191 | 184 | 179 | 190 | 202 | 205 |
| MW | 196 | 285 | 399 | 263 | 257 | 225 | 213 | 212 | 219 | 191 | 189 | 209 | 208 | 303 |
| HW | 242 | 392 | 513 | 331 | 308 | 239 | 271 | 254 | 287 | 206 | 225 | 266 | 227 | 474 |
| Tag | 7. | 18. | 8. | 26. | 9. | 15. | 12. | 7. | 18. | 1. | 9. | 6. | 7. | 27. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2006 | 2012 | 2007 | 2011 | 2010 | 2010 | 2003 | 2012 | 2009 | 2011 | 2011 |
| NW | 193 | 196 | 205 | 218 | 221 | 202 | 190 | 184 | 182 | 178 | 179 | 186 | 193 | 196 |
| MNW | 217 | 232 | 255 | 253 | 250 | 221 | 201 | 194 | 191 | 192 | 195 | 199 | 210 | 229 |
| MW | 268 | 290 | 349 | 321 | 300 | 248 | 228 | 209 | 207 | 217 | 211 | 219 | 253 | 290 |
| MHW | 378 | 420 | 525 | 443 | 401 | 320 | 301 | 250 | 252 | 294 | 262 | 284 | 351 | 416 |
| HW | 563 | 606 | 742 | 499 | 508 | 419 | 443 | 283 | 335 | 512 | 387 | 435 | 563 | 606 |
| Jahr | 2010 | 2007 | 2003 | 2005 | 2007 | 2006 | 2004 | 2006 | 2007 | 2010 | 2007 | 2007 | 2010 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 179 | am 09.09.2012 | 193 | 179 | 179 | am 09.09.2012 |
| MW cm | 239 | | 272 | 206 | 241 | |
| HW cm | 513 | am 08.01.2012 | 513 | 287 | 513 | am 08.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 178 | am 17.08.2003 | 193 | 178 | 178 | am 17.08.2003 |
| MNW cm | 185 | | 207 | 185 | 185 | |
| MW cm | 256 | | 296 | 215 | 254 | |
| MHW cm | 554 | | 547 | 357 | 566 | |
| HW cm | 742 | am 05.01.2003 | 742 | 512 | 742 | am 05.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 173 | 21.08.1976 | 1013 | 10.02.1946 |
| 2 | 177 | 27.08.1973 | 828 | 07.12.1960 |
| 3 | 178 | 17.08.2003 | 767 | 24.02.1970 |
| 4 | 178 | 10.08.1996 | 759 | 04.01.1926 |
| 5 | 178 | 04.08.1990 | 748 | 02.01.1987 |
| 6 | 179 | 09.09.2012 | 742 | 05.01.2003 |
| 7 | 180 | 16.08.1975 | 732 | 16.01.1948 |
| 8 | 181 | 13.09.2009 | 726 | 29.11.1928 |
| 9 | 181 | 20.08.2009 | 714 | 07.01.1925 |
| 10 | 182 | 10.07.2010 | 702 | 17.01.1968 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 504 | 504 | | | |
| 364 | 503 | 503 | 731 | 602 | 415 |
| 363 | 489 | 489 | 702 | 539 | 413 |
| 362 | 483 | 483 | 687 | 522 | 399 |
| 361 | 482 | 482 | 682 | 497 | 398 |
| 360 | 475 | 475 | 679 | 488 | 398 |
| 359 | 474 | 474 | 602 | 481 | 396 |
| 358 | 463 | 470 | 583 | 471 | 395 |
| 357 | 462 | 464 | 539 | 465 | 394 |
| 356 | 458 | 463 | 535 | 460 | 392 |
| 350 | 399 | 442 | 474 | 426 | 379 |
| 340 | 350 | 380 | 451 | 385 | 341 |
| 330 | 323 | 316 | 431 | 353 | 315 |
| 320 | 302 | 304 | 405 | 331 | 300 |
| 300 | 276 | 276 | 359 | 303 | 276 |
| 270 | 248 | 247 | 321 | 277 | 247 |
| 240 | 233 | 232 | 301 | 259 | 232 |
| 210 | 225 | 224 | 283 | 243 | 219 |
| 183 | 218 | 218 | 271 | 231 | 211 |
| 150 | 209 | 211 | 262 | 219 | 204 |
| 130 | 206 | 208 | 253 | 214 | 201 |
| 120 | 203 | 207 | 249 | 211 | 200 |
| 110 | 200 | 206 | 247 | 209 | 198 |
| 100 | 200 | 204 | 243 | 207 | 197 |
| 90 | 198 | 203 | 238 | 205 | 195 |
| 80 | 197 | 201 | 234 | 203 | 192 |
| 70 | 196 | 199 | 232 | 201 | 191 |
| 60 | 195 | 197 | 230 | 199 | 190 |
| 50 | 194 | 194 | 226 | 197 | 188 |
| 40 | 191 | 191 | 223 | 195 | 187 |
| 30 | 188 | 188 | 220 | 193 | 185 |
| 25 | 187 | 187 | 219 | 192 | 185 |
| 20 | 186 | 186 | 216 | 190 | 184 |
| 15 | 185 | 185 | 211 | 189 | 183 |
| 10 | 185 | 185 | 206 | 186 | 181 |
| 9 | 185 | 185 | 206 | 185 | 181 |
| 8 | 185 | 185 | 204 | 185 | 180 |
| 7 | 185 | 185 | 203 | 185 | 180 |
| 6 | 184 | 184 | 202 | 185 | 180 |
| 5 | 184 | 184 | 202 | 184 | 180 |
| 4 | 183 | 183 | 201 | 184 | 180 |
| 3 | 183 | 183 | 200 | 183 | 180 |
| 2 | 183 | 183 | 200 | 183 | 179 |
| 1 | 182 | 182 | 199 | 181 | 179 |
| 0 | 179 | 179 | 198 | 178 | 178 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte NW ab 1961, HW ab 1921

Wasserstände unter 380 cm sind mit denen vor 1965 nicht vergleichbar !

18 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 4981 km²
PNP : NN + 12.39 m
Lage: 212.0 km Lauflänge ab Quelle, rechts

W
cm

Pegel : Dalum Nr. 3550040
Gewässer : Ems
Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 148 | 146 | 249 | R 211 | 215 | 168 | 158 | 145 | 148 | 150 | 140 | 143 | 154 | 154 |
| 2. | 150 | 148 | 257 | R 201 | 215 | 166 | 157 | 150 | 147 | 147 | 139 | 144 | 153 | 153 |
| 3. | 150 | 152 | 279 | R 186 | 210 | 163 | 156 | 150 | 145 | 148 | 137 | 144 | 153 | 154 |
| 4. | 148 | 158 | 301 | R 188 | 207 | 162 | 160 | 150 | 143 | 146 | 136 | 152 | 153 | 158 |
| 5. | 149 | 161 | 322 | R 187 | 201 | 163 | 160 | 156 | 143 | 144 | 138 | 175 | 157 | 161 |
| 6. | 148 | 164 | 344 | R 183 | 209 | 163 | 156 | 162 | 142 | 147 | 136 | 197 | 161 | 165 |
| 7. | 147 | 171 | 339 | R 180 | 213 | 160 | 157 | 162 | 144 | 148 | 138 | 201 | 165 | 165 |
| 8. | 147 | 184 | 346 | R 175 | 208 | 158 | 155 | 166 | 143 | 148 | 138 | 189 | 162 | 162 |
| 9. | 148 | 189 | 352 | R 175 | 215 | 158 | 154 | 162 | 152 | 146 | 136 | 173 | 160 | 159 |
| 10. | 147 | 186 | 352 | R 173 | 213 | 163 | 155 | 157 | 155 | 146 | 137 | 164 | 160 | 172 |
| 11. | 147 | 180 | 341 | R 170 | 201 | 171 | 157 | 149 | 150 | 144 | 141 | 162 | 159 | 191 |
| 12. | 148 | 171 | 317 | R 168 | 195 | 169 | 171 | 148 | 151 | 143 | 139 | 159 | 157 | 195 |
| 13. | 146 | 174 | 288 | R 165 | 190 | 171 | 172 | 156 | 155 | 142 | 141 | 163 | 157 | 186 |
| 14. | 145 | 184 | 268 | R 168 | 187 | 171 | 162 | 156 | 162 | 141 | 141 | 164 | 154 | 182 |
| 15. | 144 | 200 | 254 | 178 | 184 | 169 | 159 | 152 | 167 | 141 | 140 | 161 | 152 | 187 |
| 16. | 144 | 208 | 238 | 179 | 183 | 171 | 156 | 150 | 168 | 140 | 139 | 160 | 151 | 213 |
| 17. | 145 | 247 | 225 | 179 | 183 | 167 | 155 | 153 | 173 | 140 | 137 | 157 | 151 | 224 |
| 18. | 144 | 271 | 216 | 180 | 179 | 165 | 154 | 157 | 183 | 140 | 140 | 154 | 150 | 227 |
| 19. | 144 | 265 | 220 | 190 | 177 | 163 | 154 | 156 | 194 | 140 | 141 | 153 | 151 | 226 |
| 20. | 144 | 240 | 270 | 202 | 175 | 163 | 153 | 151 | 188 | 137 | 141 | 151 | 152 | 222 |
| 21. | 144 | 237 | 304 | 199 | 174 | 161 | 148 | 147 | 180 | 136 | 139 | 151 | 151 | 222 |
| 22. | 145 | 249 | 331 | 194 | 170 | 162 | 149 | 148 | 170 | 135 | 138 | 149 | 152 | 217 |
| 23. | 146 | 252 | 341 | 195 | 170 | 166 | 148 | 147 | 160 | 136 | 138 | 150 | 150 | 244 |
| 24. | 145 | 256 | 347 | 203 | 170 | 168 | 147 | 147 | 157 | 138 | 144 | 148 | 151 | 293 |
| 25. | 145 | 260 | 344 | 218 | 168 | 167 | 146 | 146 | 154 | 137 | 153 | 147 | 152 | 305 |
| 26. | 145 | 255 | 334 | 234 | 166 | 168 | 143 | 153 | 151 | 136 | 160 | 146 | 152 | 325 |
| 27. | 146 | 241 | 306 | 232 | 165 | 163 | 142 | 153 | 148 | 143 | 154 | 148 | 153 | 334 |
| 28. | 145 | 226 | 267 | 221 | 164 | 164 | 142 | 148 | 154 | 145 | 153 | 145 | 155 | 337 |
| 29. | 145 | 219 | 247 | 216 | 163 | 164 | 142 | 147 | 158 | 143 | 152 | 146 | 155 | 324 |
| 30. | 147 | 217 | 233 | | 164 | 163 | 142 | 146 | 157 | 141 | 150 | 146 | 155 | 315 |
| 31. | | 236 | 222 | | 166 | | 143 | | 153 | 141 | | 150 | | 295 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 15.+ | 1. | 18. | 13. | 29. | 8.+ | 27.+ | 1. | 6. | 22. | 4.+ | 1. | 18.+ | 2. |
| NW | 144 | 146 | 216 | 165 | 163 | 158 | 142 | 145 | 142 | 135 | 136 | 143 | 150 | 153 |
| MW | 146 | 208 | 292 | 191 | 187 | 165 | 153 | 152 | 158 | 142 | 142 | 158 | 155 | 222 |
| HW | 157 | 278 | 355 | 238 | 221 | 177 | 179 | 169 | 200 | 154 | 165 | 205 | 170 | 340 |
| Tag | 2. | 18. | 9.+ | 27. | 1.+ | 14.+ | 12.+ | 8. | 19. | 3.+ | 26. | 7. | 7. | 27. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2011 | 2009 | 2012 | 2012 | 2011 | 2011 + | 2009 + | 2006 | 2003 + | 2009 | 2009 | 2011 | 2011 |
| NW | 144 | 146 | 151 | 165 | 163 | 148 | 142 | 139 | 135 | 135 | 135 | 137 | 144 | 146 |
| MNW | 162 | 173 | 190 | 188 | 187 | 163 | 150 | 144 | 141 | 141 | 145 | 148 | 156 | 171 |
| MW | 198 | 214 | 256 | 237 | 222 | 183 | 168 | 155 | 152 | 158 | 155 | 162 | 186 | 214 |
| MHW | 264 | 293 | 358 | 316 | 285 | 235 | 211 | 180 | 181 | 210 | 194 | 204 | 247 | 291 |
| HW | 374 | 413 | 452 | 366 | 368 | 291 | 293 | 211 | 232 | 380 | 314 | 292 | 374 | 413 |
| Jahr | 2010 | 2007 | 2003 | 2004 | 2007 | 2006 | 2004 | 2006 | 2007 | 2010 | 2010 | 2007 | 2010 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 135 | am 22.08.2012 | 144 | 135 | 135 | am 22.08.2012 |
| MW cm | 175 | | 199 | 151 | 177 | |
| HW cm | 355 | am 09.01.2012 | 355 | 205 | 355 | am 09.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 135 | am 07.08.2003 | 144 | 135 | 135 | am 07.08.2003 |
| MNW cm | 138 | | 154 | 138 | 138 | |
| MW cm | 188 | | 218 | 158 | 187 | |
| MHW cm | 378 | | 372 | 250 | 383 | |
| HW cm | 452 | am 06.01.2003 | 452 | 380 | 452 | am 06.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Niedrigwasser Datum | Hochwasser cm | Hochwasser Datum |
|---|---|---|---|---|
| 1 | 131 | 22.08.1973 | 462 | 03.01.1987 |
| 2 | 132 | 18.09.1971 | 458 | 25.02.1970 |
| 3 | 133 | 06.07.1976 | 454 | 14.03.1981 |
| 4 | 134 | 10.08.1992 | 453 | 02.11.1998 |
| 5 | 135 | 22.08.2012 | 453 | 18.01.1968 |
| 6 | 135 | 11.09.2009 | 452 | 06.01.2003 |
| 7 | 135 | 20.07.2006 | 450 | 04.01.1994 |
| 8 | 135 | 07.08.2003 | 449 | 18.01.2011 |
| 9 | 135 | 17.08.1997 | 446 | 31.01.1995 |
| 10 | 135 | 06.08.1996 | 446 | 23.01.1986 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 353 | 353 | | | |
| 364 | 352 | 352 | 451 | 426 | 299 |
| 363 | 347 | 347 | 451 | 394 | 296 |
| 362 | 346 | 346 | 448 | 375 | 289 |
| 361 | 346 | 346 | 447 | 365 | 289 |
| 360 | 344 | 344 | 440 | 354 | 289 |
| 359 | 344 | 344 | 426 | 347 | 288 |
| 358 | 341 | 341 | 415 | 344 | 286 |
| 357 | 339 | 339 | 412 | 340 | 282 |
| 356 | 334 | 337 | 406 | 335 | 280 |
| 350 | 301 | 322 | 348 | 307 | 270 |
| 340 | 256 | 279 | 335 | 280 | 250 |
| 330 | 238 | 234 | 309 | 260 | 232 |
| 320 | 220 | 221 | 292 | 243 | 220 |
| 300 | 202 | 202 | 265 | 223 | 202 |
| 270 | 180 | 180 | 234 | 205 | 180 |
| 240 | 169 | 169 | 222 | 192 | 169 |
| 210 | 164 | 164 | 207 | 179 | 161 |
| 183 | 159 | 160 | 200 | 171 | 153 |
| 150 | 154 | 155 | 189 | 163 | 150 |
| 130 | 151 | 154 | 182 | 159 | 149 |
| 120 | 149 | 153 | 179 | 157 | 148 |
| 110 | 149 | 152 | 177 | 155 | 147 |
| 100 | 148 | 151 | 176 | 153 | 146 |
| 90 | 147 | 149 | 173 | 152 | 144 |
| 80 | 147 | 148 | 172 | 150 | 143 |
| 70 | 146 | 147 | 170 | 149 | 142 |
| 60 | 145 | 146 | 167 | 147 | 141 |
| 50 | 144 | 144 | 166 | 146 | 140 |
| 40 | 143 | 143 | 165 | 144 | 140 |
| 30 | 142 | 142 | 161 | 143 | 139 |
| 25 | 141 | 141 | 160 | 142 | 138 |
| 20 | 140 | 140 | 158 | 141 | 138 |
| 15 | 139 | 139 | 157 | 140 | 137 |
| 10 | 138 | 138 | 155 | 139 | 137 |
| 9 | 138 | 138 | 153 | 139 | 137 |
| 8 | 138 | 138 | 153 | 138 | 137 |
| 7 | 137 | 137 | 151 | 138 | 136 |
| 6 | 137 | 137 | 151 | 138 | 136 |
| 5 | 137 | 137 | 151 | 138 | 136 |
| 4 | 137 | 137 | 150 | 137 | 136 |
| 3 | 137 | 137 | 149 | 137 | 136 |
| 2 | 137 | 137 | 149 | 137 | 136 |
| 1 | 136 | 136 | 148 | 136 | 136 |
| 0 | 135 | 135 | 146 | 135 | 135 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1965
14 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 8389 km²
PNP : NN + 6.71 m
Lage: 234.8 km Lauflänge ab Quelle, rechts

W
cm

Pegel : Versen-Wehrdurchstich Nr. 3730010
Gewässer : Ems
Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 111 | 98 | 226 | 175 | 176 | 124 | 109 | 100 | 96 | 105 | 96 | 89 | 105 | 103 |
| 2. | 112 | 104 | 239 | T 162 | 177 | 120 | 108 | 106 | 98 | 102 | 96 | 92 | 105 | 102 |
| 3. | 114 | 105 | 267 | T 143 | 169 | 117 | 108 | 107 | 94 | 99 | 96 | 94 | 104 | 103 |
| 4. | 112 | 115 | 295 | T 151 | 164 | 116 | 113 | 106 | 96 | 98 | 96 | 104 | 103 | 107 |
| 5. | 111 | 115 | 323 | T 173 | 155 | 115 | 117 | 109 | 96 | 94 | 95 | 124 | 104 | 111 |
| 6. | 111 | 125 | 351 | T 199 | 162 | 116 | 108 | 116 | 97 | 96 | 95 | 153 | 112 | 117 |
| 7. | 110 | 137 | 359 | D 184 | 165 | 114 | 108 | 112 | 99 | 98 | 95 | 171 | 114 | 115 |
| 8. | 104 | 149 | 364 | D 177 | 160 | 110 | 109 | 111 | 99 | 98 | 95 | 153 | 116 | 107 |
| 9. | 100 | 169 | 370 | D 164 | 174 | 110 | 109 | 114 | 107 | 98 | 93 | 133 | 108 | 105 |
| 10. | 100 | 176 | 372 | D 152 | 174 | 117 | 113 | 109 | 109 | 98 | 93 | 117 | 107 | 124 |
| 11. | 100 | 165 | 365 | D 143 | 167 | 134 | 112 | 103 | 106 | 96 | 95 | 117 | 104 | 149 |
| 12. | 101 | 142 | 347 | D 136 | 156 | 129 | 123 | 98 | 100 | 94 | 95 | 110 | 102 | 152 |
| 13. | 100 | 136 | 309 | D 131 | 147 | 128 | 124 | 105 | 103 | 96 | 97 | 117 | 102 | 138 |
| 14. | 98 | 153 | 274 | T 125 | 142 | 129 | 113 | 108 | 112 | 94 | 98 | 118 | 98 | 130 |
| 15. | 97 | 179 | 253 | 131 | 137 | 123 | 108 | 104 | 115 | 94 | 97 | 115 | 100 | 135 |
| 16. | 96 | 190 | 224 | 132 | 137 | 125 | 112 | 101 | 119 | 97 | 96 | 111 | 102 | 164 |
| 17. | 96 | 227 | 205 | 136 | 140 | 121 | 108 | 105 | 121 | 96 | 95 | 108 | 101 | 178 |
| 18. | 96 | 255 | 189 | 137 | 145 | 115 | 106 | 110 | 132 | 95 | 96 | 109 | 99 | 176 |
| 19. | 96 | 256 | 186 | 143 | 135 | 118 | 103 | 111 | 144 | 96 | 95 | 108 | 101 | 178 |
| 20. | 97 | 226 | 236 | 164 | 129 | 116 | 103 | 107 | 138 | 96 | 98 | 104 | 103 | 170 |
| 21. | 97 | 216 | 281 | 162 | 125 | 114 | 99 | 100 | 130 | 96 | 96 | 103 | 103 | 167 |
| 22. | 97 | 226 | 314 | 153 | 125 | 114 | 99 | 99 | 121 | 95 | 96 | 100 | 102 | 159 |
| 23. | 96 | 229 | 337 | 153 | 122 | 117 | 100 | 98 | 110 | 95 | 94 | 100 | 101 | 197 |
| 24. | 97 | 227 | 352 | 165 | 121 | 124 | 97 | 99 | 107 | 96 | 101 | 99 | 101 | 261 |
| 25. | 96 | 240 | 355 | 181 | 121 | 121 | 98 | 100 | 104 | 96 | 109 | 98 | 101 | 284 |
| 26. | 96 | 233 | 346 | 200 | 115 | 121 | 94 | 108 | 99 | 95 | 115 | 96 | 103 | 305 |
| 27. | 96 | 216 | 323 | 199 | 118 | 116 | 93 | 113 | 98 | 100 | 100 | 98 | 107 | 318 |
| 28. | 97 | 194 | 276 | 182 | 120 | 114 | 92 | 104 | 103 | 102 | 97 | 95 | 106 | 318 |
| 29. | 97 | 184 | 235 | 176 | 118 | 112 | 92 | 103 | 109 | 101 | 95 | 94 | 105 | 300 |
| 30. | 97 | 186 | 209 | | 117 | 115 | 94 | 98 | 114 | 97 | 95 | 96 | 105 | 276 |
| 31. | | 208 | 191 | | 124 | | 95 | | 108 | 96 | | 101 | | 253 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 16.+ | 1. | 19. | 14. | 26. | 8.+ | 28.+ | 12.+ | 3. | 5.+ | 9.+ | 1. | 14. | 2. |
| NW | 96 | 98 | 186 | 125 | 115 | 110 | 92 | 98 | 94 | 94 | 93 | 89 | 98 | 102 |
| MW | 101 | 180 | 289 | 160 | 143 | 119 | 105 | 105 | 109 | 97 | 97 | 111 | 104 | 177 |
| HW | 120 | 261 | 374 | 210 | 181 | 139 | 135 | 122 | 151 | 111 | 132 | 178 | 119 | 321 |
| Tag | 3. | 18.+ | 10. | 26. | 1.+ | 11. | 12. | 6.+ | 19. | 1.+ | 26. | 7. | 8. | 28. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2006 | 2011 | 2009 | 2006 | 2012 | 2011 | 2009 | 2011 | 2011 | 2004 + | 2006 | 2012 | 2006 | 2011 |
| NW | 94 | 98 | 96 | 116 | 115 | 102 | 91 | 90 | 88 | 88 | 87 | 89 | 94 | 98 |
| MNW | 113 | 122 | 144 | 144 | 145 | 118 | 102 | 94 | 93 | 94 | 96 | 98 | 105 | 118 |
| MW | 153 | 171 | 232 | 208 | 190 | 140 | 121 | 105 | 104 | 110 | 108 | 112 | 138 | 170 |
| MHW | 227 | 264 | 358 | 305 | 269 | 199 | 172 | 134 | 134 | 161 | 153 | 154 | 204 | 260 |
| HW | 345 | 414 | 493 | 405 | 395 | 263 | 252 | 164 | 179 | 343 | 298 | 236 | 340 | 414 |
| Jahr | 2002 | 2007 | 2003 | 2004 | 2007 | 2006 | 2004 | 2006 | 2007 | 2010 | 2010 | 2007 | 2007 | 2007 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NW cm | 89 | am 01.10.2012 | 96 | 89 | 89 | am 01.10.2012 |
| MW cm | 135 | | 166 | 104 | 135 | |
| HW cm | 374 | am 10.01.2012 | 374 | 178 | 374 | am 10.01.2012 |

| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|
| NW cm | 87 | am 26.09.2006 | 94 | 87 | 87 | am 26.09.2006 |
| MNW cm | 90 | | 104 | 90 | 90 | |
| MW cm | 146 | | 182 | 110 | 144 | |
| MHW cm | 380 | | 377 | 206 | 382 | |
| HW cm | 493 | am 07.01.2003 | 493 | 343 | 493 | am 07.01.2003 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 77 | 20.08.1938 | 546 | 12.02.1946 |
| 2 | 80 | 27.01.1996 | 504 | 02.11.1998 |
| 3 | 80 | 07.07.1947 | 504 | 04.01.1997 |
| 4 | 82 | 13.08.1990 | 502 | 08.12.1960 |
| 5 | 82 | 27.05.1990 | 496 | 05.12.1961 |
| 6 | 82 | 20.09.1944 | 495 | 02.02.1995 |
| 7 | 82 | 30.07.1943 | 495 | 26.02.1970 |
| 8 | 83 | 04.09.1989 | 494 | 18.01.1948 |
| 9 | 83 | 22.08.1976 | 493 | 07.01.2003 |
| 10 | 83 | 04.08.1974 | 492 | 05.01.1994 |

## Dauertabelle

| Unter schreitungs dauer in Tagen | Unterschrittene Wasserstände cm: Abfluss-jahr (*) 2012 | Kalender jahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 372 | 372 | | | |
| 364 | 370 | 370 | 493 | 449 | 270 |
| 363 | 365 | 365 | 492 | 413 | 262 |
| 362 | 364 | 364 | 486 | 397 | 261 |
| 361 | 359 | 359 | 483 | 383 | 257 |
| 360 | 355 | 355 | 468 | 372 | 256 |
| 359 | 352 | 352 | 451 | 363 | 253 |
| 358 | 351 | 351 | 450 | 352 | 252 |
| 357 | 347 | 347 | 425 | 345 | 247 |
| 356 | 346 | 346 | 409 | 340 | 246 |
| 350 | 295 | 314 | 361 | 300 | 236 |
| 340 | 236 | 267 | 335 | 254 | 215 |
| 330 | 224 | 205 | 306 | 230 | 188 |
| 320 | 190 | 181 | 273 | 210 | 176 |
| 300 | 169 | 165 | 231 | 184 | 161 |
| 270 | 140 | 137 | 196 | 162 | 137 |
| 240 | 124 | 122 | 177 | 144 | 122 |
| 210 | 116 | 116 | 163 | 131 | 115 |
| 183 | 112 | 111 | 153 | 121 | 110 |
| 150 | 108 | 108 | 138 | 113 | 104 |
| 130 | 104 | 105 | 132 | 109 | 101 |
| 120 | 102 | 104 | 130 | 108 | 99 |
| 110 | 101 | 103 | 128 | 106 | 98 |
| 100 | 100 | 102 | 125 | 105 | 97 |
| 90 | 99 | 101 | 123 | 104 | 96 |
| 80 | 99 | 100 | 122 | 102 | 96 |
| 70 | 98 | 99 | 120 | 101 | 95 |
| 60 | 97 | 98 | 119 | 99 | 95 |
| 50 | 97 | 97 | 115 | 98 | 94 |
| 40 | 97 | 97 | 113 | 97 | 94 |
| 30 | 96 | 96 | 110 | 96 | 93 |
| 25 | 96 | 96 | 109 | 95 | 92 |
| 20 | 96 | 96 | 108 | 94 | 92 |
| 15 | 95 | 95 | 107 | 94 | 91 |
| 10 | 95 | 95 | 105 | 93 | 90 |
| 9 | 95 | 95 | 104 | 93 | 90 |
| 8 | 95 | 95 | 104 | 92 | 90 |
| 7 | 94 | 94 | 104 | 92 | 89 |
| 6 | 94 | 94 | 104 | 92 | 89 |
| 5 | 94 | 94 | 104 | 91 | 89 |
| 4 | 93 | 93 | 103 | 91 | 89 |
| 3 | 93 | 93 | 103 | 91 | 89 |
| 2 | 93 | 93 | 102 | 90 | 89 |
| 1 | 92 | 92 | 100 | 89 | 89 |
| 0 | 89 | 89 | 99 | 87 | 87 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1936
6 Tage Treibeis
7 Tage Eisdecke

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 2246 $km^2$

PNP : NN + 13.50 m

Lage: 43.9 km oberhalb der Mündung links

W

cm

Pegel : Herzlake Nr. 3671101

Gewässer : Hase

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 188 | 179 | 338 | 270 | 281 | 220 | 201 | 198 | 194 | 210 | 183 | 184 | 192 | 187 |
| 2. | 187 | 182 | 367 | 263 | 277 | 216 | 198 | 201 | 191 | 206 | 191 | 181 | 190 | 187 |
| 3. | 187 | 195 | 404 | 272 | 271 | 218 | 199 | 196 | 188 | 201 | 187 | 189 | 190 | 187 |
| 4. | 185 | 207 | 425 | 261 | 264 | 213 | 214 | 196 | 186 | 199 | 184 | 199 | 189 | 195 |
| 5. | 186 | 213 | 450 | 251 | 260 | 211 | 206 | 200 | 185 | 197 | 182 | 232 | 188 | 199 |
| 6. | 183 | 224 | 478 | 241 | 252 | 211 | 200 | 201 | 185 | 197 | 180 | 274 | 197 | 205 |
| 7. | 182 | 255 | 461 | 240 | 240 | 210 | 198 | 200 | 186 | 197 | 179 | 303 | 196 | 196 |
| 8. | 181 | 276 | 464 | 239 | 260 | 208 | 198 | 205 | 186 | 198 | 178 | 270 | 194 | 191 |
| 9. | 181 | 308 | 465 | 234 | 266 | 206 | 199 | 220 | 191 | 200 | 177 | 234 | 201 | 197 |
| 10. | 181 | 320 | 449 | 225 | 289 | 226 | 202 | 217 | 209 | 200 | 176 | 216 | 196 | 230 |
| 11. | 182 | 294 | 432 | 223 | 285 | 242 | 212 | 208 | 199 | 198 | 176 | 209 | 195 | 263 |
| 12. | 183 | 265 | 408 | 220 | 252 | 232 | 209 | 201 | 190 | 197 | 175 | 205 | 193 | 240 |
| 13. | 184 | 259 | 387 | 219 | 240 | 233 | 201 | 203 | 190 | 195 | 183 | 209 | 190 | 228 |
| 14. | 179 | 282 | 383 | 223 | 235 | 230 | 199 | 211 | 200 | 192 | 177 | 209 | 183 | 222 |
| 15. | 179 | 320 | 357 | 234 | 233 | 226 | 196 | 200 | 208 | 187 | 180 | 205 | 184 | 235 |
| 16. | 179 | 322 | 328 | 241 | 234 | 223 | 197 | 194 | 215 | 184 | 185 | 203 | 190 | 268 |
| 17. | 180 | 385 | 309 | 238 | 258 | 216 | 197 | 197 | 218 | 183 | 181 | 199 | 182 | 261 |
| 18. | 180 | 397 | 296 | 240 | 247 | 216 | 195 | 210 | 246 | 183 | 170 | 194 | 184 | 263 |
| 19. | 182 | 362 | 305 | 265 | 234 | 214 | 193 | 204 | 253 | 181 | 178 | 194 | 190 | 264 |
| 20. | 181 | 338 | 369 | 286 | 223 | 208 | 195 | 200 | 264 | 180 | 179 | 190 | 192 | 256 |
| 21. | 179 | 340 | 403 | 265 | 227 | 209 | 195 | 195 | 262 | 180 | 174 | 187 | 190 | 242 |
| 22. | 179 | 338 | 433 | 255 | 223 | 209 | 198 | 195 | 236 | 179 | 170 | 186 | 188 | 241 |
| 23. | 179 | 327 | 458 | 260 | 221 | 223 | 193 | 193 | 220 | 179 | 171 | 185 | 186 | 308 |
| 24. | 178 | 330 | 450 | 276 | 221 | 221 | 200 | 194 | 212 | 178 | 178 | 183 | 185 | 388 |
| 25. | 178 | 350 | 434 | 303 | 219 | 214 | 191 | 202 | 205 | 179 | 205 | 184 | 187 | 392 |
| 26. | 178 | 340 | 414 | 309 | 218 | 216 | 189 | 218 | 201 | 180 | 216 | 183 | 197 | 401 |
| 27. | 177 | 313 | 396 | 293 | 214 | 209 | 187 | 221 | 199 | 183 | 200 | 180 | 191 | 384 |
| 28. | 177 | 296 | 363 | 285 | 214 | 206 | 185 | 209 | 202 | 184 | 193 | 180 | 191 | 364 |
| 29. | 177 | 287 | 331 | 283 | 213 | 210 | 184 | 202 | 208 | 183 | 194 | 179 | 194 | 330 |
| 30. | 181 | 309 | 309 | | 216 | 208 | 184 | 196 | 217 | 181 | 190 | 182 | 189 | 302 |
| 31. | | 349 | 290 | | 221 | | 186 | | 215 | 180 | | 190 | | 291 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 27.+ | 1. | 31. | 13. | 29. | 9.+ | 29.+ | 23. | 5.+ | 24. | 18.+ | 29. | 17. | 1.+ |
| NW | 177 | 179 | 290 | 219 | 213 | 206 | 184 | 193 | 185 | 178 | 170 | 179 | 182 | 187 |
| MW | 181 | 296 | 392 | 256 | 242 | 217 | 197 | 203 | 208 | 189 | 183 | 204 | 190 | 262 |
| HW | 189 | 404 | 482 | 312 | 298 | 247 | 219 | 227 | 274 | 211 | 223 | 308 | 203 | 406 |
| Tag | 3. | 18. | 6. | 25. | 10. | 11. | 11. | 26. | 20. | 1. | 26. | 7. | 9. | 25. |

| | 2002/2011 | | 2003/2012 | | | | | | 10 Jahre | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2009 | 2003 | 2009 | 2006 | 2011 | 2011 | 2011 | 2010 | 2006 | 2003 | 2009 | 2009 | 2009 | 2003 |
| NW | 172 | 176 | 193 | 209 | 211 | 186 | 173 | 169 | 156 | 155 | 161 | 161 | 172 | 176 |
| MNW | 198 | 214 | 241 | 243 | 242 | 208 | 188 | 179 | 176 | 176 | 179 | 180 | 188 | 208 |
| MW | 240 | 265 | 320 | 300 | 288 | 234 | 212 | 196 | 193 | 198 | 200 | 200 | 223 | 262 |
| MHW | 316 | 365 | 438 | 395 | 370 | 285 | 258 | 236 | 242 | 258 | 263 | 252 | 290 | 356 |
| HW | 470 | 493 | 549 | 503 | 491 | 338 | 333 | 273 | 279 | 426 | 396 | 308 | 427 | 466 |
| Jahr | 2002 | 2002 | 2008 | 2004 | 2007 | 2006 | 2003 | 2005 | 2004 | 2010 | 2010 | 2012 | 2007 | 2007 |

| | | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NW | cm | 170 | am 18.09.2012 | 177 | 170 | 170 | am 18.09.2012 |
| MW | cm | 231 | | 265 | 197 | 229 | |
| HW | cm | 482 | am 06.01.2012 | 482 | 308 | 482 | am 06.01.2012 |

| | | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
|---|---|---|---|---|---|---|---|
| NW | cm | 155 | am 15.08.2003 | 172 | 155 | 155 | am 15.08.2003 |
| MNW | cm | 167 | | 187 | 169 | 169 | |
| MW | cm | 237 | | 274 | 200 | 235 | |
| MHW | cm | 460 | | 460 | 309 | 460 | |
| HW | cm | 549 | am 22.01.2008 | 549 | 426 | 549 | am 22.01.2008 |

## Extremwerte

| | Niedrigwasser cm | Datum | Hochwasser cm | Datum |
|---|---|---|---|---|
| 1 | 155 | 15.08.2003 | 583 | 30.10.1998 |
| 2 | 156 | 23.07.2006 | 570 | 06.01.1987 |
| 3 | 161 | 28.09.2009 | 569 | 17.03.1981 |
| 4 | 164 | 21.07.1996 | 556 | 16.01.1968 |
| 5 | 164 | 23.08.1989 | 549 | 22.01.2008 |
| 6 | 165 | 27.07.1982 | 548 | 19.03.1994 |
| 7 | 167 | 14.07.2010 | 545 | 28.01.1994 |
| 8 | 167 | 20.07.2005 | 543 | 03.01.2003 |
| 9 | 167 | 01.11.1991 | 542 | 19.03.1987 |
| 10 | 167 | 10.07.1976 | 540 | 20.12.1965 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Wasserstände cm: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 2003/2012 10 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 478 | 478 | | | |
| 364 | 465 | 465 | 537 | 490 | 349 |
| 363 | 464 | 464 | 531 | 471 | 337 |
| 362 | 461 | 461 | 517 | 465 | 337 |
| 361 | 458 | 458 | 512 | 454 | 337 |
| 360 | 458 | 458 | 500 | 446 | 328 |
| 359 | 458 | 458 | 496 | 437 | 325 |
| 358 | 449 | 449 | 491 | 432 | 324 |
| 357 | 434 | 434 | 483 | 425 | 322 |
| 356 | 433 | 433 | 476 | 417 | 321 |
| 350 | 403 | 403 | 433 | 388 | 309 |
| 340 | 357 | 364 | 411 | 343 | 289 |
| 330 | 328 | 308 | 387 | 323 | 278 |
| 320 | 308 | 286 | 359 | 306 | 271 |
| 300 | 274 | 264 | 321 | 282 | 259 |
| 270 | 241 | 236 | 290 | 259 | 236 |
| 240 | 223 | 221 | 273 | 240 | 221 |
| 210 | 214 | 212 | 255 | 228 | 212 |
| 183 | 207 | 206 | 241 | 217 | 206 |
| 150 | 201 | 200 | 226 | 208 | 189 |
| 130 | 198 | 198 | 218 | 201 | 186 |
| 120 | 196 | 196 | 215 | 199 | 183 |
| 110 | 194 | 195 | 212 | 196 | 181 |
| 100 | 191 | 194 | 210 | 194 | 180 |
| 90 | 188 | 192 | 207 | 191 | 179 |
| 80 | 186 | 191 | 206 | 189 | 179 |
| 70 | 185 | 188 | 204 | 187 | 177 |
| 60 | 184 | 187 | 201 | 184 | 175 |
| 50 | 182 | 185 | 200 | 181 | 173 |
| 40 | 181 | 184 | 198 | 180 | 171 |
| 30 | 180 | 182 | 196 | 177 | 169 |
| 25 | 180 | 181 | 195 | 176 | 165 |
| 20 | 180 | 181 | 194 | 174 | 160 |
| 15 | 179 | 180 | 192 | 172 | 157 |
| 10 | 178 | 179 | 190 | 169 | 156 |
| 9 | 178 | 179 | 190 | 169 | 156 |
| 8 | 178 | 178 | 190 | 168 | 155 |
| 7 | 178 | 178 | 190 | 167 | 155 |
| 6 | 177 | 177 | 190 | 166 | 155 |
| 5 | 177 | 177 | 190 | 165 | 155 |
| 4 | 175 | 175 | 188 | 163 | 155 |
| 3 | 174 | 174 | 188 | 162 | 155 |
| 2 | 171 | 171 | 188 | 159 | 155 |
| 1 | 171 | 171 | 186 | 157 | 155 |
| 0 | 170 | 170 | 185 | 155 | 155 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Hase
RB Alfhausen-Rieste seit 1987

NLWKN

PNP : NN - 5.02 m

W Tide
cm

Pegel : Herbrum Hafendamm Nr. 3770030
Gewässer : Ems
Gebiet : Untere Ems

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 1. | 1. | 31. | 31. | 13. | 5. | 15. | 3. | 7. | 29. | 6. | 14. | 27. | 15. | 9. | 9. | 21. | 13. | 1. | 24. | 3.+ | 12. | 16. | 21. | 3. | 21. |
| N | 321 | 617 | 343 | 654 | 466 | 627 | 372 | 615 | 346 | 602 | 337 | 654 | 326 | 645 | 340 | 643 | 328 | 659 | 322 | 633 | 320 | 602 | 339 | 646 | 328 | 630 | 350 | 597 |
| M | 355 | 688 | 477 | 745 | 602 | 753 | 433 | 700 | 413 | 704 | 377 | 703 | 363 | 694 | 367 | 697 | 364 | 701 | 351 | 692 | 371 | 702 | 368 | 696 | 363 | 698 | 444 | 696 |
| H | 451 | 848 | 566 | 855 | 798 | 883 | 489 | 781 | 462 | 763 | 740 | 765 | 439 | 750 | 402 | 774 | 444 | 769 | 381 | 782 | 736 | 785 | 455 | 761 | 420 | 754 | 570 | 773 |
| Tag | 27. | 28. | 18. | 10. | 20. | 5. | 27. | 19. | 8. | 8. | 13. | 7. | 16. | 16. | 1. | 25. | 19. | 19. | 29. | 31. | 16. | 15. | 8. | 15.+ | 25. | 22. | 27. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2003 | 2011 | 2002 | 2009 | 2004 | 2012 | 2009 | 2012 | 2012 | 2003 | 2004 | 2012 | 2011 | 2004 | 2005 | 2012 | 2004 | 2012 | 2012 | 2012 | 2012 | 2004 | 2011 | 2011 | 2003 | 2011 | 2010 |
| N | 321 | 605 | 343 | 586 | 364 | 567 | 372 | 598 | 346 | 602 | 333 | 617 | 326 | 607 | 339 | 609 | 328 | 624 | 322 | 633 | 320 | 602 | 334 | 585 | 321 | 605 | 343 | 590 |
| MN | 373 | 624 | 385 | 625 | 417 | 623 | 418 | 629 | 411 | 626 | 356 | 639 | 349 | 636 | 351 | 641 | 357 | 646 | 360 | 644 | 360 | 626 | 352 | 620 | 365 | 626 | 385 | 626 |
| M | 437 | 706 | 455 | 708 | 518 | 721 | 493 | 707 | 477 | 707 | 407 | 696 | 383 | 694 | 381 | 694 | 389 | 697 | 393 | 697 | 397 | 698 | 392 | 694 | 420 | 705 | 455 | 710 |
| MH | 592 | 802 | 560 | 800 | 668 | 808 | 623 | 803 | 656 | 796 | 549 | 768 | 452 | 752 | 518 | 770 | 458 | 769 | 472 | 773 | 556 | 777 | 469 | 784 | 558 | 800 | 558 | 803 |
| H | 788 | 848 | 679 | 855 | 798 | 883 | 777 | 858 | 795 | 850 | 740 | 813 | 496 | 779 | 719 | 813 | 710 | 811 | 659 | 791 | 753 | 804 | 505 | 813 | 788 | 848 | 679 | 855 |
| Jahr | 2010 | 2011 | 2007 | 2011 | 2012 | 2012 | 2004 | 2004 | 2006 | 2008 | 2012 | 2003 | 2004 | 2006 | 2009 | 2007 | 2003 | 2007 | 2008 | 2004 | 2008 | 2004 | 2007 | 2009 | 2010 | 2011 | 2007 | 2011 |
| HThw ab 1936 | 879 | | 863 | | 920 | | 896 | | 850 | | 815 | | 810 | | 813 | | 811 | | 807 | | 817 | | 866 | | 879 | | 863 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 320 | 01.09.2012 | 321 | 320 | 320 | 01.09.2012 |
| NThw | 602 | 03.03.2012 | 602 | 602 | 597 | 21.12.2012 |
| M | 404 706 | | 444 716 | 364 697 | 402 703 | |
| HTnw | 798 | 20.01.2012 | 798 | 736 | 798 | 20.01.2012 |
| HThw | 883 | 05.01.2012 | 883 | 785 | 883 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 320 | 01.09.2012 | 321 | 320 | 320 | 01.09.2012 |
| NThw | 567 | 01.01.2004 | 567 | 585 | 567 | 01.01.2004 |
| MN | 340 592 | | 351 592 | 342 610 | 339 592 | |
| M | 427 702 | | 464 708 | 389 696 | 425 702 | |
| MH | 768 834 | | 766 834 | 662 801 | 761 839 | |
| HTnw | 798 | 20.01.2012 | 798 | 753 | 798 | 20.01.2012 |
| HThw | 883 | 05.01.2012 | 883 | 813 | 883 | 05.01.2012 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | 287 | e 21.11.1997 | 403 | 07.12.1959 | 870 | 13.02.1946 | 920 | 28.01.1994 |
| 2 | 289 | e 20.01.1996 | 460 | 17.11.1965 | 849 | 06.01.1987 | 916 | 04.01.1976 |
| 3 | 292 | e 19.11.1997 | 464 | 15.03.1964 | 839 | 07.01.1987 | 907 | 02.01.1995 |
| 4 | 294 | e 20.11.1997 | 466 | 08.12.1959 | 838 | 06.01.1987 | 907 | 03.01.1976 |
| 5 | 295 | e 18.12.1997 | 467 | 19.01.1963 | 833 | 28.01.1994 | 906 | 29.01.1994 |
| 6 | 295 | e 20.11.1997 | 472 | 15.03.1964 | 827 | 07.01.1987 | 896 | 28.02.1990 |
| 7 | 297 | e 19.08.1997 | 475 | 08.12.1978 | 824 | 18.03.1981 | 893 | 10.01.1995 |
| 8 | 298 | e 21.01.1996 | 475 | 17.01.1972 | 824 | 17.02.1962 | 888 | 27.02.1990 |
| 9 | 300 | e 05.11.1997 | 478 | 24.02.1947 | 823 | 11.12.1960 | 883 | 05.01.2012 |
| 10 | 300 | e 04.11.1997 | 481 | 08.12.1959 | 822 | 10.12.1960 | 881 | 02.02.1983 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | 60 | | | | | | | | | | | | 352 | | 708 | 708 | 705.9 |
| 780 | | | 59 | | | | | | | | | | | | 351 | | 707 | 707 | 705.5 |
| 760 | | | 58 | | | 58 | | | | | | | | | 350 | | 706 | 706 | 705.0 |
| 740 | | | 57 | | | 57 | | | | | 58 | | | | 348 | 356 | 704 | 704 | 703.9 |
| 720 | | | 56 | | | 57 | | | | | 57 | | | | 347 | 355 | 702 | 702 | 703.0 |
| 700 | | | 56 | | | 57 | | | | | 57 | | | | 347 | 355 | 702 | 702 | 701.8 |
| 680 | | | 56 | | | 57 | | | | | 57 | | | | 347 | 355 | 702 | 702 | 699.3 |
| 660 | | | 50 | | | 57 | | | | | 57 | | | | 341 | 355 | 696 | 696 | 696.5 |
| 640 | | | 39 | | | 57 | | | | | 57 | | | | 330 | 355 | 685 | 685 | 691.6 |
| 620 | | | 31 | | | 57 | | | | | 57 | | | | 322 | 355 | 677 | 677 | 685.0 |
| 600 | | | 26 | | | 57 | | | | | 57 | | | | 317 | 355 | 672 | 672 | 679.3 |
| 580 | | 60 | 23 | | | 57 | | | | | 57 | | | 60 | 314 | 355 | 669 | 669 | 669.2 |
| 560 | | 59 | 19 | | | 57 | | | | | 57 | | | 59 | 309 | 355 | 664 | 664 | 661.5 |
| 540 | | 53 | 13 | | | 57 | | | | | 57 | | | 52 | 297 | 355 | 652 | 651 | 649.5 |
| 520 | | 44 | 12 | | | 57 | | | | | 57 | | | 45 | 287 | 355 | 642 | 643 | 631.3 |
| 500 | | 33 | 6 | 56 | | 57 | | | | | 57 | | | 44 | 270 | 355 | 625 | 636 | 607.6 |
| 480 | | 27 | 1 | 54 | 60 | 57 | | | | | 57 | | | 44 | 257 | 355 | 612 | 629 | 584.2 |
| 460 | 58 | 22 | | 44 | 57 | 57 | | | 60 | | 57 | 60 | | 38 | 238 | 355 | 593 | 609 | 547.9 |
| 440 | 57 | 18 | | 34 | 41 | 57 | 60 | | 59 | | 57 | 57 | 58 | 34 | 207 | 351 | 558 | 575 | 501.9 |
| 420 | 57 | 12 | | 22 | 34 | 57 | 58 | 58 | 58 | | 55 | 55 | 57 | 27 | 182 | 344 | 526 | 541 | 441.0 |
| 400 | 57 | 6 | | 5 | 22 | 48 | 56 | 57 | 56 | 60 | 52 | 51 | 54 | 18 | 138 | 332 | 470 | 479 | 343.5 |
| 380 | 55 | 4 | | 1 | 10 | 42 | 47 | 50 | 48 | 59 | 43 | 47 | 46 | 11 | 112 | 294 | 406 | 404 | 185.8 |
| 360 | 37 | 2 | | | 3 | 16 | 27 | 17 | 30 | 50 | 24 | 35 | 29 | 6 | 58 | 183 | 241 | 237 | 53.2 |
| 340 | 14 | | | | | 2 | 8 | | 8 | 8 | 10 | 2 | 5 | | 16 | 36 | 52 | 43 | 6.9 |
| 320 | | | | | | | | | | | | | | | | | | | |
| 300 | | | | | | | | | | | | | | | | | | | |
| 280 | | | | | | | | | | | | | | | | | | | |
| 260 | | | | | | | | | | | | | | | | | | | |
| 240 | | | | | | | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | |
| 960 | | | | | | | | | | | | | | | | | | | |
| 940 | | | | | | | | | | | | | | | | | | | |
| 920 | | | | | | | | | | | | | | | | | | | |
| 900 | | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.8 |
| 880 | | | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.7 |
| 860 | 58 | 60 | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.7 |
| 840 | 57 | 59 | 58 | | | | | | | | | | | | 348 | | 703 | 705 | 705.1 |
| 820 | 56 | 55 | 53 | | | | | | | | | | | | 338 | | 693 | 700 | 702.5 |
| 800 | 56 | 53 | 49 | 56 | | | | | | 59 | 58 | | | | 332 | 355 | 687 | 696 | 695.3 |
| 780 | 54 | 48 | 43 | 54 | 60 | 58 | | 58 | 60 | 58 | 57 | 60 | | 60 | 317 | 353 | 670 | 686 | 682.5 |
| 760 | 54 | 38 | 31 | 49 | 58 | 56 | 60 | 57 | 58 | 58 | 55 | 58 | 58 | 57 | 286 | 346 | 632 | 655 | 656.4 |
| 740 | 51 | 26 | 23 | 44 | 53 | 51 | 58 | 56 | 55 | 56 | 49 | 55 | 56 | 50 | 248 | 329 | 577 | 606 | 597.0 |
| 720 | 48 | 18 | 17 | 40 | 41 | 41 | 53 | 49 | 50 | 48 | 41 | 50 | 43 | 42 | 205 | 291 | 496 | 515 | 520.1 |
| 700 | 45 | 10 | 10 | 30 | 24 | 28 | 37 | 32 | 29 | 37 | 31 | 30 | 27 | 27 | 147 | 196 | 343 | 342 | 366.2 |
| 680 | 32 | 3 | 4 | 18 | 10 | 12 | 14 | 15 | 12 | 20 | 13 | 18 | 16 | 19 | 79 | 92 | 171 | 171 | 195.0 |
| 660 | 12 | 1 | 3 | 13 | 4 | 1 | 4 | 1 | 1 | 10 | 5 | 4 | 6 | 11 | 34 | 25 | 59 | 63 | 71.3 |
| 640 | 3 | | 2 | 3 | 2 | | | | | 3 | 2 | | 2 | 9 | 10 | 5 | 15 | 23 | 18.8 |
| 620 | 1 | | | 1 | 1 | | | | | | 1 | | | 5 | 3 | 1 | 4 | 8 | 5.3 |
| 600 | | | | | | | | | | | | | | 1 | | | | 1 | 1.0 |
| 580 | | | | | | | | | | | | | | | | | | | 0.2 |
| 560 | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
**)Extremwerte ab 1936
e = Wert ist ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.02 m

W Tide
cm

Pegel : Herbrum Hafendamm Nr. 3770030
Gewässer : Ems
Gebiet : Untere Ems

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.31 e | 378 | 4.01 e | 688 | 1.21 | 356 | 4.03 | 688 | 2.05 | 514 | 4.31 | 741 | 2.28 | 447 | 5.44 | 644 | 2.03 | 450 | 4.40 | 682 | 3.03 | 386 | 6.02 | 666 | 4.11 | 379 | 6.37 | 648 | 1. |
| | 13.18 | 366 | 16.20 | 666 | 13.44 | 343 | 16.32 | 654 | 14.32 | 525 | 17.00 | 718 | 14.43 | 474 | 18.08 | 638 | 14.20 | 447 | 16.51 | 680 | 15.02 | 383 | 19.26 | 693 | 16.28 | 354 | 18.57 | 688 | |
| 2. | 1.44 | 362 | 4.44 | 738 | 1.18 | 377 | 6.45 | 794 | 2.38 | 550 | 5.24 | 760 | 3.12 | 459 | 6.38 | 627 | 2.40 | 461 | 5.18 | 674 | 4.23 | 403 | 7.15 | 689 | 5.37 | 356 | 8.17 | 667 | 2. |
| | 14.22 | 359 | 16.37 | 678 | 14.35 | 389 | 17.06 | 700 | 15.11 | 559 | 18.08 | 748 | 15.33 | 459 | 19.06 | 644 | 14.49 | 461 | 17.45 | 649 | 16.42 | 385 | 20.05 | 689 | 18.06 | 365 | 20.44 | 698 | |
| 3. | 2.43 | 353 | 5.02 | 669 | 2.49 | 365 | 5.08 | 687 | 3.28 | 578 | 6.14 | 744 | 4.00 | 450 | 8.25 | 648 | 3.39 | 436 | 6.20 | 602 | 6.04 | 365 | 9.08 | 662 | 6.47 | 344 | 9.33 | 681 | 3. |
| | 15.10 | 344 | 17.34 | 653 | 14.41 | 389 | 19.40 | 730 | 15.45 | 577 | 20.20 | 753 | 16.53 | 419 | 20.51 | 654 | 15.58 | 437 | 18.49 | 635 | 18.42 | 368 | 21.33 | 673 | 19.07 | 342 | 22.29 | 714 | |
| 4. | 3.17 | 363 | 6.02 | 685 | 2.19 | 481 | 8.35 | 818 | 1.34 | 641 | 9.18 | 794 | 5.40 | 425 | 9.25 | 653 | 4.57 | 444 | 7.53 | 641 | 7.04 | 362 | 10.13 | 668 | 7.53 | 337 | 10.42 | 689 | 4. |
| | 16.03 | 359 | 18.39 | 660 | 16.14 | 452 | 19.13 | 750 | 16.55 | 645 | 21.04 | 808 | 18.27 | 428 | 21.52 | 661 | 17.20 | 454 | 20.37 | 692 | 19.38 | 360 | 22.39 | 686 | 20.16 | 346 | 23.24 | 719 | |
| 5. | 4.33 | 375 | 7.47 | 700 | 4.21 | 416 | 9.05 | 760 | 4.41 | 623 | 10.44 | 809 | 7.29 | 408 | 10.23 | 615 | 7.01 | 449 | 9.59 | 672 | 8.33 | 347 | 11.19 | 665 | 8.48 | 337 | - | - | 5. |
| | 17.36 | 372 | 20.17 | 671 | 17.20 | 420 | 21.05 | 733 | 15.00 | 726 | 23.52 | 883 | 19.26 | 413 | 22.37 | 678 | 19.08 | 449 | 22.10 | 702 | 20.54 | 357 | 23.47 | 698 | 21.13 | 342 | 12.17 | 705 | |
| 6. | 5.46 | 376 | 9.18 | 695 | 5.50 | 400 | 8.55 | 712 | 7.30 | 751 | 11.28 | 832 | 8.34 | 410 | 11.30 | 657 | 8.00 | 438 | 10.50 | 682 | 9.12 | 351 | - | - | 9.45 | 326 | 0.33 | 727 | 6. |
| | 18.52 | 372 | 21.36 | 661 | 18.02 | 417 | 23.23 | 748 | 20.22 | 665 | 23.27 | 759 | 20.40 | 412 | 23.54 | 687 | 20.05 | 459 | 22.56 e | 694 | 21.36 | 346 | 12.33 | 703 | 22.07 | 333 | 12.45 | 704 | |
| 7. | 7.01 | 373 | 10.10 | 686 | 7.18 | 409 | 9.59 | 707 | 8.10 | 638 | - | - | 9.22 | 409 | - | - | 9.02 | 446 | 11.22 | 664 | 10.07 | 364 | 1.14 | 765 | 10.38 | 343 | 1.32 | 726 | 7. |
| | 19.54 | 357 | 22.20 | 660 | 18.10 | 436 | - | - | 20.14 | 653 | 13.02 | 760 | 21.42 | 385 | 12.16 | 653 | 20.51 | 452 | 23.38 | 736 | 22.24 | 337 | 13.17 | 732 | 23.01 | 339 | 13.45 | 704 | |
| 8. | 8.01 | 349 | 10.34 | 674 | 8.10 | 480 | 0.37 | 822 | 8.54 | 677 | 0.38 | 815 | 10.17 | 389 | 0.36 | 673 | 9.41 | 462 | - | - | 11.01 | 338 | 1.55 | 741 | 11.08 | 331 | 1.24 | 688 | 8. |
| | 20.28 | 338 | 23.00 | 648 | 20.23 | 433 | 10.51 | 761 | 21.35 | 665 | 13.12 | 814 | 22.22 | 405 | 13.04 | 643 | 22.04 | 445 | 13.09 | 763 | 23.15 | 341 | 14.11 | 707 | 23.32 | 345 | 14.31 | 694 | |
| 9. | 8.28 | 329 | 11.14 | 671 | 7.26 | 476 | 1.09 | 693 | 10.04 | 645 | 0.51 | 769 | 10.50 | 409 | 1.17 | 688 | 10.40 | 444 | 0.35 | 751 | 11.34 | 343 | 2.06 | 716 | 11.58 | 333 | 2.27 | 707 | 9. |
| | 21.00 | 350 | 23.27 | 662 | 20.23 | 551 | 13.50 | 831 | 21.49 | 647 | 12.05 | 738 | 22.50 | 416 | 13.45 | 701 | 22.49 | 457 | 13.15 | 696 | 23.56 | 351 | 15.04 | 741 | - | - | 15.05 | 718 | |
| 10. | 9.35 | 343 | 11.57 | 667 | 9.44 | 507 | 1.23 | 855 | 10.44 | 653 | 2.08 | 799 | 11.46 | 422 | 1.46 | 696 | 11.15 | 451 | 1.14 | 756 | - | - | 3.09 | 720 | 0.36 | 344 | 2.55 | 692 | 10. |
| | 21.53 | 332 | - | - | 21.32 | 482 | 13.33 | 792 | 22.40 | 644 | 13.26 | 758 | 23.58 | 409 | 14.36 | 643 | 23.22 e | 449 | 14.50 | 750 | 12.05 | 361 | 16.31 | 737 | 12.49 | 338 | 16.10 | 710 | |
| 11. | 9.51 | 335 | 0.19 | 652 | 10.04 | 455 | 0.21 | 764 | 11.04 | 641 | 2.02 | 771 | - | - | 2.22 | 677 | 11.54 e | 443 | 2.45 e | 761 | 0.40 | 355 | 3.36 | 734 | 1.23 | 352 | 3.47 | 693 | 11. |
| | 22.23 | 321 | 12.38 | 636 | 22.05 | 438 | 12.30 | 718 | 23.21 | 645 | 14.03 | 766 | 12.27 | 434 | 15.20 | 646 | - | - | 15.02 | 724 | 12.47 | 373 | 17.48 | 748 | 13.27 | 373 | 17.58 | 741 | |
| 12. | 10.27 | 327 | 0.41 | 617 | 10.35 | 419 | 0.23 | 713 | 11.42 | 636 | 2.23 | 780 | 0.21 | 409 | 3.06 | 704 | 0.18 | 453 | 3.04 | 753 | 1.24 | 411 | 4.30 | 740 | 2.07 | 363 | 5.11 | 704 | 12. |
| | 22.48 | 345 | 13.21 | 633 | 22.47 | 424 | 13.13 | 737 | - | - | 18.01 | 827 | 12.58 | 425 | 15.34 | 682 | 12.45 | 429 | 15.59 | 733 | 13.41 | 416 | 16.17 | 764 | 14.18 | 376 | 18.23 | 739 | |
| 13. | 11.13 | 344 | 1.41 | 698 | 10.57 | 406 | 1.09 | 749 | 0.00 | 676 | 4.53 | 858 | 0.59 | 403 | 3.45 | 724 | 1.02 | 410 | 3.52 | 710 | 1.03 b | 740 | 7.10 b | 737 | 3.04 | 343 | 5.34 | 663 | 13. |
| | 23.24 | 339 | 14.03 | 698 | 23.02 | 429 | 13.33 | 671 | 12.46 | 667 | 17.36 | 824 | 13.27 | 372 | 16.12 | 685 | 13.25 | 407 | 15.46 | 698 | 14.19 | 407 | 17.11 | 749 | 14.52 | 341 | 18.22 | 684 | |
| 14. | 11.37 | 333 | 2.01 | 673 | 11.40 | 446 | 1.43 | 766 | 1.08 | 632 | 4.46 | 793 | 1.35 | 388 | 4.55 | 747 | 1.43 | 417 | 4.18 | 703 | 3.03 | 407 | 5.22 | 717 | 3.59 e | 344 | 6.08 e | 645 | 14. |
| | 23.49 | 340 | 14.12 | 658 | 23.42 | 453 | 14.07 | 725 | 13.24 | 582 | 16.28 | 725 | 14.03 | 404 | 17.01 | 725 | 14.06 | 385 | 16.34 | 720 | 15.13 | 415 | 18.10 | 739 | 15.51 e | 384 | 20.29 e | 729 | |
| 15. | - | - | 2.30 | 683 | - | - | 3.17 | 771 | 1.19 | 567 | 4.08 | 750 | 2.01 | 392 | 7.13 | 780 | 2.23 | 414 | 4.53 | 683 | 4.08 | 409 | 6.49 | 701 | 4.53 e | 400 | 7.44 e | 668 | 15. |
| | 12.15 | 341 | 14.55 | 650 | 12.34 | 475 | 15.16 | 701 | 13.49 | 544 | 16.36 | 707 | 14.33 | 446 | 18.07 | 765 | 14.41 | 346 | 17.22 | 693 | 16.25 | 404 | 19.37 | 722 | 17.02 e | 397 | 21.43 e | 714 | |
| 16. | 0.28 | 334 | 2.58 | 662 | 0.24 | 472 | 2.53 | 740 | 1.57 | 545 | 4.31 | 726 | 3.20 | 406 | 6.04 | 707 | 3.14 | 395 | 5.39 | 670 | 5.13 | 393 | 7.48 | 679 | 5.59 e | 427 | 10.47 e | 732 | 16. |
| | 12.54 | 337 | 15.29 | 648 | 13.23 | 487 | 17.58 | 734 | 14.34 | 546 | 17.03 | 712 | 15.41 | 406 | 18.38 | 682 | 14.35 | 409 | 18.23 | 702 | 17.50 | 406 | 21.32 | 728 | 18.33 e | 439 | 22.39 e | 750 | |
| 17. | 1.01 | 341 | 3.39 | 673 | 1.23 | 514 | 6.22 | 805 | 2.44 | 496 | 5.55 | 708 | 4.11 | 410 | 7.17 | 695 | 4.19 | 402 | 7.18 | 662 | 6.56 | 378 | 9.34 | 671 | 6.58 e | 385 | 10.10 e | 682 | 17. |
| | 13.31 | 340 | 16.03 | 654 | 13.57 | 540 | 16.53 | 766 | 14.57 | 510 | 18.16 | 690 | 16.53 | 425 | 19.50 | 708 | 16.12 | 426 | 19.39 | 703 | 19.07 | 392 | 21.34 | 690 | 19.22 e | 374 | 22.52 e | 692 | |
| 18. | 1.30 | 357 | 4.18 | 685 | 2.19 | 542 | 5.23 | 781 | 3.30 | 498 | 6.31 | 695 | 5.46 | 418 | 8.51 | 685 | 5.41 | 409 | 8.16 | 668 | 7.37 | 363 | 10.15 | 660 | 8.01 e | 366 | 10.37 e | 656 | 18. |
| | 14.15 | 353 | 16.33 | 655 | 14.55 | 566 | 17.32 | 747 | 16.14 | 496 | 21.14 | 683 | 18.12 | 439 | 22.17 | 752 | 17.47 | 427 | 21.55 | 725 | 20.03 | 370 | 22.31 | 707 | 20.15 e | 360 | 23.16 e | 694 | |
| 19. | 2.12 | 364 | 4.56 | 694 | 3.05 | 548 | 5.40 | 749 | 4.35 | 504 | 8.41 | 755 | 6.55 | 455 | 11.26 | 781 | 7.23 | 407 | 10.03 | 685 | 8.41 | 374 | 11.04 | 685 | 8.33 e | 364 | 11.37 e | 683 | 19. |
| | 15.16 | 363 | 17.31 | 664 | 15.45 | 547 | 18.23 | 702 | 17.16 | 487 | 21.48 | 784 | 19.46 | 468 | 23.41 | 779 | 19.34 | 405 | 23.00 | 717 | 20.57 | 375 | 23.35 | 724 | 21.05 e | 378 | 23.59 e | 700 | |
| 20. | 3.16 | 365 | 5.55 | 680 | 3.59 | 543 | 6.23 | 692 | 5.07 b | 771 | 8.36 b | 766 | 8.54 | 442 | 11.34 | 686 | 8.26 | 389 | 11.01 | 684 | 9.22 | 361 | 11.38 | 690 | 9.17 e | 369 | - | - | 20. |
| | 16.19 | 362 | 18.55 | 667 | 16.29 | 524 | 20.28 | 774 | 19.15 b | 798 | 23.41 b | 767 | 20.54 | 467 | 23.49 | 698 | 20.39 | 400 | 23.36 | 730 | 21.40 | 367 | - | - | 21.45 e | 355 | 12.30 e | 690 | |
| 21. | 4.52 | 368 | 7.25 | 684 | 5.20 | 538 | 8.30 | 748 | 7.41 | 560 | - | - | 9.25 | 454 | - | - | 9.20 | 383 | 11.59 | 699 | 9.58 e | 354 | 0.01 | 720 | 10.00 e | 357 | 1.15 e | 696 | 21. |
| | 17.40 | 371 | 20.21 | 659 | 18.14 | 479 | 20.40 | 684 | 20.08 | 588 | 13.46 | 734 | 21.43 | 430 | 12.14 | 706 | 21.28 | 358 | - | - | 22.03 e | 368 | 12.35 e | 686 | 22.18 e | 369 | 13.34 e | 706 | |
| 22. | 5.59 | 355 | 8.46 | 686 | 6.42 | 490 | 9.41 | 694 | 8.42 | 663 | 1.56 | 830 | 10.17 | 431 | 0.18 | 735 | 9.32 | 369 | 0.13 | 719 | 10.25 e | 371 | 0.52 e | 711 | 10.36 e | 375 | 1.48 e | 707 | 22. |
| | 19.00 | 339 | 21.33 | 667 | 19.22 | 508 | 22.15 | 728 | 21.14 | 656 | 13.13 | 833 | 22.19 | 421 | 12.54 | 675 | 22.22 | 392 | 12.36 | 693 | 22.42 e | 381 | 13.18 e | 702 | 22.57 e | 355 | 14.03 e | 708 | |
| 23. | 7.20 | 354 | 10.37 | 676 | 7.53 | 507 | 10.24 | 716 | 9.42 | 620 | 0.51 | 776 | 10.54 | 426 | 1.32 | 745 | 10.21 | 383 | 0.59 | 717 | 10.51 e | 370 | 1.42 e | 700 | 11.10 e | 373 | 1.46 e | 694 | 23. |
| | 19.56 | 336 | 22.59 | 679 | 20.23 | 514 | 22.53 | 752 | 22.02 | 639 | 13.36 | 765 | 23.02 | 433 | 14.14 | 735 | 22.53 | 395 | 13.08 | 704 | 23.23 e | 376 | 13.41 e | 688 | 23.38 e | 360 | 14.35 e | 703 | |
| 24. | 8.11 | 338 | 11.38 | 738 | 8.48 | 531 | - | - | 10.46 | 640 | 2.12 | 794 | 11.30 | 449 | 2.01 | 764 | 11.14 | 375 | 1.28 | 730 | 11.26 e | 374 | 1.51 e | 694 | 11.41 e | 362 | 2.20 e | 676 | 24. |
| | 21.04 | 355 | 23.49 | 696 | 21.36 | 529 | 13.39 | 798 | 22.53 | 633 | 14.18 | 768 | 23.48 | 475 | 14.23 | 763 | 23.26 | 385 | 13.34 | 715 | 23.56 | 358 | 14.30 e | 710 | - | - | 15.19 e | 684 | |
| 25. | 9.22 | 353 | - | - | 9.46 | 513 | 0.19 | 742 | 11.24 | 620 | 2.06 | 772 | - | - | 3.16 | 779 | 11.45 | 369 | 2.09 | 726 | 11.58 e | 364 | 2.22 | 707 | 0.10 e | 354 | 2.44 e | 668 | 25. |
| | 21.34 | 381 | 13.26 | 714 | 22.04 | 532 | 13.01 | 734 | 23.26 | 608 | 14.10 | 701 | 12.10 | 465 | 15.18 | 755 | 23.59 | 381 | 14.22 | 714 | - | - | 14.26 e | 689 | 12.13 e | 361 | 15.38 e | 688 | |
| 26. | 9.59 | 398 | 2.02 | 828 | 10.40 | 510 | 1.02 | 752 | 12.08 | 603 | 2.32 | 698 | 0.16 | 468 | 3.27 | 748 | - | - | 2.29 | 723 | 0.21 e | 351 | 2.51 e | 667 | 0.47 e | 364 | 3.23 e | 663 | 26. |
| | 22.12 | 376 | 13.59 | 783 | 22.57 | 522 | 13.41 | 770 | 23.58 | 600 | 15.00 | 669 | 11.20 | 487 | 15.17 | 711 | 12.09 | 368 | 14.47 | 708 | 12.26 | 358 | 14.48 | 700 | 12.48 e | 345 | 15.46 e | 682 | |
| 27. | 10.55 | 368 | 1.32 | 755 | 11.34 | 519 | 1.39 | 743 | - | - | 3.39 | 732 | 0.46 | 489 | 3.19 | 705 | 0.29 | 363 | 2.57 | 707 | 0.52 | 365 | 2.49 | 678 | 1.10 e | 358 | 4.00 e | 661 | 27. |
| | 23.03 | 451 | 16.58 | 796 | 23.50 | 505 | 14.45 | 770 | 12.23 | 612 | 15.27 | 725 | 13.01 | 473 | 15.42 | 698 | 12.38 | 365 | 15.20 | 704 | 12.47 | 365 | 15.12 | 707 | 13.18 e | 371 | 17.26 e | 699 | |
| 28. | - | - | 4.07 | 848 | - | - | 2.23 | 757 | 0.24 | 601 | 3.24 | 762 | 1.10 | 479 | 3.56 | 717 | 0.56 | 364 | 3.30 | 699 | 1.28 | 367 | 3.35 | 699 | 2.04 e | 383 | 4.56 e | 664 | 28. |
| | 12.03 | 378 | 14.50 | 733 | 12.17 | 490 | 14.16 | 682 | 13.00 | 592 | 15.48 | 715 | 13.18 | 476 | 16.02 | 716 | 12.31 | 355 | 16.07 | 705 | 13.25 e | 366 | 15.57 e | 682 | 14.01 e | 386 | 18.15 e | 698 | |
| 29. | 0.14 | 331 | 2.47 | 702 | 0.04 | 479 | 6.11 | 793 | 1.17 | 559 | 4.06 | 715 | 1.36 | 475 | 4.08 | 713 | 1.15 | 382 | 4.08 | 715 | 2.18 | 348 | 4.28 | 654 | 2.48 e | 386 | 5.38 e | 670 | 29. |
| | 12.43 | 341 | 15.28 | 662 | 12.36 | 536 | 16.40 | 824 | 13.41 | 518 | 16.16 | 690 | 13.43 | 452 | 16.24 | 697 | 12.57 | 409 | 16.55 | 742 | 13.40 | 351 | 17.26 | 682 | 15.04 e | 401 | 18.55 e | 698 | |
| 30. | 0.44 | 347 | 5.41 | 754 | 0.38 | 533 | 5.52 | 834 | 1.37 | 517 | 4.46 | 684 | | | | | 1.42 | 390 | 5.15 | 726 | 2.29 | 367 | 5.40 | 662 | 3.39 e | 380 | 7.26 e | 665 | 30. |
| | 13.04 | 352 | 16.14 | 750 | 13.31 | 537 | 16.08 | 770 | 14.05 | 507 | 16.36 | 651 | | | | | 13.49 | 403 | 16.59 | 735 | 15.02 e | 373 | 17.51 | 693 | 16.03 e | 383 | 20.03 e | 695 | |
| 31. | | | | | 1.52 | 507 | 4.06 | 723 | 2.06 | 483 | 5.02 | 638 | | | | | 2.21 | 388 | 5.26 | 718 | | | | | 4.41 e | 381 | 8.00 | 654 | 31. |
| | | | | | 14.12 | 513 | 16.07 | 672 | 14.21 | 466 | 17.10 | 627 | | | | | 14.24 | 429 | 17.59 | 725 | | | | | 17.22 | 368 | 21.54 | 715 | |
| Mittel | | 355 | | 688 | | 477 | | 745 | | 602 | | 753 | | 433 | | 700 | | 413 | | 704 | | 377 | | 703 | | 363 | | 694 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 444 | 716 |

Winterhalbjahr: 1.11. bis 30.4.
keine Angaben zu Eisverhältnissen
e = ergänzt
b = beeinflusst

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.02 m

W Tide
cm

Pegel : Herbrum Hafendamm Nr. 3770030
Gewässer : Ems
Gebiet : Untere Ems

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.57 e | 380 | 10.32 e | 705 | 6.41 | 371 | 10.19 | 686 | 8.54 | 351 | - | - | 10.19 | 320 | 1.40 | 697 | 10.39 e | 346 | 1.04 e | 664 | 11.05 | 351 | 1.26 | 666 | 11.20 | 357 | 1.51 | 729 | 1. |
| | 18.35 e | 402 | 22.33 e | 721 | 19.15 | 375 | 22.33 | 695 | 21.36 | 343 | 12.26 | 695 | 22.54 | 326 | 14.23 | 722 | 23.04 e | 357 | 14.24 | 721 | 23.07 | 366 | 14.07 | 661 | 23.34 | 353 | 14.14 | 700 | |
| 2. | 7.15 e | 372 | 11.39 e | 705 | 7.53 | 358 | 11.24 | 667 | 9.40 | 358 | 0.56 | 680 | 11.02 | 324 | 2.23 | 679 | 11.10 | 351 | 2.58 e | 698 | 11.32 | 392 | 2.15 | 735 | - | - | 2.47 | 705 | 2. |
| | 19.46 e | 384 | 23.54 e | 712 | 20.32 | 358 | 23.37 | 683 | 22.28 | 355 | 14.05 | 736 | 23.30 | 351 | 15.16 | 723 | 23.28 | 348 | 15.15 | 716 | 23.42 | 386 | 15.02 | 702 | 12.00 | 358 | 14.47 | 699 | |
| 3. | 8.17 e | 356 | 11.32 e | 695 | 9.00 | 348 | - | - | 10.39 | 348 | 1.37 | 711 | 11.41 | 355 | 3.13 | 706 | 11.37 | 339 | 2.44 | 685 | - | - | 2.58 | 700 | 0.05 | 350 | 3.11 | 708 | 3. |
| | 20.44 e | 372 | - | - | 21.11 | 362 | 12.38 | 683 | 23.17 | 355 | 14.36 | 734 | - | - | 15.54 | 727 | 23.49 | 360 | 14.49 | 700 | 12.03 | 381 | 15.21 | 692 | 12.27 | 366 | 14.55 | 675 | |
| 4. | 9.10 e | 371 | 0.55 e | 728 | 9.58 | 364 | 0.49 | 697 | 11.20 | 342 | 2.24 | 689 | 0.08 | 338 | 3.43 | 687 | - | - | 2.39 | 710 | 0.00 | 380 | 3.02 | 737 | 0.05 | 362 | 4.02 | 747 | 4. |
| | 21.37 e | 376 | 13.17 e | 726 | 22.26 | 358 | 13.48 | 708 | 23.54 | 354 | 15.16 | 735 | 12.13 | 336 | 16.31 | 730 | 12.06 | 348 | 16.30 | 744 | 12.40 | 356 | 15.44 | 683 | 12.59 | 390 | 15.01 | 707 | |
| 5. | 10.04 e | 373 | 2.07 e | 751 | 10.57 | 334 | 2.06 | 701 | 11.59 | 337 | 2.57 | 689 | 0.33 | 363 | 4.18 | 747 | 0.22 | 365 | 3.07 | 713 | 0.40 | 365 | 4.25 | 732 | 1.02 | 386 | 3.37 | 735 | 5. |
| | 22.36 e | 360 | 14.00 e | 735 | 23.30 | 335 | 14.54 | 717 | - | - | 15.53 | 731 | 12.41 | 367 | 16.58 | 754 | 12.47 | 383 | 17.07 | 752 | 13.15 | 366 | 15.43 | 710 | 13.38 | 383 | 16.46 | 682 | |
| 6. | 10.52 e | 363 | 1.25 e | 694 | 11.47 | 332 | 2.49 | 696 | 0.34 | 348 | 3.45 | 690 | 1.08 | 350 | 4.36 | 699 | 0.44 | 414 | 3.29 | 731 | 1.13 | 374 | 4.06 | 718 | 0.51 | 425 | 5.38 | 716 | 6. |
| | 23.14 e | 359 | 13.33 e | 691 | - | - | 15.24 | 718 | 12.37 | 343 | 16.17 | 729 | 13.15 | 333 | 16.31 | 678 | 12.18 | 410 | 17.29 | 712 | 13.45 | 362 | 16.37 | 696 | 14.27 | 391 | 16.54 | 673 | |
| 7. | 11.34 e | 386 | 2.11 e | 692 | 0.17 | 334 | 3.09 | 674 | 1.03 | 354 | 4.01 | 692 | 1.18 | 329 | 4.47 | 686 | 1.13 | 426 | 4.07 | 728 | 1.32 | 415 | 5.22 | 730 | 2.35 | 360 | 4.40 | 650 | 7. |
| | - | - | 15.35 e | 723 | 12.21 | 329 | 15.51 | 722 | 13.07 | 354 | 17.16 | 743 | 13.24 | 368 | 17.26 | 720 | 13.27 | 446 | 17.57 | 746 | 14.46 | 394 | 17.06 | 699 | 14.58 | 383 | 17.19 | 628 | |
| 8. | 0.23 e | 372 | 3.08 e | 687 | 0.59 | 336 | 3.34 | 671 | 1.21 e | 361 | 4.25 e | 686 | 1.55 | 369 | 4.58 | 685 | 2.03 | 455 | 4.55 | 711 | 2.43 | 385 | 5.30 | 705 | 3.07 | 373 | 5.26 | 664 | 8. |
| | 12.32 e | 373 | 15.58 e | 714 | 13.03 | 332 | 16.28 | 707 | 13.28 e | 358 | 17.44 e | 706 | 14.09 | 363 | 17.27 | 674 | 14.18 | 430 | 17.03 | 668 | 15.25 | 402 | 18.50 | 675 | 16.14 | 359 | 18.54 | 634 | |
| 9. | 0.51 e | 385 | 3.30 e | 668 | 1.31 | 328 | 4.48 | 659 | 2.08 | 351 | 5.01 | 675 | 2.25 | 365 | 5.30 | 666 | 2.07 | 413 | 6.42 | 719 | 4.04 | 391 | 7.21 | 691 | 4.16 | 356 | 9.36 | 683 | 9. |
| | 12.53 e | 382 | 16.58 e | 725 | 13.23 | 359 | 17.02 | 741 | 14.15 | 350 | 17.39 | 692 | 14.45 | 348 | 17.54 | 660 | 13.57 | 453 | 17.31 | 696 | 17.10 | 355 | 19.44 | 640 | 17.31 | 396 | 21.01 | 761 | |
| 10. | 1.29 e | 396 | 4.46 e | 683 | 2.05 | 367 | 4.53 | 696 | 2.38 | 354 | 5.21 | 667 | 3.04 | 387 | 6.47 | 684 | 3.17 | 414 | 6.44 | 676 | 5.22 | 355 | 8.29 | 677 | 5.24 | 452 | 9.57 e | 751 | 10. |
| | 13.43 e | 396 | 17.49 e | 724 | 14.15 | 350 | 18.03 | 714 | 14.44 | 352 | 17.53 | 676 | 15.31 | 399 | 18.53 | 686 | 15.47 | 395 | 19.25 | 668 | 18.12 | 355 | 21.37 | 683 | 18.40 | 413 | 21.15 | 697 | |
| 11. | 2.37 | 353 | 4.47 | 676 | 2.45 | 347 | 5.22 | 667 | 3.12 | 352 | 5.58 | 655 | 4.07 | 416 | 7.29 | 683 | 4.50 | 395 | 7.57 | 676 | 6.34 e | 376 | 9.39 | 731 | 7.30 | 402 | 9.40 | 702 | 11. |
| | 14.45 | 356 | 18.33 | 707 | 14.45 | 345 | 18.54 | 701 | 15.33 | 353 | 18.38 | 658 | 16.05 | 420 | 21.27 | 696 | 18.09 | 384 | 20.53 | 649 | 19.34 | 359 | 23.11 | 707 | 19.45 | 432 | - | - | |
| 12. | 3.23 | 357 | 5.40 | 680 | 3.18 | 351 | 6.27 | 666 | 4.07 | 357 | 7.01 | 637 | 5.59 | 408 | 9.24 | 698 | 6.35 | 357 | 9.13 | 646 | 7.54 | 363 | 10.38 | 701 | 8.19 | 446 | 0.38 | 700 | 12. |
| | 15.30 | 363 | 19.45 | 716 | 15.19 | 369 | 19.01 | 715 | 16.38 | 359 | 19.49 | 643 | 18.51 | 395 | 22.40 | 697 | 18.55 | 359 | 23.46 | 672 | 20.27 | 351 | 22.51 | 674 | 20.48 | 419 | 10.35 | 717 | |
| 13. | 4.07 | 359 | 6.42 | 678 | 4.13 | 365 | 7.01 | 663 | 5.22 | 365 | 8.21 | 633 | 7.17 | 389 | 10.45 | 704 | 7.37 | 368 | 10.00 | 670 | 8.46 | 341 | 11.10 | 675 | 9.17 | 412 | 0.56 | 712 | 13. |
| | 16.19 | 372 | 19.52 | 710 | 16.20 | 357 | 19.33 | 665 | 18.04 | 348 | 21.16 | 648 | 20.08 | 367 | - | - | 20.11 | 357 | 22.33 | 660 | 21.20 | 343 | - | - | 21.42 | 406 | 11.23 | 712 | |
| 14. | 4.58 | 362 | 7.40 | 670 | 5.01 | 367 | 8.33 b | 674 | 6.43 | 356 | 9.57 | 639 | 8.07 | 364 | 0.02 | 682 | 8.28 | 376 | 11.20 | 677 | 9.48 | 331 | 0.39 | 689 | 10.13 | 401 | 1.12 | 707 | 14. |
| | 17.35 | 372 | 20.28 | 685 | 16.46 | 382 | 21.03 b | 708 | 19.21 | 354 | 22.50 | 663 | 20.31 | 428 | 11.22 | 702 | 21.02 | 374 | 23.23 | 660 | 22.12 | 356 | 13.44 | 703 | 22.57 | 373 | 12.30 | 675 | |
| 15. | 6.16 | 363 | 8.49 | 643 | 6.11 | 367 | 9.43 b | 700 | 7.59 | 351 | 11.27 | 660 | 9.15 | 404 | 1.08 | 785 | 9.03 | 358 | - | - | 10.34 | 340 | 2.11 | 711 | 10.55 | 394 | 1.36 | 621 | 15. |
| | 18.28 | 367 | 21.24 | 675 | 18.59 | 372 | 22.28 b | 713 | 20.41 | 337 | 23.32 | 656 | 21.50 | 352 | 13.14 | 759 | 21.55 | 363 | 13.14 | 761 | 22.56 | 333 | 14.37 | 738 | 23.11 | 414 | 13.07 | 673 | |
| 16. | 7.02 | 358 | 9.36 | 665 | 7.16 | 376 | 10.32 | 697 | 8.31 | 347 | - | - | 9.55 | 364 | 1.35 | 708 | 10.04 | 349 | 0.11 | 690 | 11.27 | 328 | 2.37 | 708 | - | - | 1.36 e | 734 | 16. |
| | 19.30 | 373 | 22.21 | 700 | 20.03 | 394 | 22.57 | 692 | 21.20 | 346 | 12.30 | 682 | 21.43 b | 736 | 14.13 | 738 | 22.19 | 355 | 12.43 | 668 | 23.46 | 350 | 14.48 | 708 | 12.06 e | 432 | 15.54 e | 727 | |
| 17. | 7.56 | 360 | 12.24 | 674 | 8.16 | 382 | 12.33 | 710 | 9.34 | 337 | 0.42 | 668 | 10.31 | 369 | 3.40 b | 687 | 10.59 | 358 | 2.19 | 761 | - | - | 2.36 | 724 | 0.28 e | 440 | 2.38 e | 743 | 17. |
| | 20.42 | 371 | 23.20 | 683 | 20.55 | 384 | 23.56 | 716 | 22.12 | 346 | 13.43 | 704 | 23.06 | 359 | 14.55 | 761 | 23.07 | 347 | 13.51 | 709 | 12.16 | 334 | 15.55 | 686 | 12.38 | 469 | 14.59 | 692 | |
| 18. | 8.39 | 372 | - | - | 9.13 | 399 | - | - | 10.24 | 328 | 1.41 | 678 | 11.19 e | 358 | 2.33 | 714 | 11.37 | 349 | 3.43 | 700 | 0.23 | 355 | 3.57 | 734 | 1.01 e | 465 | 4.33 e | 748 | 18. |
| | 21.28 | 360 | 13.10 | 696 | 21.38 | 387 | 12.26 | 707 | 22.48 | 346 | 14.00 | 692 | 23.33 | 378 | 15.49 e | 749 | 23.56 | 360 | 15.49 | 710 | 12.56 | 370 | 16.54 | 710 | 13.55 e | 462 | 15.27 | 705 | |
| 19. | 9.21 | 356 | 0.32 | 702 | 9.43 | 444 | 0.31 | 695 | 11.04 | 344 | 3.00 | 702 | 11.49 e | 391 | 3.33 | 757 | - | - | 3.59 | 708 | 1.15 | 369 | 4.51 | 739 | 1.39 | 460 | 4.08 | 709 | 19. |
| | 21.53 | 358 | 12.35 | 701 | 22.23 | 434 | 14.38 | 769 | 23.29 | 348 | 15.11 | 718 | - | - | 16.37 | 769 | 12.14 | 354 | 16.28 | 705 | 13.52 | 346 | 16.18 | 643 | 14.39 e | 458 | 15.56 e | 674 | |
| 20. | 9.51 | 357 | 0.45 | 684 | 10.35 | 417 | 1.47 | 763 | 11.42 | 347 | 3.43 | 698 | 0.23 | 355 | 4.22 | 716 | 0.46 | 361 | 3.42 | 712 | 1.52 | 341 | 4.34 | 667 | 2.59 e | 460 | 5.04 e | 672 | 20. |
| | 22.47 | 367 | 13.52 | 715 | 23.07 | 402 | 14.25 | 747 | - | - | 15.47 | 728 | 12.36 | 334 | 16.29 | 723 | 13.05 | 350 | 17.28 | 704 | 14.31 | 352 | 19.20 | 662 | 15.51 e | 421 | 17.19 e | 600 | |
| 21. | 11.02 | 358 | 1.40 | 696 | 11.16 | 395 | 2.13 | 718 | 0.08 | 344 | 3.54 | 690 | 0.59 | 343 | 4.33 | 681 | 1.29 | 357 | 4.14 | 706 | 2.42 | 353 | 5.03 | 689 | 3.41 e | 419 | 5.34 e | 612 | 21. |
| | 23.25 | 370 | 14.12 | 698 | 23.51 | 381 | 15.05 | 738 | 12.24 | 322 | 16.20 | 705 | 13.05 | 337 | 16.39 | 694 | 14.02 | 350 | 16.10 | 671 | 15.34 | 334 | 17.51 | 630 | 16.10 e | 412 | 17.52 e | 597 | |
| 22. | 10.58 | 358 | 1.48 | 679 | 11.57 | 367 | 2.43 | 702 | 0.51 | 326 | 4.51 | 698 | 1.35 | 358 | 5.35 | 708 | 2.16 | 345 | 5.06 | 688 | 3.14 | 354 | 7.54 | 754 | 4.45 e | 436 | 6.23 e | 631 | 22. |
| | 23.44 | 360 | 14.26 | 703 | - | - | 15.41 | 723 | 12.44 | 349 | 17.03 | 752 | 13.57 | 367 | 18.13 | 717 | 14.49 | 346 | 17.22 | 664 | 16.37 | 364 | 18.44 | 651 | 17.02 e | 428 | 18.38 e | 616 | |
| 23. | 11.58 | 357 | 2.02 | 667 | 0.28 | 378 | 2.57 | 696 | 1.21 | 354 | 5.00 | 702 | 2.27 | 368 | 5.23 | 691 | 2.56 | 358 | 5.58 | 681 | 4.36 | 340 | 6.59 | 638 | 5.30 e | 426 | 7.10 e | 616 | 23. |
| | - | - | 14.59 | 701 | 12.36 | 362 | 16.21 | 734 | 13.34 | 343 | 17.54 | 730 | 14.55 | 349 | 17.55 | 662 | 15.53 | 343 | 18.56 | 647 | 17.20 | 368 | 19.56 | 672 | 17.20 e | 474 | 19.34 e | 646 | |
| 24. | 0.34 | 362 | 2.52 | 672 | 1.04 | 356 | 4.13 | 716 | 2.07 | 345 | 5.22 | 678 | 3.31 | 346 | 6.11 | 632 | 4.07 | 356 | 7.14 | 680 | 5.49 | 370 | 10.00 | 718 | 6.36 e | 514 | 9.20 e | 715 | 24. |
| | 12.30 | 353 | 15.40 | 694 | 13.13 | 356 | 16.51 | 732 | 14.16 | 337 | 18.19 | 691 | 15.37 | 332 | 18.17 | 602 | 17.10 | 341 | 20.12 | 650 | 18.52 | 351 | 21.15 | 663 | 19.34 e | 521 | 21.29 e | 688 | |
| 25. | 1.04 | 370 | 4.36 | 699 | 1.46 | 358 | 4.52 | 704 | 2.45 | 340 | 6.04 | 667 | 2.08 | 391 | 7.44 | 654 | 5.28 | 354 | 10.10 | 698 | 7.28 | 350 | 10.04 | 640 | 8.18 e | 532 | 9.49 e | 723 | 25. |
| | 13.03 | 370 | 17.09 | 774 | 13.52 | 359 | 17.47 | 743 | 15.00 | 340 | 19.08 | 694 | 16.43 | 383 | 19.35 | 659 | 18.29 | 372 | 21.32 | 689 | 18.25 | 420 | 22.44 | 753 | 20.29 e | 539 | 23.18 e | 712 | |
| 26. | 1.46 | 366 | 4.55 | 706 | 2.26 | 366 | 5.23 | 704 | 3.14 | 359 | 7.01 | 671 | 5.48 | 372 | 8.55 | 668 | 7.32 | 363 | 10.34 | 716 | 7.53 | 404 | 10.38 | 723 | 8.41 e | 559 | 11.00 e | 740 | 26. |
| | 14.03 | 355 | 17.45 | 719 | 14.36 | 352 | 17.56 | 715 | 15.46 | 375 | 20.47 | 712 | 18.40 | 389 | 21.16 | 652 | 19.38 | 353 | 22.13 | 680 | 20.23 | 383 | - | - | 20.53 e | 547 | 22.58 e | 733 | |
| 27. | 2.39 | 362 | 5.31 | 677 | 3.11 | 354 | 6.02 | 671 | 4.51 | 367 | 8.35 | 680 | 7.12 | 354 | 11.16 e | 685 | 7.42 | 350 | 12.00 | 711 | 8.46 | 368 | 0.57 | 704 | 9.07 e | 570 | 11.28 e | 734 | 27. |
| | 14.36 | 340 | 18.41 | 702 | 15.18 | 340 | 19.07 | 703 | 17.37 | 367 | 20.45 | 643 | 19.58 e | 361 | 23.42 e | 690 | 20.24 | 357 | 23.29 | 701 | 21.09 | 379 | 12.02 | 694 | 21.54 e | 558 | - | - | |
| 28. | 3.18 | 362 | 6.00 | 679 | 3.56 | 367 | 7.35 | 696 | 6.17 | 353 | 9.40 | 650 | 8.27 e | 379 | 11.52 e | 704 | 8.47 | 339 | 12.01 | 705 | 9.35 | 375 | 0.42 | 699 | 10.14 e | 547 | 0.00 e | 748 | 28. |
| | 15.37 | 356 | 18.34 | 686 | 16.31 | 371 | 19.47 | 693 | 18.54 | 357 | 23.35 | 722 | 20.58 e | 362 | 23.28 e | 672 | 21.10 | 351 | 23.33 | 664 | 21.49 | 375 | 13.06 | 704 | 22.20 e | 529 | 12.31 e | 693 | |
| 29. | 4.16 | 360 | 7.24 | 674 | 5.00 | 352 | 8.06 | 662 | 7.37 | 381 | 11.30 | 710 | 9.01 e | 375 | - | - | 9.20 | 346 | - | - | 10.12 | 365 | 1.16 | 737 | 10.50 e | 544 | 0.19 e | 664 | 29. |
| | 16.55 | 362 | 19.43 | 689 | 17.45 | 359 | 21.19 | 675 | 20.25 | 365 | - | - | 21.33 e | 382 | 13.26 e | 754 | 21.31 | 366 | 12.52 | 697 | 22.21 | 346 | 14.17 | 721 | 22.51 e | 539 | 12.46 e | 681 | |
| 30. | 5.13 | 361 | 8.35 | 669 | 6.32 | 344 | 10.53 | 683 | 8.44 | 372 | 0.13 | 699 | 10.05 e | 365 | 1.33 e | 730 | 10.06 | 355 | 1.26 | 729 | 10.53 | 349 | 1.22 | 729 | 11.30 e | 552 | 3.19 e | 748 | 30. |
| | 18.02 | 375 | 21.15 | 701 | 19.01 | 363 | 22.43 | 686 | 21.01 | 367 | 12.57 | 700 | 22.34 e | 352 | 13.37 e | 716 | 22.24 | 355 | 14.10 | 729 | 23.01 | 348 | 14.04 | 704 | 23.39 e | 551 | 14.08 e | 773 | |
| 31. | | | | | 7.37 | 349 | 10.52 | 689 | 9.36 | 369 | 1.28 | 717 | | | | | 10.28 | 346 | 1.25 | 701 | | | | | 11.46 e | 533 | 1.35 e | 768 | 31. |
| | | | | | 20.30 | 357 | 23.48 | 686 | 22.20 | 337 | 14.11 | 782 | | | | | 22.33 | 372 | 13.44 | 681 | | | | | 23.52 e | 521 | 14.09 e | 726 | |
| Mittel | | 367 | | 697 | | 364 | | 701 | | 351 | | 692 | | 371 | | 702 | | 368 | | 696 | | 363 | | 698 | | 444 | | 696 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 364 | 697 |

Sommerhalbjahr: 1.5. bis 31.10.
keine Angaben zu Eisverhältnissen
e = ergänzt
b = beeinflusst

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.02 m

W Tide
cm

Pegel : Papenburg Nr. 3790010
Gewässer : Ems
Gebiet : Untere Ems

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.17 | 299 | 4.08 | 685 | 0.18 | 326 | 4.05 | 683 | 1.09 | 356 | 4.16 | 714 | 1.25 | 305 | 5.24 | 608 | 1.02 | 308 | 4.32 | 669 | 1.51 | 344 | 5.43 | 651 | 3.09 | 288 | 6.51 | 620 | 1. |
| | 12.40 | 293 | 16.49 | 667 | 12.44 | 281 | 17.20 | 643 | 13.36 | 375 | 16.46 | 683 | 13.55 | 309 | 17.49 | 595 | 13.14 | 322 | 16.51 | 671 | 13.42 | 350 | 19.24 | 682 | 15.17 | 273 | 19.24 | 657 | |
| 2. | 0.38 | 329 | 5.10 | 727 | 0.09 | 366 | 5.54 | 779 | 1.39 | 383 | 5.00 | 718 | 2.03 | 306 | 6.27 | 597 | 1.33 | 324 | 5.07 | 655 | 3.15 | 366 | 7.26 | 665 | 4.34 | 291 | 8.19 | 646 | 2. |
| | 13.18 | 323 | 17.06 | 663 | 13.30 | 360 | 17.05 | 682 | 14.14 | 406 | 17.25 | 701 | 14.16 | 327 | 19.00 | 615 | 13.48 | 324 | 17.29 | 634 | 15.59 | 332 | 20.22 | 670 | 17.00 | 304 | 21.00 | 669 | |
| 3. | 1.32 | 310 | 5.25 | 658 | 1.35 | 332 | 5.33 | 675 | 2.27 | 414 | 5.40 | 702 | 2.51 R | 340 | 7.53 R | 630 | 2.21 | 303 | 6.05 | 592 | 4.57 | 305 | 9.05 | 648 | 5.49 | 283 | 9.52 | 658 | 3. |
| | 14.01 | 304 | 17.48 | 640 | 13.41 | 361 | 20.27 | 715 | 14.48 | 383 | 20.12 | 725 | 16.00 R | 332 | 20.28 R | 630 | 14.43 | 305 | 18.42 | 620 | 17.37 | 302 | 21.37 | 662 | 18.07 | 304 | 22.17 | 702 | |
| 4. | 2.08 | 334 | 6.06 | 674 | 1.30 | 481 | 7.30 | 821 | 0.41 | 563 | 8.08 | 776 | 4.32 T | 333 | 9.07 T | 637 | 3.48 | 316 | 7.38 | 622 | 6.29 | 277 | 10.21 | 641 | 6.53 | 285 | 11.00 | 681 | 4. |
| | 14.48 | 333 | 18.50 | 652 | 15.23 | 434 | 19.26 | 733 | 16.08 | 552 | 20.03 | 789 | 17.25 T | 324 | 21.42 T | 634 | 16.13 | 344 | 21.00 | 678 | 18.39 | 291 | 22.44 | 669 | 19.15 | 310 | 23.31 | 712 | |
| 5. | 3.21 | 353 | 7.40 | 694 | 3.22 | 398 | 8.26 | 750 | 3.33 | 505 | 10.00 | 799 | 6.24 T | 301 | 10.29 T | 595 | 5.55 | 324 | 9.39 | 648 | 7.26 | 279 | 11.23 | 653 | 7.57 | 304 | - | - | 5. |
| | 16.25 | 338 | 20.24 | 655 | 16.17 | 417 | 20.20 | 730 | 13.54 | 639 | 22.33 | 880 | 18.39 T | 323 | 22.34 T | 658 | 18.03 | 323 | 22.17 | 676 | 19.52 | 280 | 23.55 | 686 | 20.17 | 301 | 12.04 | 701 | |
| 6. | 4.33 | 352 | 9.36 | 689 | 4.45 | 396 | 9.30 | 714 | 6.18 | 644 | 10.07 | 812 | 7.14 T | 307 | 11.19 T | 646 | 7.00 | 303 | 10.42 | 657 | 8.21 | 277 | - | - | 8.50 | 283 | 0.20 | 718 | 6. |
| | 17.38 | 340 | 21.31 | 656 | 17.08 | 408 | 22.36 | 752 | 18.58 | 477 | 22.32 | 707 | 19.49 T | 325 | 23.37 T | 661 | 19.24 | 297 | 23.10 | 674 | 20.40 | 302 | 12.29 | 689 | 21.14 | 284 | 12.41 | 697 | |
| 7. | 5.45 | 336 | 10.29 | 680 | 6.12 | 388 | 9.31 | 709 | 6.57 | 415 | 11.25 | 708 | 8.14 T | 324 | - | - | 8.04 | 285 | 11.27 | 638 | 9.05 | 315 | 0.57 | 752 | 9.42 | 287 | 1.21 | 716 | 7. |
| | 18.47 | 304 | 22.43 | 648 | 17.40 | 434 | 22.50 | 843 | 19.10 | 467 | - | - | 20.32 T | 296 | 12.32 T | 645 | 19.57 | 293 | - | - | 21.37 | 289 | 13.17 | 717 | 22.15 | 271 | 13.37 | 698 | |
| 8. | 6.47 | 300 | 10.59 | 667 | 7.15 | 451 | 10.37 | 754 | 8.00 | 499 | 0.21 | 798 | 9.07 T | 288 | 0.46 T | 655 | 8.43 | 345 | 1.43 | 716 | 10.09 | 278 | 1.33 | 727 | 10.29 | 262 | 1.47 | 667 | 8. |
| | 19.25 | 294 | 23.13 | 642 | 19.35 | 319 | - | - | 20.37 | 443 | 12.05 | 788 | 21.18 T | 282 | 13.12 T | 624 | 21.07 | 310 | 12.47 | 745 | 22.24 | 277 | 13.58 | 694 | 23.14 e | 270 | 14.37 | 680 | |
| 9. | 7.42 | 298 | 11.40 | 664 | 6.20 | 432 | 1.41 | 681 | 8.59 | 398 | 23.27 * | 718 | 9.48 T | 295 | 1.27 T | 661 | 9.48 | 272 | 0.43 | 731 | 10.38 | 285 | 2.29 | 691 | 11.12 | 289 | 2.51 e | 687 | 9. |
| | 20.06 | 295 | - | - | 19.20 | 503 | 12.42 | 833 | 20.53 | 414 | 11.44 | 688 | 21.59 T | 301 | 13.48 T | 678 | 21.51 | 291 | 13.16 | 675 | 23.00 | 301 | 14.50 | 723 | 23.41 | 288 | 15.25 | 706 | |
| 10. | 8.31 | 294 | 0.08 | 654 | 8.47 | 416 | 0.11 | 849 | 9.44 | 408 | 1.02 | 754 | 10.50 T | 353 | 2.01 T | 677 | 10.24 | 294 | 1.27 | 734 | 11.18 | 304 | 3.00 | 706 | - | - | 3.26 | 677 | 10. |
| | 20.54 | 289 | 12.35 | 662 | 20.30 | 400 | 12.44 | 787 | 21.43 | 396 | 12.23 | 702 | 22.52 T | 287 | 14.45 T | 618 | 22.42 | 304 | 13.56 | 734 | 23.47 | 304 | 15.54 | 718 | 12.00 | 285 | 16.00 | 699 | |
| 11. | 9.17 | 276 | 0.46 | 647 | 9.06 | 352 | 0.23 | 752 | 10.19 | 400 | 0.49 | 721 | 11.32 T | 359 | 2.45 T | 648 | 11.13 | 289 | 2.34 | 748 | 11.56 | 316 | 3.48 | 719 | 0.31 | 294 | 4.22 | 682 | 11. |
| | 21.23 | 264 | 12.57 | 625 | 21.14 | 328 | 12.20 | 708 | 22.30 | 389 | 13.11 | 714 | 23.28 T | 341 | 15.29 T | 636 | 23.32 | 288 | 14.49 | 706 | - | - | 16.51 | 729 | 12.26 | 326 | 17.16 | 730 | |
| 12. | 9.35 | 265 | 1.06 | 609 | 9.43 | 325 | 0.30 | 704 | 10.38 | 397 | 1.23 | 728 | - | - | 3.06 T | 688 | 11.52 | 290 | 3.31 | 734 | 0.34 | 307 | 4.18 | 702 | 1.09 | 325 | 5.14 | 695 | 12. |
| | 21.47 | 281 | 13.37 | 622 | 21.53 | 345 | 13.21 | 727 | 23.04 | 461 | 17.04 | 802 | 12.05 T | 386 | 15.45 T | 668 | - | - | 15.22 | 720 | 12.46 | 317 | 16.17 | 719 | 13.17 | 353 | 17.44 | 734 | |
| 13. | 10.14 | 308 | 2.00 | 681 | 10.12 | 285 | 1.06 | 732 | 11.46 | 470 | 3.26 | 846 | 0.03 T | 288 | 4.07 T | 702 | 0.12 | 282 | 3.46 | 711 | 0.29 b | 700 | 6.36 b | 667 | 2.08 | 303 | 5.29 | 650 | 13. |
| | 22.33 | 300 | 14.13 | 689 | 22.06 | 355 | 13.53 | 662 | - | - | 16.13 | 807 | 12.29 T | 281 | 16.30 T | 681 | 12.28 | 290 | 16.03 | 682 | 13.20 | 316 | 18.09 | 709 | 13.57 | 297 | 18.16 | 680 | |
| 14. | 10.45 | 287 | 2.18 | 669 | 10.44 | 360 | 1.52 | 748 | 0.08 | 427 | 3.50 | 764 | 0.30 T | 294 | 4.41 T | 738 | 0.47 | 279 | 4.25 | 683 | 2.03 | 310 | 5.45 | 675 | 3.00 | 292 | 6.28 | 640 | 14. |
| | 22.51 | 293 | 14.38 | 651 | 22.31 | 367 | 14.14 | 704 | 12.26 | 364 | 15.25 | 688 | 12.58 T | 322 | 17.08 T | 723 | 13.09 | 282 | 16.54 | 680 | 14.07 | 332 | 18.21 | 698 | 14.42 | 338 | 19.52 | 724 | |
| 15. | 11.27 | 293 | 2.56 | 676 | 11.35 | 345 | 3.45 | 766 | 0.25 | 355 | 3.34 | 724 | 0.49 R | 324 | 6.10 R | 786 | 1.25 | 284 | 4.59 | 665 | 3.04 | 321 | 6.52 | 661 | 3.51 | 340 | 7.25 | 662 | 15. |
| | 23.33 | 287 | 15.15 | 642 | 23.29 | 349 | 14.54 | 690 | 12.54 | 344 | 15.59 | 672 | 13.31 R | 394 | 17.48 R | 748 | 13.44 | 292 | 17.26 | 680 | 15.22 | 343 | 19.56 | 694 | 15.59 | 340 | 21.13 | 710 | |
| 16. | 12.00 | 279 | 3.30 | 652 | - | - | 2.37 | 722 | 1.05 | 344 | 4.12 | 702 | 2.19 R | 305 | 6.19 R | 688 | 2.13 | 294 | 5.50 | 660 | 4.25 | 318 | 8.23 | 662 | 4.45 | 380 | 10.12 | 725 | 16. |
| | 23.59 | 289 | 15.50 | 631 | 12.01 | 330 | 17.14 | 709 | 13.33 | 340 | 16.47 | 665 | 14.37 R | 293 | 18.57 R | 668 | 14.24 | 327 | 18.26 | 680 | 16.38 | 345 | 21.12 | 697 | 17.27 | 389 | 21.54 | 744 | |
| 17. | - | - | 4.02 | 662 | 0.25 | 376 | 5.22 | 785 | 1.45 | 336 | 5.28 | 691 | 3.05 | 304 | 7.17 | 675 | 3.20 | 303 | 7.03 | 641 | 5.58 | 294 | 9.39 | 650 | 6.03 | 327 | 9.57 | 678 | 17. |
| | 12.25 | 305 | 16.20 | 641 | 13.01 | 405 | 16.33 | 739 | 14.21 | 343 | 17.55 | 668 | 15.47 | 317 | 20.02 e | 676 | 15.21 | 347 | 19.41 | 685 | 18.06 | 287 | 21.42 | 655 | 18.21 | 311 | 22.33 | 687 | |
| 18. | 0.33 | 310 | 4.34 | 667 | 1.18 | 384 | 5.34 | 757 | 2.27 | 353 | 6.16 | 681 | 4.34 e | 292 | 8.53 e | 644 | 4.47 | 314 | 8.43 | 648 | 6.40 | 284 | 10.23 | 645 | 7.04 | 288 | 10.45 | 649 | 18. |
| | 13.14 | 308 | 17.01 | 635 | 13.47 | 403 | 17.02 | 716 | 14.49 | 353 | 20.27 | 666 | 16.54 e | 319 | 21.47 e | 711 | 16.38 | 358 | 21.07 | 715 | 19.01 | 311 | 22.42 | 685 | 19.19 | 287 | 23.30 | 688 | |
| 19. | 1.14 | 321 | 5.23 | 674 | 2.04 | 383 | 5.18 | 725 | 3.44 | 379 | 8.25 | 739 | 5.40 e | 348 | 11.19 e | 762 | 6.20 | 318 | 10.17 | 676 | 7.42 | 288 | 11.27 | 654 | 7.45 | 297 | 11.42 | 679 | 19. |
| | 14.02 | 326 | 17.56 | 646 | 14.45 | 366 | 17.53 | 668 | 16.15 | 391 | 21.11 | 775 | 18.31 e | 390 | 23.28 | 755 | 18.41 | 323 | 22.39 | 701 | 19.57 | 298 | 23.39 | 690 | 20.14 | 309 | - | - | |
| 20. | 2.17 | 328 | 6.28 | 664 | 3.02 | 354 | 6.01 | 656 | 4.19 b | 764 | 8.19 b | 756 | 7.45 | 291 | 11.31 | 663 | 7.20 | 291 | 11.14 | 673 | 8.24 | 298 | - | - | 8.29 | 304 | 0.15 | 695 | 20. |
| | 15.14 | 311 | 19.14 | 643 | 15.24 | 403 | 20.16 | 752 | 18.04 b | 774 | 23.00 b | 728 | 19.50 | 290 | 23.38 | 682 | 19.33 | 320 | 23.30 | 715 | 20.44 | 300 | 12.10 | 671 | 20.52 | 299 | 12.30 | 687 | |
| 21. | 3.34 | 324 | 7.48 | 670 | 4.11 | 418 | 7.38 | 728 | 6.28 | 383 | - | - | 8.23 | 312 | - | - | 8.19 | 297 | - | - | 9.05 | 293 | 0.39 | 697 | 9.08 | 303 | 0.58 | 692 | 21. |
| | 16.35 | 306 | 20.40 | 644 | 17.07 | 351 | 20.24 | 675 | 19.10 | 429 | 12.58 | 704 | 20.53 | 311 | 12.17 | 701 | 20.30 | 300 | 12.03 | 682 | 21.18 | 305 | 12.40 | 681 | 21.32 | 306 | 13.23 | 702 | |
| 22. | 4.59 | 314 | 9.10 | 673 | 5.42 | 344 | 9.19 | 685 | 7.40 | 523 | 0.05 | 834 | 9.20 | 280 | 0.18 | 715 | 9.06 | 287 | 0.31 | 702 | 9.39 | 300 | 1.11 | 704 | 9.44 | 308 | 1.40 | 703 | 22. |
| | 17.55 | 302 | 22.07 | 654 | 18.22 | 362 | 21.42 | 727 | 20.00 | 490 | 11.43 | 822 | 21.21 | 303 | 13.00 | 671 | 21.23 | 286 | 12.48 | 676 | 21.58 | 308 | 14.30 | 697 | 22.10 | 297 | 13.54 | 706 | |
| 23. | 6.15 | 306 | 10.36 | 687 | 6.54 | 361 | 10.13 | 693 | 8.47 | 416 | 23.05 * | 737 | 10.03 | 314 | 1.23 | 740 | 9.48 | 284 | 1.00 | 697 | 10.09 | 292 | 1.24 | 693 | 10.18 | 301 | 2.04 | 689 | 23. |
| | 18.51 | 302 | 23.22 | 679 | 19.17 | 364 | 22.36 | 732 | 20.49 | 409 | 12.05 | 706 | 22.08 | 305 | 13.36 | 724 | 21.59 | 280 | 13.25 | 674 | 22.32 | 295 | 14.08 | 680 | 22.48 | 290 | 14.21 | 700 | |
| 24. | 7.20 | 323 | 11.31 | 725 | 7.53 | 429 | 12.44 | 790 | 9.45 | 403 | 0.58 | 743 | 10.35 | 311 | 1.55 | 740 | 10.21 | 283 | 1.42 | 694 | 10.37 | 297 | 2.05 | 683 | 10.57 | 282 | 2.27 | 671 | 24. |
| | 20.01 | 312 | 23.52 | 678 | 20.35 | 388 | 23.41 | 727 | 21.57 | 389 | 12.40 | 709 | 22.54 | 334 | 14.16 | 738 | 22.34 | 281 | 14.00 | 683 | 22.59 | 294 | 14.12 | 698 | 23.23 | 283 | 14.54 | 678 | |
| 25. | 8.29 | 290 | - | - | 8.46 | 360 | - | - | 10.35 | 369 | 0.55 | 716 | 11.13 | 330 | 2.52 | 760 | 10.53 | 287 | 2.13 | 695 | 11.09 | 293 | 2.35 | 687 | 11.24 | 286 | 2.58 | 659 | 25. |
| | 20.31 | 362 | 13.30 | 700 | 21.05 | 383 | 12.21 | 722 | 22.42 | 353 | 13.07 | 628 | 23.24 | 307 | 14.46 | 744 | 23.03 | 283 | 14.28 | 687 | 23.29 | 274 | 14.38 | 678 | 23.54 | 284 | 15.19 | 684 | |
| 26. | 9.13 | 376 | 1.30 | 836 | 9.47 | 363 | 0.19 | 733 | 11.02 | 343 | 1.22 | 633 | 11.43 | 304 | 3.26 | 735 | 11.15 | 287 | 2.42 | 693 | 11.28 | 291 | 2.57 | 652 | 11.59 | 284 | 3.32 | 654 | 26. |
| | 21.10 | 353 | 13.25 | 764 | 22.01 | 370 | 13.48 | 754 | 22.52 | 350 | 13.40 | 583 | 23.56 | 295 | 14.59 | 693 | 23.30 | 284 | 14.56 | 680 | 23.57 | 298 | 14.59 | 677 | - | - | 16.01 | 678 | |
| 27. | 9.56 | 327 | 1.41 | 727 | 10.30 | 359 | 1.27 | 719 | 11.31 | 377 | 2.11 | 680 | - | - | 3.08 | 688 | 11.42 | 289 | 3.13 | 683 | 11.47 | 310 | 3.07 | 652 | 0.29 | 281 | 4.27 | 655 | 27. |
| | 22.09 | 443 | 15.51 | 776 | 22.50 | 358 | 14.06 | 748 | 23.35 | 374 | 14.37 | 670 | 12.09 | 293 | 15.18 | 681 | 23.57 | 286 | 15.24 | 681 | - | - | 15.42 | 682 | 12.33 | 297 | 16.57 | 692 | |
| 28. | 11.09 | 361 | 2.54 | 844 | 11.22 | 310 | 2.04 | 735 | - | - | 2.59 | 715 | 0.11 | 309 | 3.41 | 701 | 11.57 | 297 | 3.38 | 675 | 0.29 | 307 | 3.52 | 663 | 1.07 | 301 | 5.03 | 658 | 28. |
| | 23.23 | 289 | 14.51 | 713 | 23.05 | 329 | 14.16 | 643 | 12.09 | 364 | 15.01 | 657 | 12.24 | 319 | 16.00 | 698 | - | - | 15.56 | 685 | 12.29 | 304 | 16.13 | 667 | 13.13 | 311 | 17.49 | 695 | |
| 29. | 11.48 | 277 | 3.06 | 683 | 11.40 | 458 | 5.23 | 780 | 0.11 | 346 | 3.33 | 670 | 0.37 | 324 | 4.01 | 693 | 0.12 | 313 | 4.12 | 694 | 1.01 | 294 | 4.45 | 626 | 1.51 | 315 | 5.51 | 668 | 29. |
| | 23.47 | 299 | 16.00 | 658 | 23.44 | 430 | 16.01 | 823 | 12.34 | 338 | 15.51 | 645 | 12.54 | 311 | 16.16 | 678 | 12.13 | 352 | 16.39 | 726 | 12.27 | 289 | 17.30 | 652 | 14.18 | 328 | 18.41 | 696 | |
| 30. | - | - | 5.22 | 753 | - | - | 4.21 | 826 | 0.39 | 331 | 4.08 | 650 | | | | | 0.35 | 361 | 4.56 | 716 | 1.15 | 310 | 5.31 | 642 | 2.48 | 312 | 7.03 | 662 | 30. |
| | 12.12 | 340 | 15.52 | 737 | 12.38 | 414 | 16.22 | 749 | 12.58 | 326 | 16.21 | 616 | | | | | 12.47 | 370 | 16.46 | 711 | 13.55 | 308 | 18.05 | 664 | 15.11 | 320 | 19.29 | 686 | |
| 31. | | | | | 0.56 | 363 | 4.08 | 698 | 1.04 | 309 | 4.35 | 617 | | | | | 1.18 | 345 | 4.57 | 698 | | | | | 3.55 | 302 | 8.14 | 653 | 31. |
| | | | | | 13.14 | 336 | 16.08 | 643 | 13.14 | 312 | 16.59 | 604 | | | | | 13.16 | 408 | 18.20 | 711 | | | | | 16.22 | 313 | 21.18 | 703 | |
| Mittel | | 313 | | 678 | | 376 | | 731 | | 418 | | 717 | | 315 | | 680 | | 307 | | 685 | | 310 | | 681 | | 303 | | 685 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 341 | 696 |

* 5. Wert am 08.01.2012 22.01.2012

Winterhalbjahr: 1.11. bis 30.4.
3 Tage Randeis
11 Tage Treibeis
e = ergänzt
b = beeinflusst

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.02 m

W Tide
cm

Pegel : Papenburg Nr. 3790010
Gewässer : Ems
Gebiet : Untere Ems

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.06 | 321 | 9.58 | 701 | 5.42 | 308 | 10.37 | 681 | 7.51 | 305 | - | - | 9.30 | 292 | 1.21 | 692 | 9.35 | 306 | 1.23 | 657 | 10.10 | 297 | 1.34 | 659 | 10.19 | 313 | 2.00 | 719 | 1. |
| | 17.40 | 344 | 21.58 | 716 | 18.10 | 323 | 22.08 | 686 | 20.39 | 281 | 12.05 | 685 | 21.58 | 291 | 13.52 | 719 | 21.54 | 323 | 13.58 | 715 | 22.06 | 327 | 14.13 | 658 | 22.40 | 310 | 14.54 | 687 | |
| 2. | 6.21 | 317 | 11.04 | 701 | 6.51 | 313 | 10.55 | 669 | 8.50 | 295 | 0.29 | 667 | 10.05 | 294 | 1.59 | 677 | 10.09 | 317 | 2.36 | 692 | 10.26 | 347 | 2.16 | 723 | 10.57 | 326 | 3.08 | 692 | 2. |
| | 18.45 | 324 | 23.10 | 706 | 19.34 | 298 | 23.29 | 678 | 21.33 | 311 | 13.40 | 725 | 22.34 | 316 | 14.45 | 720 | 22.25 | 315 | 14.30 | 706 | 22.43 | 346 | 15.04 | 692 | 22.57 | 317 | 14.49 | 686 | |
| 3. | 7.27 | 296 | 11.36 | 688 | 8.02 | 289 | - | - | 9.44 | 301 | 1.23 | 693 | 10.47 | 301 | 2.41 | 700 | 10.39 | 302 | 2.28 | 677 | 11.03 | 346 | 3.03 | 694 | 11.21 | 308 | 3.06 | 698 | 3. |
| | 19.49 | 306 | - | - | 20.44 | 284 | 12.34 | 685 | 22.24 | 295 | 14.13 | 722 | 23.12 | 298 | 15.17 | 719 | 22.43 | 335 | 15.33 | 694 | 22.58 | 342 | 15.39 | 683 | 23.09 | 311 | 15.02 | 653 | |
| 4. | 8.23 | 314 | 0.17 | 721 | 9.07 | 286 | 0.47 | 684 | 10.24 | 295 | 2.09 | 676 | 11.17 | 294 | 3.19 | 682 | 11.05 | 326 | 2.45 | 703 | 11.34 | 338 | 3.36 | 733 | 11.47 | 346 | 3.33 | 722 | 4. |
| | 20.49 | 320 | 12.36 | 721 | 21.47 | 278 | 13.30 | 698 | 23.03 | 294 | 14.54 | 724 | 23.36 | 326 | 16.02 | 723 | 23.20 | 346 | 15.42 | 740 | 23.41 | 329 | 15.30 | 679 | 23.54 | 349 | 15.37 | 677 | |
| 5. | 9.15 | 315 | 1.20 | 741 | 10.02 | 283 | 1.52 | 681 | 11.05 | 294 | 2.54 | 677 | 11.41 | 337 | 3.55 | 738 | 11.43 | 317 | 2.54 | 704 | 11.56 | 340 | 3.44 | 723 | 12.27 | 323 | 3.43 | 712 | 5. |
| | 21.54 | 291 | 13.30 | 725 | 22.34 | 283 | 14.22 | 707 | 23.42 | 289 | 15.26 | 721 | - | - | 15.56 | 747 | 23.43 | 383 | 16.27 | 730 | - | - | 15.59 | 701 | 23.47 | 401 | 16.48 | 663 | |
| 6. | 10.12 | 276 | 1.40 | 685 | 10.52 | 284 | 2.42 | 681 | 11.31 | 296 | 3.26 | 679 | 0.08 | 328 | 4.03 | 695 | 11.46 | 350 | 3.05 | 724 | 0.03 | 347 | 4.08 | 708 | - | - | 5.34 | 700 | 6. |
| | 22.39 | 281 | 14.04 | 688 | 23.22 | 294 | 15.28 | 714 | - | - | 15.53 | 714 | 12.18 | 301 | 16.21 | 679 | - | - | 16.42 | 705 | 12.35 | 339 | 17.04 | 683 | 13.23 | 332 | 17.05 | 652 | |
| 7. | 10.55 | 296 | 2.34 | 685 | 11.28 | 284 | 3.23 | 668 | 0.08 | 308 | 3.54 | 684 | 0.25 | 303 | 4.38 | 686 | 0.10 | 363 | 4.07 | 718 | 0.24 | 387 | 4.44 | 721 | 1.29 | 301 | 4.58 | 631 | 7. |
| | 23.39 | 287 | 15.07 | 718 | - | - | 16.00 | 714 | 12.12 | 314 | 16.24 | 738 | 12.22 | 336 | 17.09 | 711 | 12.12 | 375 | 17.06 | 736 | 13.37 | 372 | 17.26 | 685 | 13.59 | 300 | 17.49 | 610 | |
| 8. | 11.42 | 298 | 3.25 | 678 | 0.04 | 288 | 3.57 | 667 | 0.34 | 327 | 4.22 | 679 | 0.54 | 335 | 4.50 | 676 | 0.49 | 378 | 4.29 | 702 | 1.34 | 369 | 5.57 | 701 | 1.56 | 331 | 5.54 | 659 | 8. |
| | - | - | 16.26 | 705 | 12.10 | 286 | 16.26 | 704 | 12.36 | 306 | 17.21 | 700 | 13.07 | 325 | 17.10 | 665 | 12.56 | 344 | 16.36 | 659 | 14.12 | 388 | 19.14 | 675 | 15.04 | 306 | 19.06 | 630 | |
| 9. | 0.10 | 317 | 3.41 | 661 | 0.36 | 296 | 5.26 | 668 | 1.09 | 312 | 4.54 | 673 | 1.19 | 320 | 5.21 | 658 | 0.54 | 346 | 6.11 | 712 | 2.57 | 378 | 7.14 | 683 | 3.09 | 314 | 9.19 | 673 | 9. |
| | 12.09 | 312 | 16.17 | 717 | 12.24 | 338 | 17.00 | 732 | 13.07 | 312 | 17.27 | 682 | 13.31 | 307 | 17.42 | 643 | 13.23 | 405 | 17.25 | 678 | 16.00 | 336 | 20.03 | 638 | 16.24 | 369 | 20.37 | 747 | |
| 10. | 0.49 | 323 | 4.35 | 675 | 1.07 | 334 | 4.43 | 686 | 1.35 | 313 | 5.22 | 661 | 1.54 | 330 | 6.59 | 662 | 2.06 | 360 | 6.28 | 668 | 4.17 | 336 | 8.46 | 679 | 4.46 | 440 | 9.02 | 745 | 10. |
| | 12.56 | 321 | 17.16 | 715 | 13.17 | 318 | 17.53 | 711 | 13.37 | 314 | 17.54 | 668 | 14.20 | 357 | 19.05 | 654 | 14.52 | 352 | 19.25 | 649 | 17.02 | 338 | 21.48 | 682 | 17.30 | 340 | 21.38 | 679 | |
| 11. | 1.38 | 301 | 5.17 | 664 | 1.47 | 319 | 5.18 | 658 | 2.14 | 310 | 6.04 | 651 | 2.55 | 369 | 8.34 | 659 | 3.32 | 339 | 7.52 | 665 | 5.32 | 346 | 9.49 | 726 | 6.17 | 316 | 10.02 | 692 | 11. |
| | 13.41 | 307 | 18.25 | 702 | 13.43 | 314 | 18.47 | 698 | 14.19 | 318 | 18.36 | 646 | 15.41 | 395 | 21.20 | 684 | 16.57 | 312 | 20.43 | 633 | 18.25 | 332 | 23.05 | 698 | 18.36 | 306 | 23.53 | 687 | |
| 12. | 2.19 | 309 | 6.01 | 670 | 2.15 | 327 | 6.06 | 668 | 2.57 | 303 | 6.51 | 628 | 4.41 | 383 | 9.01 | 685 | 5.25 | 296 | 9.06 | 637 | 6.40 | 335 | 10.58 | 691 | 7.22 | 312 | 11.05 | 701 | 12. |
| | 14.24 | 319 | 19.11 | 710 | 14.10 | 352 | 19.03 | 710 | 15.26 | 311 | 19.32 | 626 | 17.36 | 367 | 22.15 | 678 | 17.53 | 292 | 23.04 | 670 | 19.24 | 310 | 23.28 | 670 | 19.46 | 304 | - | - | |
| 13. | 3.06 | 325 | 6.56 | 669 | 3.07 | 335 | 6.55 | 658 | 4.09 | 308 | 8.25 | 633 | 6.06 | 355 | 10.51 | 693 | 6.32 | 338 | 10.11 | 666 | 7.47 | 302 | 11.56 | 670 | 8.22 | 309 | 0.13 | 697 | 13. |
| | 15.16 | 332 | 19.49 | 697 | 15.10 | 332 | 19.34 | 661 | 16.54 | 302 | 21.14 | 628 | 19.03 | 336 | 23.38 | 670 | 19.10 | 305 | 22.57 | 652 | 20.19 | 302 | - | - | 20.48 | 294 | 12.00 | 698 | |
| 14. | 4.02 | 322 | 7.56 | 659 | 3.49 | 336 | 8.51 b | 672 | 5.38 | 298 | 9.52 | 632 | 6.55 | 334 | 11.33 | 694 | 7.24 | 312 | 11.16 | 674 | 8.49 | 300 | 0.29 | 683 | 9.22 | 291 | 1.01 | 694 | 14. |
| | 16.29 | 317 | 20.41 | 673 | 16.23 | 361 | 21.20 b | 703 | 18.15 | 304 | 22.48 | 654 | 19.13 | 414 | - | - | 20.02 | 308 | 23.37 | 654 | 21.16 | 299 | 13.10 | 697 | 22.09 | 257 | 12.53 | 659 | |
| 15. | 5.14 | 295 | 8.55 | 633 | 5.05 | 345 | 10.03 b | 694 | 6.50 | 305 | 11.10 | 653 | 8.07 | 389 | 0.20 | 774 | 8.06 | 325 | - | - | 9.37 | 300 | 1.44 | 702 | 9.55 | 285 | 1.40 | 613 | 15. |
| | 17.24 | 292 | 21.39 | 665 | 17.43 | 339 | 22.39 b | 692 | 19.44 | 279 | 23.47 | 644 | 20.44 | 323 | 12.25 | 747 | 20.53 | 314 | 12.19 | 757 | 22.05 | 297 | 13.59 | 726 | 22.14 | 306 | 13.23 | 657 | |
| 16. | 6.03 | 310 | 9.57 | 654 | 6.10 | 338 | 10.20 | 684 | 7.30 | 323 | - | - | 8.54 | 310 | 1.11 | 691 | 9.08 | 301 | 0.47 | 680 | 10.33 | 292 | 2.19 | 706 | 10.54 | 312 | 2.03 | 722 | 16. |
| | 18.16 | 329 | 22.27 | 687 | 18.53 | 344 | 22.49 | 677 | 20.22 | 303 | 12.22 | 680 | 20.49 b | 719 | 13.30 | 721 | 21.20 | 320 | 12.48 | 665 | 22.50 | 303 | 14.52 | 700 | 23.13 | 328 | 15.22 | 716 | |
| 17. | 6.54 | 320 | 11.29 | 670 | 7.12 | 348 | 12.09 | 702 | 8.35 | 306 | 0.22 | 670 | 9.28 | 328 | 2.49 b | 651 | 10.02 | 315 | 1.43 | 750 | 11.22 | 277 | 2.42 | 713 | 11.48 | 301 | 3.04 | 734 | 17. |
| | 19.35 | 334 | 23.16 | 675 | 19.48 | 340 | 23.43 | 693 | 21.14 | 296 | 13.12 | 702 | 22.11 | 318 | 14.04 | 748 | 22.10 | 312 | 13.45 | 702 | 23.31 | 314 | 15.53 | 681 | 23.58 | 324 | 15.15 | 677 | |
| 18. | 7.48 | 307 | - | - | 8.08 | 323 | - | - | 9.29 | 292 | 1.13 | 674 | 10.19 | 325 | 2.17 | 697 | 10.46 | 289 | 3.10 | 694 | 11.55 | 309 | 3.44 | 726 | - | - | 3.55 | 738 | 18. |
| | 20.27 | 311 | 12.44 | 686 | 20.37 | 331 | 13.09 | 691 | 21.53 | 292 | 13.44 | 690 | 22.33 | 353 | 15.13 | 739 | 23.03 | 309 | 15.19 | 705 | - | - | 16.34 | 705 | 12.36 | 323 | 15.37 | 687 | |
| 19. | 8.38 | 307 | 0.23 | 692 | 8.43 | 342 | 0.16 | 677 | 10.10 | 304 | 2.24 | 696 | 10.56 | 345 | 2.51 | 744 | 11.26 | 296 | 3.39 | 703 | 0.09 | 329 | 4.23 | 730 | 0.41 | 314 | 4.06 | 691 | 19. |
| | 21.10 | 299 | 12.38 | 690 | 21.31 | 390 | 13.41 | 755 | 22.36 | 296 | 14.35 | 716 | 23.26 | 328 | 15.48 | 758 | 23.49 | 300 | 15.49 | 698 | 12.49 | 299 | 16.30 | 635 | 13.23 | 305 | 16.20 | 651 | |
| 20. | 9.21 | 294 | 1.00 | 674 | 9.30 | 340 | 1.05 | 742 | 10.48 | 308 | 3.07 | 692 | 11.37 | 307 | 3.59 | 710 | - | - | 3.52 | 698 | 0.50 | 283 | 5.01 | 655 | 1.29 | 283 | 4.41 | 654 | 20. |
| | 21.50 | 296 | 13.32 | 705 | 22.12 | 315 | 13.46 | 732 | 23.13 | 306 | 15.11 | 725 | - | - | 16.05 | 716 | 12.07 | 294 | 16.46 | 695 | 13.30 | 295 | 18.40 | 654 | 14.18 | 272 | 17.13 | 572 | |
| 21. | 10.05 | 284 | 1.36 | 684 | 10.21 | 310 | 2.04 | 701 | 11.29 | 295 | 3.42 | 691 | 0.07 | 307 | 4.24 | 677 | 0.30 | 309 | 4.37 | 696 | 1.35 | 333 | 5.20 | 683 | 2.07 | 262 | 5.24 | 591 | 21. |
| | 22.31 | 277 | 14.03 | 686 | 23.00 | 296 | 14.32 | 724 | 23.54 | 294 | 15.46 | 711 | 12.18 | 305 | 17.01 | 685 | 12.57 | 305 | 16.47 | 664 | 14.31 | 292 | 18.18 | 627 | 14.35 | 271 | 17.38 | 574 | |
| 22. | 10.02 | 308 | 2.19 | 664 | 11.02 | 296 | 2.32 | 690 | 11.53 | 320 | 4.41 | 695 | 0.35 | 317 | 5.09 | 697 | 1.07 | 304 | 5.17 | 684 | 2.03 | 340 | 7.10 | 750 | 2.35 | 285 | 6.12 | 615 | 22. |
| | 22.45 | 302 | 14.45 | 690 | 23.34 | 284 | 15.10 | 708 | - | - | 16.32 | 741 | 12.54 | 334 | 17.52 | 697 | 13.40 | 300 | 17.43 | 654 | 15.29 | 333 | 19.06 | 638 | 15.17 | 297 | 18.29 | 595 | |
| 23. | 10.55 | 303 | 2.23 | 656 | 11.42 | 290 | 3.09 | 670 | 0.23 | 322 | 4.57 | 696 | 1.26 | 329 | 5.21 | 678 | 1.55 | 312 | 6.14 | 674 | 3.28 | 307 | 7.13 | 629 | 3.47 | 283 | 7.08 | 593 | 23. |
| | 23.36 | 312 | 15.34 | 694 | - | - | 16.02 | 717 | 12.35 | 317 | 17.17 | 722 | 13.49 | 309 | 17.56 | 650 | 14.40 | 303 | 18.30 | 637 | 16.06 | 326 | 21.05 | 659 | 15.19 | 344 | 18.55 | 629 | |
| 24. | 11.45 | 301 | 3.12 | 666 | 0.10 | 288 | 4.01 | 690 | 1.09 | 312 | 5.10 | 679 | 2.16 | 297 | 6.03 | 616 | 2.46 | 323 | 7.31 | 674 | 4.37 | 350 | 9.06 | 713 | 4.38 | 379 | 8.19 | 696 | 24. |
| | 23.54 | 353 | 15.44 | 691 | 12.18 | 298 | 16.31 | 716 | 13.13 | 308 | 17.56 | 694 | 14.25 | 278 | 18.27 | 592 | 16.02 | 314 | 20.03 | 644 | 17.39 | 324 | 21.31 | 656 | 17.46 | 373 | 20.48 | 672 | |
| 25. | - | - | 4.47 | 696 | 0.48 | 291 | 4.37 | 684 | 1.45 | 309 | 5.47 | 667 | 0.56 | 377 | 8.05 | 641 | 4.10 | 329 | 9.39 | 696 | 6.24 | 284 | 10.00 | 624 | 6.44 | 401 | 9.28 | 698 | 25. |
| | 12.05 | 344 | 16.34 | 762 | 12.51 | 299 | 17.16 | 717 | 13.55 | 322 | 19.06 | 694 | 15.24 | 347 | 19.33 | 636 | 17.11 | 352 | 21.16 | 684 | 17.27 | 401 | 21.56 | 737 | 18.31 | 382 | 22.15 | 698 | |
| 26. | 0.49 | 336 | 4.37 | 700 | 1.29 | 298 | 5.10 | 682 | 2.16 | 347 | 7.15 | 669 | 4.39 | 333 | 8.27 | 652 | 6.25 | 345 | 10.16 | 707 | 6.46 | 358 | 10.19 | 704 | 7.14 | 420 | 10.18 | 722 | 26. |
| | 13.03 | 325 | 17.22 | 713 | 13.40 | 296 | 17.44 | 694 | 14.41 | 362 | 20.15 | 709 | 17.34 | 320 | 21.22 | 636 | 18.32 | 306 | 22.39 | 668 | 19.13 | 330 | - | - | 19.16 | 408 | 22.22 | 713 | |
| 27. | 1.41 | 298 | 5.24 | 666 | 2.14 | 281 | 5.59 | 653 | 3.42 | 356 | 8.14 | 675 | 6.11 | 318 | 11.08 | 678 | 6.30 | 329 | 11.25 | 708 | 7.44 | 329 | 0.11 | 690 | 7.02 | 426 | 10.36 | 716 | 27. |
| | 13.41 | 302 | 18.04 | 695 | 14.17 | 295 | 18.42 | 687 | 16.30 | 308 | 20.17 | 633 | 18.55 | 325 | 23.28 | 686 | 19.12 | 328 | 23.34 | 694 | 20.03 | 306 | 11.15 | 682 | 20.26 | 389 | 23.23 | 728 | |
| 28. | 2.27 | 301 | 6.12 | 667 | 2.54 | 307 | 7.37 | 677 | 5.10 | 293 | 9.48 | 640 | 7.19 | 327 | 11.39 | 700 | 7.35 | 312 | 12.06 | 702 | 8.34 | 312 | 0.40 | 680 | 8.54 | 377 | 11.43 | 667 | 28. |
| | 14.41 | 300 | 18.43 | 680 | 15.26 | 325 | 19.23 | 678 | 17.45 | 326 | 22.59 | 702 | 19.56 | 320 | 23.46 | 666 | 20.10 | 300 | 23.46 | 656 | 20.44 | 320 | 12.31 | 686 | 21.03 | 346 | 23.43 | 633 | |
| 29. | 3.14 | 286 | 7.23 | 664 | 4.03 | 304 | 8.42 | 661 | 6.31 | 344 | 11.02 | 699 | 8.01 | 333 | - | - | 8.15 | 301 | - | - | 9.09 | 314 | 0.55 | 716 | 9.23 | 357 | - | - | 29. |
| | 15.51 | 307 | 20.07 | 679 | 16.37 | 324 | 21.07 | 675 | 19.21 | 314 | - | - | 20.39 | 358 | 12.52 | 748 | 20.31 | 336 | 12.52 | 692 | 21.23 | 322 | 13.35 | 709 | 21.36 | 365 | 12.10 | 656 | |
| 30. | 4.28 | 304 | 8.41 | 662 | 5.28 | 312 | 10.15 | 663 | 7.39 | 330 | 0.12 | 680 | 9.00 | 331 | 1.10 | 723 | 9.00 | 332 | 1.05 | 724 | 9.48 | 304 | 1.22 | 722 | 9.53 | 400 | 2.29 | 734 | 30. |
| | 16.49 | 317 | 21.11 | 691 | 18.00 | 330 | 22.49 | 679 | 20.08 | 320 | 12.26 | 688 | 21.28 | 313 | 13.16 | 712 | 21.23 | 320 | 13.35 | 724 | 22.01 | 308 | 14.10 | 695 | 22.06 | 401 | 13.31 | 760 | |
| 31. | | | | | 6.37 | 322 | 11.23 | 687 | 8.30 | 331 | 1.02 | 703 | | | | | 9.41 | 310 | 1.31 | 694 | | | | | 10.18 | 395 | 1.28 | 750 | 31. |
| | | | | | 19.24 | 313 | 23.27 | 676 | 21.24 | 324 | 13.26 | 769 | | | | | 21.40 | 315 | 13.25 | 676 | | | | | 22.33 | 362 | 13.33 | 714 | |
| Mittel | | 309 | | 688 | | 313 | | 690 | | 310 | | 684 | | 336 | | 691 | | 323 | | 689 | | 326 | | 689 | | 333 | | 679 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 316 | 688 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei
b = beeinflusst

Bundesanstalt für Gewässerkunde Koblenz

# W Tide

PNP : NN - 5.02 m

cm

Pegel : Papenburg Nr. 3790010
Gewässer : Ems
Gebiet : Untere Ems

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 1. | 1.+ | 31. | 26. | 22. | 1.+ | 9. | 3. | 25. | 29. | 8. | 1. | 6. | 15. | 4. | 27. | 15. | 12. | 24. | 24. | 18. | 11. | 17. | 25. | 14. | 20. |
| N | 264 | 609 | 281 | 643 | 309 | 583 | 280 | 595 | 272 | 592 | 274 | 626 | 262 | 620 | 276 | 633 | 278 | 653 | 279 | 626 | 278 | 592 | 289 | 633 | 277 | 624 | 257 | 572 |
| M | 313 | 678 | 376 | 731 | 418 | 717 | 315 | 680 | 307 | 685 | 310 | 681 | 303 | 685 | 309 | 688 | 313 | 690 | 310 | 684 | 336 | 691 | 323 | 689 | 326 | 689 | 333 | 679 |
| H | 443 | 844 | 503 | 849 | 774 | 880 | 394 | 786 | 408 | 748 | 700 | 752 | 389 | 744 | 353 | 762 | 390 | 755 | 362 | 769 | 719 | 774 | 405 | 757 | 401 | 750 | 440 | 760 |
| Tag | 27. | 28. | 9. | 10. | 20. | 5. | 15. | 15. | 31. | 11. | 13. | 7. | 16. | 16. | 24. | 25. | 19. | 19. | 26. | 31. | 16. | 15. | 9. | 15. | 25. | 22. | 10. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2002 | 2002+ | 2002 | 2010 | 2004 | 2009 | 2011 | 2011 | 2005 | 2004 | 2004 | 2011 | 2011 | 2009 | 2004 | 2010 | 2004 | 2011 | 2012 | 2010 | 2012 | 2011 | 2011 | 2011 | 2005 | 2008+ | 2010 |
| N | 264 | 589 | 248 | 559 | 241 | 541 | 262 | 558 | 265 | 585 | 259 | 597 | 258 | 603 | 267 | 628 | 269 | 622 | 270 | 626 | 251 | 592 | 246 | 568 | 264 | 590 | 257 | 563 |
| MN | 291 | 611 | 282 | 606 | 288 | 596 | 293 | 601 | 288 | 603 | 274 | 620 | 277 | 623 | 285 | 638 | 285 | 641 | 292 | 637 | 284 | 619 | 273 | 608 | 289 | 615 | 283 | 607 |
| M | 352 | 696 | 344 | 693 | 371 | 697 | 353 | 685 | 345 | 690 | 314 | 684 | 314 | 686 | 322 | 691 | 326 | 694 | 332 | 694 | 336 | 693 | 333 | 690 | 348 | 696 | 347 | 696 |
| MH | 566 | 806 | 464 | 803 | 552 | 806 | 517 | 805 | 616 | 800 | 478 | 761 | 371 | 750 | 496 | 767 | 424 | 767 | 426 | 770 | 535 | 773 | 442 | 786 | 531 | 804 | 470 | 807 |
| H | 774 | 856 | 554 | 858 | 774 | 880 | 753 | 876 | 786 | 883 | 700 | 816 | 404 | 775 | 715 | 814 | 712 | 807 | 659 | 788 | 754 | 814 | 496 | 842 | 774 | 856 | 554 | 858 |
| Jahr | 2010 | 2007 | 2003 | 2005 | 2012 | 2012 | 2009 | 2004 | 2006 | 2008 | 2012 | 2003 | 2007 | 2006 | 2011 | 2007 | 2003 | 2007 | 2008 | 2011 | 2008 | 2004 | 2010 | 2009 | 2010 | 2007 | 2003 | 2005 |
| HThw ab 1931 | 903 | | 900 | | 958 | | 916 | | 886 | | 835 | | 775 | | 814 | | 807 | | 800 | | 831 | | 867 | | 903 | | 900 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 262 | 08.05.2012 | 264 | 262 | 257 | 14.12.2012 |
| NThw | 583 | 26.01.2012 | 583 | 592 | 572 | 20.12.2012 |
| M | 328 692 | | 341 696 | 316 688 | 325 688 | |
| HTnw | 774 | 20.01.2012 | 774 | 719 | 774 | 20.01.2012 |
| HThw | 880 | 05.01.2012 | 880 | 774 | 880 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 241 | 16.01.2010 | 241 | 246 | 241 | 16.01.2010 |
| NThw | 541 | 01.01.2004 | 541 | 568 | 541 | 01.01.2004 |
| MN | 258 568 | | 264 568 | 264 601 | 258 570 | |
| M | 337 691 | | 346 691 | 327 691 | 337 691 | |
| MH | 758 852 | | 749 851 | 652 806 | 752 856 | |
| HTnw | 786 | 13.03.2006 | 786 | 754 | 786 | 13.03.2006 |
| HThw | 883 | 01.03.2008 | 883 | 842 | 883 | 01.03.2008 |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | 205 | 17.12.1997 | 390 | 07.12.1959 | 786 | 13.03.2006 | 958 | 28.01.1994 |
| 2 | 228 | 19.11.1997 | 430 | 01.02.1950 | 774 | 20.01.2012 | 929 | 04.01.1976 |
| 3 | 228 | 13.03.1996 | 442 | 15.03.1964 | 774 | 13.11.2010 | 922 | 10.01.1995 |
| 4 | 229 | 17.12.1997 | 446 | 17.11.1965 | 769 | 10.03.2007 | 919 | 03.01.1976 |
| 5 | 230 | 18.12.1997 | 448 | 08.03.1952 | 768 | 06.11.2006 | 916 | 28.02.1990 |
| 6 | 232 | 20.01.1996 | 448 | 10.02.1947 | 763 | 11.03.2010 | 914 | 27.02.1990 |
| 7 | 234 | 19.11.1997 | 451 | 15.03.1964 | 762 | 05.11.2006 | 911 | 05.02.1999 |
| 8 | 235 | 21.10.1999 | 453 | 08.12.1959 | 759 | 17.02.1962 | 910 | 29.01.1994 |
| 9 | 235 | 12.03.1996 | 454 | 25.01.1942 | 754 | 28.09.2008 | 905 | 02.01.1995 |
| 10 | 237 | 21.01.1996 | 455 | 17.01.1972 | 753 | 21.02.2009 | 904 | 30.01.2000 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | 705.9 |
| 780 | | | 60 | | | | | | | | | | | | 352 | | 708 | 708 | 705.8 |
| 760 | | | 58 | | | | | | | | | | | | 350 | | 706 | 706 | 705.1 |
| 740 | | | 58 | | | | | | | | | | | | 350 | | 706 | 706 | 704.4 |
| 720 | | | 58 | | | 58 | | | | | 58 | | | | 350 | 356 | 706 | 706 | 703.9 |
| 700 | | | 58 | | | 57 | | | | | 57 | | | | 349 | 355 | 704 | 704 | 703.1 |
| 680 | | | 58 | | | 57 | | | | | 57 | | | | 349 | 355 | 704 | 704 | 702.7 |
| 660 | | | 58 | | | 57 | | | | | 57 | | | | 349 | 355 | 704 | 704 | 702.5 |
| 640 | | | 57 | | | 57 | | | | | 57 | | | | 348 | 355 | 703 | 703 | 702.0 |
| 620 | | | 56 | | | 57 | | | | | 57 | | | | 347 | 355 | 702 | 702 | 701.7 |
| 600 | | | 56 | | | 57 | | | | | 57 | | | | 347 | 355 | 702 | 702 | 701.7 |
| 580 | | | 56 | | | 57 | | | | | 57 | | | | 347 | 355 | 702 | 702 | 701.7 |
| 560 | | | 55 | | | 57 | | | | | 57 | | | | 346 | 355 | 701 | 701 | 701.4 |
| 540 | | | 54 | | | 57 | | | | | 57 | | | | 345 | 355 | 700 | 700 | 700.8 |
| 520 | | 60 | 53 | | | 57 | | | | | 57 | | | | 344 | 355 | 699 | 699 | 699.7 |
| 500 | | 59 | 52 | | | 57 | | | | | 57 | | | | 342 | 355 | 697 | 698 | 697.7 |
| 480 | | 58 | 50 | | | 57 | | | | | 57 | | | | 339 | 355 | 694 | 696 | 695.1 |
| 460 | 58 | 58 | 46 | | | 57 | | | | | 57 | | | 60 | 335 | 355 | 690 | 692 | 691.6 |
| 440 | 57 | 56 | 45 | | | 57 | | | | | 57 | | | 59 | 331 | 355 | 686 | 690 | 686.0 |
| 420 | 57 | 51 | 43 | | 60 | 57 | | | | | 57 | 60 | 58 | 57 | 324 | 355 | 679 | 686 | 672.5 |
| 400 | 57 | 42 | 34 | 56 | 59 | 57 | 60 | | 60 | | 56 | 59 | 57 | 52 | 305 | 353 | 658 | 668 | 650.6 |
| 380 | 57 | 35 | 25 | 53 | 59 | 57 | 58 | | 59 | 60 | 53 | 58 | 55 | 49 | 286 | 346 | 632 | 644 | 617.4 |
| 360 | 54 | 21 | 18 | 53 | 57 | 56 | 58 | 58 | 58 | 59 | 50 | 54 | 52 | 43 | 259 | 337 | 596 | 616 | 562.2 |
| 340 | 49 | 11 | 6 | 48 | 51 | 52 | 55 | 55 | 51 | 56 | 44 | 47 | 42 | 37 | 217 | 308 | 525 | 544 | 453.7 |
| 320 | 37 | 4 | 2 | 36 | 43 | 49 | 49 | 42 | 36 | 46 | 21 | 33 | 24 | 30 | 171 | 227 | 398 | 411 | 284.5 |
| 300 | 21 | 2 | | 15 | 31 | 26 | 30 | 16 | 25 | 17 | 7 | 5 | 10 | 11 | 95 | 100 | 195 | 193 | 109.3 |
| 280 | 5 | | | | 2 | 6 | 4 | 2 | 1 | 1 | 1 | | 1 | 4 | 13 | 9 | 22 | 22 | 17.5 |
| 260 | | | | | | | | | | | | | | 1 | | | | 1 | 1.6 |
| 240 | | | | | | | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | |
| 960 | | | | | | | | | | | | | | | | | | | |
| 940 | | | | | | | | | | | | | | | | | | | |
| 920 | | | | | | | | | | | | | | | | | | | |
| 900 | | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.8 |
| 880 | | | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.6 |
| 860 | 58 | 60 | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.5 |
| 840 | 57 | 58 | 58 | | | | | | | | | | | | 347 | | 702 | 705 | 703.7 |
| 820 | 56 | 54 | 56 | | | | | | | | | | | | 340 | | 695 | 703 | 701.3 |
| 800 | 56 | 54 | 53 | 56 | | | | | | | | | | | 337 | | 692 | 700 | 697.6 |
| 780 | 56 | 50 | 49 | 55 | | | | 58 | | 59 | 58 | | | 60 | 328 | 355 | 683 | 695 | 689.2 |
| 760 | 54 | 48 | 46 | 53 | 60 | 58 | 60 | 57 | 60 | 58 | 57 | 60 | 58 | 59 | 319 | 352 | 671 | 686 | 675.0 |
| 740 | 53 | 38 | 43 | 48 | 58 | 57 | 59 | 56 | 58 | 57 | 51 | 57 | 57 | 56 | 297 | 338 | 635 | 657 | 635.1 |
| 720 | 49 | 24 | 36 | 43 | 52 | 54 | 55 | 53 | 55 | 50 | 45 | 52 | 47 | 49 | 258 | 310 | 568 | 591 | 563.9 |
| 700 | 47 | 15 | 21 | 38 | 42 | 46 | 43 | 40 | 42 | 42 | 37 | 38 | 35 | 41 | 209 | 242 | 451 | 465 | 443.1 |
| 680 | 39 | 8 | 15 | 29 | 23 | 27 | 23 | 22 | 21 | 26 | 23 | 24 | 17 | 27 | 141 | 139 | 280 | 277 | 271.0 |
| 660 | 23 | 4 | 9 | 18 | 10 | 13 | 12 | 4 | 3 | 12 | 12 | 11 | 12 | 20 | 77 | 54 | 131 | 136 | 128.0 |
| 640 | 5 | | 6 | 12 | 5 | 1 | 1 | 1 | | 6 | 4 | 3 | 6 | 12 | 29 | 15 | 44 | 57 | 48.0 |
| 620 | 1 | | 4 | 6 | 1 | | | | | | 2 | | | 8 | 12 | 2 | 14 | 21 | 14.0 |
| 600 | | | 1 | 3 | 1 | | | | | | 1 | | | 5 | 5 | 1 | 6 | 11 | 4.3 |
| 580 | | | | | | | | | | | | | | 2 | | | | 2 | 1.6 |
| 560 | | | | | | | | | | | | | | | | | | | 0.3 |
| 540 | | | | | | | | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
**) Extremwerte ab 1931

Bundesanstalt für Gewässerkunde Koblenz

# W Tide

PNP : NN - 5.02 m

cm

Pegel : Leerort Nr. 3910010
Gewässer : Ems
Gebiet : Untere Ems

## Hauptwerte

| | 2011 Nov Tnw | Nov Thw | Dez Tnw | Dez Thw | 2012 Jan Tnw | Jan Thw | Feb Tnw | Feb Thw | Mrz Tnw | Mrz Thw | Apr Tnw | Apr Thw | Mai Tnw | Mai Thw | Jun Tnw | Jun Thw | Jul Tnw | Jul Thw | Aug Tnw | Aug Thw | Sep Tnw | Sep Thw | Okt Tnw | Okt Thw | Nov Tnw | Nov Thw | Dez Tnw | Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 12. | 1. | 28. | 31. | 26. | 11. | 1. | 9. | 3. | 4. | 29. | 8. | 1. | 6. | 15. | 4. | 27. | 15. | 12. | 24. | 24. | 18. | 11. | 17. | 21.+ | 21. | 20. |
| N | 264 | 591 | 293 | 623 | 289 | 565 | 259 | 575 | 272 | 574 | 272 | 592 | 261 | 602 | 277 | 616 | 277 | 639 | 280 | 613 | 281 | 585 | 294 | 616 | 283 | 620 | 243 | 543 |
| M | 318 | 668 | 374 | 723 | 391 | 707 | 309 | 666 | 308 | 671 | 311 | 670 | 302 | 675 | 310 | 679 | 315 | 681 | 313 | 675 | 342 | 682 | 328 | 680 | 332 | 682 | 326 | 667 |
| H | 456 | 854 | 512 | 856 | 771 | 888 | 404 | 775 | 409 | 735 | 700 | 741 | 393 | 731 | 356 | 756 | 392 | 748 | 373 | 763 | 721 | 766 | 412 | 746 | 419 | 743 | 448 | 747 |
| Tag | 27. | 28. | 9. | 7. | 20. | 5. | 15. | 15. | 31. | 11. | 12. | 7. | 16. | 16. | 24. | 25. | 19. | 19. | 26. | 31. | 16. | 14. | 9. | 15. | 25. | 22. | 10. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 2005 | 2002 | 2002 | 2010 | 2004 | 2009 | 2011 | 2006 | 2012 | 2004 | 2004 | 2012 | 2011 | 2009 | 2012 | 2010 | 2004 | 2011 | 2005 | 2010 | 2012 | 2011 | 2011 | 2011 | 2005 | 2008+ | 2010 |
| N | 264 | 572 | 242 | 538 | 233 | 520 | 249 | 532 | 261 | 574 | 259 | 573 | 261 | 586 | 271 | 616 | 273 | 596 | 274 | 606 | 247 | 585 | 238 | 541 | 264 | 572 | 243 | 539 |
| MN | 285 | 597 | 278 | 586 | 278 | 578 | 280 | 582 | 279 | 590 | 273 | 602 | 274 | 604 | 282 | 624 | 283 | 627 | 292 | 622 | 282 | 606 | 273 | 588 | 285 | 599 | 278 | 586 |
| M | 348 | 684 | 338 | 680 | 354 | 685 | 338 | 672 | 336 | 677 | 312 | 671 | 312 | 674 | 321 | 680 | 325 | 682 | 332 | 682 | 337 | 682 | 335 | 678 | 346 | 685 | 340 | 683 |
| MH | 569 | 805 | 464 | 801 | 544 | 802 | 510 | 800 | 616 | 797 | 479 | 750 | 372 | 738 | 500 | 759 | 428 | 759 | 426 | 762 | 540 | 766 | 449 | 781 | 536 | 803 | 470 | 804 |
| H | 773 | 860 | 553 | 865 | 771 | 888 | 751 | 884 | 785 | 900 | 700 | 817 | 412 | 760 | 717 | 810 | 713 | 800 | 657 | 784 | 751 | 809 | 509 | 848 | 773 | 860 | 553 | 865 |
| Jahr | 2010 | 2007 | 2003 | 2005 | 2012 | 2012 | 2009 | 2004 | 2006 | 2008 | 2012 | 2003 | 2011 | 2011 | 2011 | 2007 | 2003 | 2007 | 2008 | 2011 | 2008 | 2004 | 2010 | 2009 | 2010 | 2007 | 2003 | 2005 |
| HThw ab 1900 | 971 | | 954 | | 1002 | | 1006 | | 1006 | | 865 | | 780 | | 810 | | 807 | | 828 | | 925 | | 888 | | 971 | | 954 | |

| | Abflussjahr (*) 2012 Jahr | | Datum | | Winter | | Sommer | | Kalenderjahr 2012 Jahr | | Datum | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NTnw | 259 | | 11.02.2012 | | 259 | | 261 | | 243 | | 21.12.2012 | |
| NThw | | 565 | 26.01.2012 | | | 565 | | 585 | | 543 | 20.12.2012 | |
| M | 327 | 682 | | | 336 | 685 | 318 | 679 | 324 | 678 | | |
| HTnw | 771 | | 20.01.2012 | | 771 | | 721 | | 771 | | 20.01.2012 | |
| HThw | | 888 | 05.01.2012 | | | 888 | | 766 | | 888 | 05.01.2012 | |
| | 2003/2012 (*) 10 Jahre | | | | | | | | 2003/2012 | | | |
| NTnw | 233 | | 16.01.2010 | | 233 | | 238 | | 233 | | 16.01.2010 | |
| NThw | | 520 | 01.01.2004 | | | 520 | | 541 | | 520 | 01.01.2004 | |
| MN | 252 | 547 | | | 255 | 547 | 260 | 583 | 252 | 549 | | |
| M | 332 | 679 | | | 338 | 678 | 327 | 680 | 332 | 679 | | |
| MH | 756 | 858 | | | 746 | 856 | 654 | 803 | 750 | 864 | | |
| HTnw | 785 | | 13.03.2006 | | 785 | | 751 | | 785 | | 13.03.2006 | |
| HThw | | 900 | 01.03.2008 | | | 900 | | 848 | | 900 | 01.03.2008 | |

## Extremwerte **)

| | NTnw cm | | Datum | NThw cm | Datum | HTnw cm | Datum | HThw cm | Datum |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 183 | e | 17.12.1997 | 381 | 07.12.1959 | 785 | 13.03.2006 | 1006 | 16.02.1962 |
| 2 | 205 | e | 17.12.1997 | 387 | 18.11.1916 | 773 | 12.11.2010 | 1006 | 13.03.1906 |
| 3 | 212 | e | 19.11.1916 | 393 | 18.01.1912 | 771 | 20.01.2012 | 1002 | 28.01.1994 |
| 4 | 223 | e | 15.03.1964 | 398 | 25.01.1937 | 767 | 06.11.2006 | 1001 | 28.01.1901 |
| 5 | 225 | | 08.12.1959 | 400 | 19.11.1916 | 765 | 10.03.2007 | 981 | 04.01.1976 |
| 6 | 226 | e | 18.12.1997 | 407 | 08.01.1897 | 763 | 05.11.2006 | 971 | 03.01.1976 |
| 7 | 226 | | 13.03.1996 | 415 | 10.02.1947 | 762 | 11.03.2010 | 971 | 19.11.1973 |
| 8 | 230 | | 19.11.1997 | 418 | 31.01.1950 | 751 | 21.02.2009 | 970 | 10.01.1995 |
| 9 | 231 | | 15.02.1994 | 423 | 15.03.1964 | 751 | 28.09.2008 | 965 | 13.01.1916 |
| 10 | 233 | | 21.10.1999 | 424 | 06.01.1947 | 751 | 03.11.2002 | 964 | 04.02.1944 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | 705.9 |
| 780 | | | 60 | | | | | | | | | | | | 351 | | 707 | 708 | 705.8 |
| 760 | | | 58 | | | | | | | | | | | | 349 | | 705 | 706 | 705.1 |
| 740 | | | 58 | | | | | | | | 58 | | | | 349 | 356 | 705 | 706 | 704.6 |
| 720 | | | 58 | | | 58 | | | | | 57 | | | | 349 | 355 | 704 | 705 | 704.0 |
| 700 | | | 58 | | | 57 | | | | | 57 | | | | 348 | 355 | 703 | 704 | 703.1 |
| 680 | | | 58 | | | 57 | | | | | 57 | | | | 348 | 355 | 703 | 704 | 702.8 |
| 660 | | | 58 | | | 57 | | | | | 57 | | | | 348 | 355 | 703 | 704 | 702.6 |
| 640 | | | 58 | | | 57 | | | | | 57 | | | | 348 | 355 | 703 | 704 | 702.1 |
| 620 | | | 56 | | | 57 | | | | | 57 | | | | 346 | 355 | 701 | 702 | 701.7 |
| 600 | | | 56 | | | 57 | | | | | 57 | | | | 346 | 355 | 701 | 702 | 701.7 |
| 580 | | | 56 | | | 57 | | | | | 57 | | | | 346 | 355 | 701 | 702 | 701.6 |
| 560 | | | 55 | | | 57 | | | | | 57 | | | | 345 | 355 | 700 | 701 | 701.5 |
| 540 | | | 54 | | | 57 | | | | | 57 | | | | 344 | 355 | 699 | 700 | 700.4 |
| 520 | | 59 | 54 | | | 57 | | | | | 57 | | | | 344 | 355 | 699 | 700 | 700.0 |
| 500 | | 58 | 53 | | | 57 | | | | | 57 | | | | 342 | 355 | 697 | 699 | 698.3 |
| 480 | | 57 | 52 | | | 57 | | | | | 57 | | | | 340 | 355 | 695 | 698 | 696.4 |
| 460 | 58 | 56 | 50 | | | 57 | | | | | 57 | | | 60 | 337 | 355 | 692 | 696 | 693.0 |
| 440 | 57 | 53 | 48 | | | 57 | | | | | 57 | | | 59 | 331 | 355 | 686 | 693 | 688.7 |
| 420 | 57 | 49 | 46 | 56 | 60 | 57 | | | | | 56 | 60 | 58 | 59 | 325 | 354 | 679 | 690 | 680.1 |
| 400 | 57 | 42 | 43 | 54 | 59 | 57 | 60 | | 60 | | 55 | 59 | 57 | 56 | 312 | 352 | 664 | 678 | 666.8 |
| 380 | 56 | 38 | 39 | 54 | 59 | 57 | 58 | | 59 | 60 | 52 | 57 | 54 | 51 | 303 | 344 | 647 | 658 | 639.0 |
| 360 | 53 | 27 | 28 | 53 | 56 | 56 | 58 | 58 | 58 | 58 | 46 | 53 | 51 | 49 | 273 | 331 | 604 | 624 | 584.4 |
| 340 | 48 | 12 | 20 | 53 | 51 | 52 | 54 | 55 | 51 | 56 | 38 | 43 | 36 | 43 | 236 | 297 | 533 | 552 | 484.4 |
| 320 | 35 | 5 | 12 | 40 | 44 | 49 | 50 | 43 | 35 | 43 | 19 | 30 | 22 | 30 | 185 | 220 | 405 | 417 | 320.4 |
| 300 | 19 | 2 | 3 | 22 | 31 | 27 | 32 | 17 | 20 | 13 | 3 | 4 | 5 | 13 | 104 | 89 | 193 | 190 | 123.4 |
| 280 | 3 | | | 6 | 4 | 5 | 4 | 2 | 1 | | | | | 7 | 18 | 7 | 25 | 29 | 19.4 |
| 260 | | | | 1 | | | | | | | | | | 4 | 1 | | 1 | 5 | 2.8 |
| 240 | | | | | | | | | | | | | | | | | | | 0.2 |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | |
| 960 | | | | | | | | | | | | | | | | | | | |
| 940 | | | | | | | | | | | | | | | | | | | |
| 920 | | | | | | | | | | | | | | | | | | | 705.8 |
| 900 | | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.7 |
| 880 | | | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.5 |
| 860 | 58 | 60 | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.1 |
| 840 | 56 | 57 | 58 | | | | | | | | | | | | 345 | | 700 | 705 | 703.4 |
| 820 | 56 | 54 | 57 | | | | | | | | | | | | 341 | | 696 | 704 | 701.7 |
| 800 | 56 | 54 | 54 | | | | | | | | | | | | 338 | | 693 | 701 | 699.2 |
| 780 | 56 | 53 | 50 | 56 | | | | | | 59 | 58 | | | | 333 | 355 | 688 | 697 | 694.5 |
| 760 | 55 | 48 | 47 | 55 | | 58 | | 58 | 60 | 58 | 57 | 60 | 58 | 60 | 323 | 353 | 676 | 691 | 682.8 |
| 740 | 53 | 41 | 44 | 52 | 60 | 57 | 60 | 57 | 59 | 58 | 56 | 58 | 57 | 58 | 307 | 348 | 655 | 676 | 660.6 |
| 720 | 52 | 32 | 41 | 47 | 58 | 56 | 57 | 56 | 56 | 56 | 49 | 55 | 55 | 53 | 286 | 329 | 615 | 639 | 613.5 |
| 700 | 49 | 18 | 31 | 42 | 47 | 48 | 51 | 46 | 48 | 46 | 39 | 47 | 45 | 45 | 235 | 277 | 512 | 535 | 522.7 |
| 680 | 45 | 13 | 20 | 36 | 38 | 35 | 33 | 31 | 35 | 30 | 28 | 27 | 26 | 31 | 187 | 184 | 371 | 370 | 369.2 |
| 660 | 30 | 6 | 12 | 25 | 15 | 22 | 17 | 16 | 9 | 15 | 13 | 16 | 12 | 21 | 110 | 86 | 196 | 193 | 208.9 |
| 640 | 15 | 3 | 8 | 17 | 9 | 9 | 6 | 1 | 1 | 10 | 6 | 5 | 6 | 15 | 61 | 29 | 90 | 93 | 97.9 |
| 620 | 4 | | 5 | 10 | 4 | 1 | 1 | 1 | | 4 | 2 | 2 | | 10 | 24 | 10 | 34 | 40 | 34.3 |
| 600 | 1 | | 4 | 6 | 1 | 1 | | | | | 2 | | | 5 | 13 | 2 | 15 | 19 | 13.1 |
| 580 | | | 1 | 1 | 1 | | | | | | | | | 5 | 3 | | 3 | 8 | 4.4 |
| 560 | | | | | | | | | | | | | | 2 | | | | 2 | 1.9 |
| 540 | | | | | | | | | | | | | | | | | | | 0.4 |
| 520 | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
**) Extremwerte ab 1900
e = ergänzt

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.02 m

W Tide
cm

Pegel : Leerort
Gewässer : Ems
Gebiet : Untere Ems

Nr. 3910010

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 11.45 | 296 | 4.28 | 675 | 11.53 | 293 | 4.25 | 675 | 0.21 | 336 | 5.00 | 702 | 0.34 | 289 | 5.35 | 590 | 0.09 | 308 | 5.01 | 654 | 0.57 | 346 | 6.14 | 633 | 2.09 | 284 | 7.23 | 602 | 1. |
| | 23.45 | 332 | 17.13 | 661 | 23.24 | 374 | 17.14 | 638 | 12.45 | 360 | 17.05 | 666 | 13.09 | 296 | 17.49 | 575 | 12.26 | 322 | 17.15 | 654 | 12.56 | 355 | 19.24 | 679 | 14.27 | 275 | 20.08 | 650 | |
| 2. | - | - | 4.49 | 717 | - | - | 5.11 | 774 | 0.50 | 365 | 5.59 | 708 | 1.15 | 296 | 6.34 | 580 | 0.42 | 325 | 5.28 | 638 | 2.24 | 371 | 7.58 | 655 | 3.37 | 291 | 8.52 | 635 | 2. |
| | 12.25 | 327 | 17.32 | 651 | 12.46 | 367 | 17.43 | 671 | 13.31 | 391 | 18.01 | 686 | 13.22 | 320 | 18.54 | 596 | 12.59 | 324 | 17.51 | 614 | 15.05 | 334 | 20.36 | 658 | 16.05 | 302 | 21.20 | 658 | |
| 3. | 0.40 | 311 | 5.53 | 649 | 0.42 | 342 | 5.48 | 667 | 1.41 | 402 | 5.50 | 685 | 2.01 R | 336 | 7.56 R | 616 | 1.30 | 301 | 6.28 | 574 | 4.00 | 304 | 9.40 | 636 | 4.52 | 283 | 10.17 | 652 | 3. |
| | 13.08 | 304 | 18.33 | 631 | 12.51 | 368 | 19.49 | 715 | 13.57 | 370 | 19.47 | 713 | 15.12 R | 332 | 20.43 R | 615 | 13.49 | 304 | 19.11 | 605 | 16.37 | 298 | 22.05 | 646 | 17.16 | 303 | 22.27 | 691 | |
| 4. | 1.14 | 338 | 6.39 | 663 | 0.54 | 496 | 6.57 | 822 | 0.07 | 565 | 7.33 | 772 | 3.49 T | 332 | 9.30 T | 623 | 2.59 | 316 | 8.07 | 608 | 5.30 | 272 | 10.46 | 625 | 5.59 | 284 | 11.23 | 675 | 4. |
| | 13.54 | 334 | 19.29 | 643 | 14.38 | 439 | 19.16 | 720 | 15.08 | 545 | 19.36 | 781 | 16.39 T | 321 | 21.58 T | 619 | 15.33 | 349 | 21.18 | 673 | 17.45 | 286 | 23.00 | 656 | 18.21 | 309 | 23.30 | 704 | |
| 5. | 2.24 | 357 | 8.05 | 686 | 2.32 | 406 | 7.56 | 745 | 2.42 | 495 | 9.13 | 794 | 5.33 T | 282 | 10.50 T | 581 | 5.08 | 323 | 10.11 | 633 | 6.30 | 274 | 11.45 | 641 | 7.00 | 300 | - | - | 5. |
| | 15.31 | 339 | 20.55 | 643 | 15.32 | 430 | 20.45 | 724 | 13.22 | 633 | 21.50 | 888 | 17.42 T | 310 | 23.05 T | 642 | 17.12 | 324 | 22.38 | 667 | 18.59 | 276 | - | - | 19.24 | 300 | 12.04 | 692 | |
| 6. | 3.36 | 356 | 9.25 | 683 | 3.54 | 406 | 9.06 | 711 | 5.32 | 629 | 9.39 | 803 | 6.34 T | 309 | 11.44 T | 631 | 6.09 | 305 | 11.19 | 645 | 7.27 | 279 | 0.08 | 672 | 7.57 | 283 | 0.15 | 706 | 6. |
| | 16.45 | 342 | 22.01 | 642 | 16.18 | 412 | 22.04 | 748 | 18.05 | 446 | 22.12 | 693 | 18.53 T | 316 | 23.47 T | 640 | 18.35 | 299 | 23.36 | 660 | 19.46 | 306 | 12.50 | 680 | 20.21 | 283 | 13.02 | 686 | |
| 7. | 4.51 | 339 | 10.35 | 666 | 5.21 | 392 | 10.59 | 706 | 5.58 | 372 | 11.43 | 706 | 7.18 T | 307 | - | - | 7.14 | 285 | 11.53 | 620 | 8.13 | 315 | 0.43 | 741 | 8.49 | 286 | 1.18 | 705 | 7. |
| | 17.49 | 304 | 22.59 | 630 | 16.56 | 443 | 22.41 | 856 | 18.21 | 441 | 23.42 | 791 | 19.48 T | 292 | 12.31 T | 623 | 19.06 | 300 | - | - | 20.42 | 293 | 13.11 | 703 | 21.21 | 269 | 13.50 | 688 | |
| 8. | 5.54 | 303 | 11.08 | 651 | 6.34 | 453 | 10.37 | 737 | 7.09 | 471 | 11.27 | 776 | 8.17 T | 279 | 0.37 T | 630 | 7.53 | 352 | 1.02 | 719 | 9.16 | 282 | 1.42 | 715 | 9.33 | 261 | 2.03 | 651 | 8. |
| | 18.28 | 296 | 23.43 | 630 | 18.41 | 323 | - | - | 19.42 | 402 | 23.35 | 705 | 20.32 T | 277 | 12.55 T | 601 | 20.16 | 316 | 12.45 | 732 | 21.27 | 281 | 14.10 | 684 | 22.07 | 271 | 14.54 | 668 | |
| 9. | 6.47 | 298 | 11.53 | 650 | 5.37 | 440 | 0.59 | 677 | 8.08 | 348 | - | - | 9.01 T | 289 | 1.09 T | 652 | 8.54 | 272 | 0.57 | 713 | 9.48 | 288 | 2.35 | 686 | 10.20 | 290 | 3.06 | 680 | 9. |
| | 19.11 | 297 | - | - | 18.39 | 512 | 12.11 | 840 | 20.07 | 374 | 12.27 | 675 | 21.10 T | 290 | 13.47 T | 658 | 20.58 | 293 | 13.41 | 662 | 22.10 | 302 | 14.55 | 712 | 22.51 | 286 | 15.26 | 699 | |
| 10. | 7.34 | 297 | 0.29 | 645 | 7.56 | 411 | 23.35 * | 852 | 8.54 | 364 | 0.58 | 747 | 9.42 T | 270 | 2.15 T | 658 | 9.31 | 295 | 1.41 | 716 | 10.23 | 309 | 3.19 | 700 | 11.07 | 287 | 3.49 | 670 | 10. |
| | 19.58 | 289 | 12.46 | 650 | 19.46 | 399 | 12.21 | 776 | 20.54 | 346 | 12.48 | 687 | 22.01 T | 269 | 14.41 T | 598 | 21.49 | 301 | 14.34 | 714 | 22.54 | 304 | 15.35 | 712 | 23.38 | 294 | 16.11 | 696 | |
| 11. | 8.18 | 274 | 1.01 | 631 | 8.16 | 347 | 0.23 | 742 | 9.19 | 355 | 1.08 | 708 | 10.22 T | 259 | 3.00 T | 631 | 10.18 | 286 | 2.33 | 735 | 11.10 | 318 | 3.47 | 711 | 11.35 | 330 | 4.51 | 674 | 11. |
| | 20.25 | 264 | 13.11 | 607 | 20.26 | 321 | 12.49 | 685 | 21.38 | 341 | 13.33 | 698 | 22.32 T | 272 | 15.45 T | 628 | 22.36 | 287 | 15.16 | 693 | 23.39 | 306 | 16.16 | 722 | - | - | 16.44 | 723 | |
| 12. | 8.37 | 265 | 1.25 | 591 | 8.54 | 324 | 1.05 | 690 | 9.53 | 362 | 1.54 | 713 | 11.00 T | 283 | 3.52 T | 674 | 10.56 | 288 | 3.12 | 718 | 11.53 | 314 | 4.33 | 694 | 0.16 | 324 | 5.24 | 690 | 12. |
| | 20.55 | 283 | 14.02 | 613 | 21.07 | 355 | 14.21 | 724 | 22.16 | 424 | 16.26 | 793 | 23.15 T | 288 | 15.49 T | 652 | 23.16 | 281 | 15.57 | 701 | 23.35 b | 700 | 16.44 | 706 | 12.22 | 352 | 17.27 | 724 | |
| 13. | 9.21 | 312 | 2.18 | 672 | 9.18 | 301 | 1.45 | 712 | 10.57 | 434 | 3.00 | 850 | 11.43 T | 289 | 4.10 T | 696 | 11.34 | 286 | 4.04 | 695 | - | - | 5.57 b | 660 | 1.13 | 301 | 5.54 | 632 | 13. |
| | 21.36 | 305 | 14.24 | 678 | 21.18 | 368 | 15.18 | 657 | 23.19 | 390 | 15.45 | 801 | 23.44 T | 305 | 16.50 T | 669 | 23.57 | 278 | 16.28 | 668 | 12.26 | 319 | 17.37 | 704 | 13.01 | 299 | 18.29 | 672 | |
| 14. | 9.48 | 290 | 2.35 | 657 | 9.57 | 367 | 2.31 | 740 | 11.36 | 325 | 3.22 | 752 | - | - | 4.47 T | 724 | - | - | 4.56 | 670 | 1.11 | 310 | 6.13 | 665 | 2.01 | 290 | 7.08 | 628 | 14. |
| | 21.58 | 295 | 14.57 | 638 | 21.45 | 376 | 14.30 | 690 | 23.36 | 320 | 15.55 | 678 | 12.16 T | 334 | 17.10 T | 711 | 12.13 | 289 | 17.15 | 661 | 13.14 | 334 | 18.41 | 692 | 13.48 | 342 | 19.36 | 715 | |
| 15. | 10.29 | 298 | 3.12 | 663 | 10.44 | 352 | 3.17 | 761 | - | - | 4.06 | 712 | 0.11 T | 334 | 5.54 T | 775 | 0.32 | 283 | 5.25 | 649 | 2.13 | 320 | 7.31 | 650 | 2.57 | 340 | 7.52 | 647 | 15. |
| | 22.36 | 290 | 15.25 | 631 | 22.41 | 355 | 15.41 | 674 | 12.03 | 316 | 16.34 | 662 | 12.46 T | 404 | 17.51 T | 732 | 12.48 | 296 | 17.52 | 666 | 14.27 | 344 | 20.13 | 688 | 15.06 | 340 | 20.46 | 703 | |
| 16. | 10.56 | 284 | 3.43 | 640 | 11.31 | 319 | 3.12 | 705 | 0.17 | 316 | 4.46 | 686 | 1.36 T | 317 | 6.18 T | 681 | 1.16 | 293 | 6.24 | 649 | 3.29 | 319 | 8.50 | 651 | 3.52 | 383 | 9.38 | 717 | 16. |
| | 23.04 | 294 | 16.06 | 618 | 23.37 | 376 | 16.42 | 702 | 12.44 | 314 | 17.21 | 653 | 13.55 T | 299 | 19.10 T | 660 | 13.31 | 332 | 18.44 | 664 | 15.55 | 346 | 21.34 | 690 | 16.36 | 393 | 21.35 | 731 | |
| 17. | 11.29 | 309 | 4.29 | 652 | - | - | 4.57 | 776 | 0.58 | 321 | 5.55 | 684 | 2.22 T | 314 | 7.35 T | 669 | 2.24 | 302 | 7.52 | 633 | 5.00 | 295 | 10.04 | 634 | 5.02 | 326 | 10.04 | 665 | 17. |
| | 23.38 | 314 | 16.45 | 633 | 12.09 | 400 | 16.56 | 729 | 13.34 | 328 | 18.28 | 662 | 14.59 T | 326 | 20.17 T | 666 | 14.40 | 351 | 20.13 | 676 | 17.12 | 290 | 22.06 | 635 | 17.24 | 309 | 22.39 | 675 | |
| 18. | - | - | 4.59 | 661 | 0.31 | 371 | 5.28 | 750 | 1.42 | 341 | 6.39 | 675 | 3.58 R | 301 | 9.16 R | 638 | 3.51 | 312 | 9.07 | 637 | 5.39 | 283 | 11.05 | 642 | 6.08 | 287 | 11.11 | 636 | 18. |
| | 12.22 | 314 | 17.28 | 625 | 13.02 | 390 | 17.13 | 700 | 14.22 | 338 | 19.59 | 666 | 16.28 R | 326 | 21.58 R | 703 | 15.50 | 363 | 21.14 | 703 | 18.08 | 312 | 23.17 | 675 | 18.22 | 285 | 23.41 | 678 | |
| 19. | 0.21 | 324 | 5.59 | 670 | 1.16 | 366 | 5.44 | 715 | 3.00 | 375 | 8.20 | 736 | 5.05 | 360 | 10.56 | 757 | 5.27 | 319 | 10.47 | 669 | 6.48 | 286 | 11.50 | 646 | 6.50 | 298 | - | - | 19. |
| | 13.10 | 331 | 18.36 | 638 | 13.56 | 348 | 18.26 | 656 | 15.28 | 389 | 20.39 | 766 | 18.01 | 400 | 23.01 | 744 | 17.44 | 323 | 22.56 | 686 | 19.05 | 297 | - | - | 19.17 | 305 | 12.07 | 670 | |
| 20. | 1.24 | 333 | 6.58 | 658 | 2.12 | 336 | 8.32 | 644 | 3.21 b | 765 | 8.58 b | 759 | 6.56 | 299 | 11.50 | 650 | 6.22 | 292 | 11.33 | 660 | 7.33 | 297 | 0.11 | 680 | 7.37 | 304 | 0.21 | 684 | 20. |
| | 14.19 | 318 | 19.55 | 635 | 14.35 | 396 | 19.50 | 744 | 16.59 b | 771 | 22.21 b | 718 | 18.59 | 296 | - | - | 18.43 | 319 | 23.51 | 701 | 19.50 | 299 | 12.36 | 664 | 19.55 | 296 | 12.41 | 676 | |
| 21. | 2.45 | 330 | 8.14 | 660 | 3.25 | 411 | 8.03 | 713 | 5.40 | 362 | 12.35 | 693 | 7.37 | 319 | 0.02 | 673 | 7.26 | 296 | - | - | 8.10 | 295 | 0.49 | 688 | 8.15 | 304 | 1.03 | 682 | 21. |
| | 15.42 | 310 | 21.08 | 638 | 16.17 | 337 | 21.12 | 663 | 18.23 | 414 | 23.48 | 838 | 20.03 | 319 | 12.40 | 690 | 19.36 | 299 | 12.31 | 670 | 20.23 | 304 | 13.08 | 669 | 20.38 | 303 | 13.22 | 690 | |
| 22. | 4.07 | 320 | 9.36 | 668 | 4.53 | 328 | 10.12 | 679 | 6.57 | 508 | 11.20 | 818 | 8.28 | 288 | 0.33 | 694 | 8.10 | 288 | 0.48 | 688 | 8.46 | 301 | 1.27 | 696 | 8.50 | 308 | 1.42 | 691 | 22. |
| | 17.02 | 307 | 22.24 | 646 | 17.33 | 352 | 22.22 | 716 | 19.11 | 467 | 23.58 | 728 | 20.30 | 316 | 13.26 | 661 | 20.28 | 281 | 13.10 | 660 | 21.04 | 308 | 14.00 | 696 | 21.15 | 296 | 13.50 | 695 | |
| 23. | 5.22 | 311 | 10.53 | 679 | 6.05 | 344 | 10.51 | 684 | 7.57 | 382 | - | - | 9.14 | 319 | 1.16 | 728 | 8.49 | 281 | 1.23 | 681 | 9.14 | 297 | 1.52 | 681 | 9.27 | 298 | 2.17 | 677 | 23. |
| | 18.04 | 309 | 23.22 | 674 | 18.27 | 351 | 23.12 | 722 | 20.06 | 374 | 12.28 | 699 | 21.20 | 312 | 13.49 | 707 | 21.03 | 276 | 13.47 | 660 | 21.40 | 293 | 14.26 | 674 | 21.52 | 290 | 14.22 | 688 | |
| 24. | 6.28 | 326 | 11.33 | 712 | 7.03 | 420 | 12.13 | 779 | 8.59 | 369 | 0.38 | 736 | 9.44 | 317 | 2.00 | 723 | 9.23 | 279 | 1.57 | 679 | 9.43 | 296 | 2.27 | 669 | 10.02 | 283 | 2.43 | 654 | 24. |
| | 19.10 | 318 | - | - | 19.47 | 371 | 23.57 | 711 | 21.07 | 349 | 13.11 | 699 | 21.59 | 337 | 14.17 | 719 | 21.40 | 280 | 14.19 | 667 | 22.07 | 294 | 14.39 | 686 | 22.26 | 280 | 15.05 | 665 | |
| 25. | 7.38 | 299 | 0.12 | 668 | 7.53 | 341 | - | - | 9.45 | 326 | 1.24 | 702 | 10.21 | 332 | 2.39 | 746 | 9.59 | 287 | 2.34 | 681 | 10.15 | 295 | 3.00 | 675 | 10.26 | 284 | 3.13 | 642 | 25. |
| | 19.41 | 372 | 13.11 | 695 | 20.16 | 369 | 12.58 | 711 | 21.51 | 303 | 13.21 | 612 | 22.29 | 304 | 14.39 | 723 | 22.08 | 282 | 14.48 | 671 | 22.34 | 276 | 14.58 | 662 | 23.01 | 282 | 15.38 | 670 | |
| 26. | 8.27 | 387 | 0.57 | 842 | 9.00 | 344 | 1.08 | 724 | 10.16 | 293 | 1.37 | 622 | 10.54 | 302 | 3.07 | 718 | 10.20 | 287 | 2.57 | 677 | 10.36 | 301 | 3.18 | 641 | 11.02 | 284 | 3.52 | 637 | 26. |
| | 20.25 | 362 | 13.03 | 758 | 21.12 | 352 | 13.46 | 745 | 22.02 | 304 | 13.44 | 565 | 23.02 | 290 | 15.15 | 676 | 22.34 | 284 | 15.10 | 665 | 23.02 | 300 | 15.54 | 672 | 23.34 | 280 | 16.10 | 664 | |
| 27. | 9.04 | 344 | 1.32 | 722 | 9.40 | 340 | 1.54 | 705 | 10.40 | 341 | 2.43 | 672 | 11.15 | 290 | 3.24 | 672 | 10.47 | 290 | 3.25 | 667 | 10.56 | 315 | 3.39 | 636 | 11.37 | 299 | 4.35 | 641 | 27. |
| | 21.27 | 456 | 15.17 | 775 | 22.03 | 343 | 14.14 | 735 | 22.46 | 342 | 14.48 | 659 | 23.21 | 308 | 15.44 | 664 | 23.00 | 285 | 15.32 | 665 | 23.35 | 306 | 16.19 | 674 | - | - | 16.49 | 684 | |
| 28. | 10.22 | 367 | 2.17 | 854 | 10.31 | 294 | 2.24 | 719 | 11.17 | 332 | 3.04 | 698 | 11.30 | 321 | 4.03 | 685 | 11.05 | 298 | 3.51 | 658 | 11.35 | 299 | 4.13 | 642 | 0.13 | 298 | 5.16 | 647 | 28. |
| | 22.29 | 296 | 14.58 | 698 | 22.17 | 326 | 14.47 | 623 | 23.23 | 316 | 15.30 | 641 | 23.45 | 323 | 16.24 | 685 | 23.19 | 313 | 16.16 | 672 | - | - | 16.34 | 645 | 12.18 | 310 | 17.38 | 687 | |
| 29. | 10.54 | 286 | 3.19 | 668 | 11.02 | 464 | 4.44 | 780 | 11.45 | 316 | 3.57 | 654 | - | - | 4.28 | 676 | 11.17 | 354 | 4.31 | 684 | 0.06 | 292 | 4.53 | 592 | 0.55 | 315 | 6.03 | 661 | 29. |
| | 22.54 | 310 | 15.59 | 649 | 22.58 | 426 | 15.29 | 822 | 23.53 | 309 | 16.11 | 627 | 12.02 | 314 | 16.46 | 657 | 23.43 | 365 | 16.30 | 715 | 11.28 | 289 | 17.46 | 634 | 13.19 | 327 | 18.25 | 686 | |
| 30. | 11.23 | 353 | 4.44 | 749 | 11.52 | 400 | 3.45 | 822 | - | - | 4.27 | 632 | | | | | 11.55 | 375 | 4.43 | 706 | 0.22 | 311 | 5.58 | 627 | 1.51 | 308 | 7.13 | 653 | 30. |
| | 23.29 | 332 | 15.53 | 718 | - | - | 16.01 | 739 | 12.11 | 302 | 16.35 | 593 | | | | | - | - | 16.56 | 698 | 12.59 | 309 | 18.29 | 651 | 14.16 | 317 | 19.33 | 677 | |
| 31. | | | | | 0.07 | 344 | 4.37 | 689 | 0.14 | 289 | 4.53 | 596 | | | | | 0.21 | 348 | 5.29 | 687 | | | | | 2.59 | 300 | 8.13 | 645 | 31. |
| | | | | | 12.25 | 308 | 16.52 | 626 | 12.27 | 294 | 16.51 | 582 | | | | | 12.27 | 409 | 17.51 | 702 | | | | | 15.24 | 310 | 20.55 | 695 | |
| Mittel | | 318 | | 668 | | 374 | | 723 | | 391 | | 707 | | 309 | | 666 | | 308 | | 671 | | 311 | | 670 | | 302 | | 675 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 336 | 685 |

* 5. Wert am 09.12.2011

Winterhalbjahr: 1.11. bis 30.4.
2 Tage Randeis
14 Tage Treibeis
b = beeinflusst

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.02 m

W Tide
cm

Pegel : Leerort
Gewässer : Ems
Gebiet : Untere Ems

Nr. 3910010

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 4.13 | 318 | 9.41 | 694 | 4.48 | 309 | 10.14 | 678 | 6.57 | 306 | - | - | 8.38 | 298 | 1.21 | 683 | 8.42 | 317 | 1.40 | 653 | 9.19 | 307 | 2.05 | 653 | 9.29 | 320 | 2.12 | 710 | 1. |
| | 16.47 | 340 | 21.48 | 705 | 17.22 | 326 | 22.36 | 678 | 19.46 | 283 | 12.19 | 680 | 21.08 | 296 | 13.41 | 708 | 21.05 | 329 | 13.51 | 707 | 21.14 | 336 | 14.44 | 657 | 21.45 | 319 | 14.46 | 681 | |
| 2. | 5.29 | 315 | 10.47 | 693 | 5.56 | 313 | 11.17 | 664 | 7.58 | 299 | 0.56 ○ | 657 | 9.13 | 302 | 1.59 | 667 | 9.18 | 326 | 2.17 | 688 | 9.38 | 357 | 2.28 | 719 | 10.02 | 333 | 2.59 | 687 | 2. |
| | 17.53 | 320 | 23.03 | 696 | 18.40 | 298 | 23.43 | 667 | 20.43 | 314 | 13.21 | 717 | 21.44 | 318 | 14.29 | 712 | 21.32 | 321 | 14.29 | 698 | 21.50 | 352 | 14.51 | 691 | 22.04 | 324 | 15.00 | 676 | |
| 3. | 6.32 | 296 | 11.42 | 678 | 7.08 | 290 | - | - | 8.52 | 304 | 1.39 | 684 | 9.54 | 306 | 2.37 | 691 | 9.43 | 313 | 2.37 | 672 | 10.09 | 352 | 3.03 | 691 | 10.29 | 316 | 3.14 | 690 | 3. |
| | 18.54 | 304 | - | - | 19.49 | 283 | 12.30 ○ | 679 | 21.35 | 297 | 13.59 | 713 | 22.21 | 302 | 14.55 | 708 | 21.51 | 341 | 15.04 | 692 | 22.09 | 351 | 15.18 | 679 | 22.16 | 322 | 15.34 | 643 | |
| 4. | 7.29 | 312 | 0.01 ○ | 712 | 8.13 | 289 | 0.58 | 676 | 9.32 | 299 | 2.31 | 668 | 10.23 | 302 | 3.15 | 674 | 10.12 | 329 | 2.43 b | 694 | 10.41 | 346 | 3.14 | 727 | 11.00 | 355 | 3.34 | 716 | 4. |
| | 19.56 | 315 | 12.33 | 710 | 20.55 | 277 | 13.24 | 688 | 22.12 | 298 | 14.41 | 715 | 22.45 | 329 | 15.35 | 713 | 22.31 | 352 | 15.09 b | 728 | 22.46 | 336 | 15.54 | 674 | 23.04 | 357 | 16.23 | 668 | |
| 5. | 8.19 | 317 | 0.50 | 732 | 9.12 | 285 | 1.57 | 670 | 10.20 | 297 | 3.07 | 668 | 10.50 | 344 | 3.30 | 725 | 10.49 | 320 | 3.12 b | 693 | 11.13 | 348 | 3.37 | 714 | 11.36 | 329 | 4.16 | 704 | 5. |
| | 20.58 | 290 | 13.16 | 714 | 21.42 | 280 | 14.17 | 696 | 22.49 | 294 | 15.23 | 710 | 23.15 | 333 | 15.58 | 734 | 22.51 | 388 | 15.57 b | 720 | 23.13 | 356 | 16.22 | 693 | 23.08 | 407 | 17.02 | 662 | |
| 6. | 9.16 | 277 | 1.44 | 672 | 10.00 | 288 | 2.49 | 672 | 10.44 | 301 | 3.46 | 669 | 11.19 | 310 | 4.00 | 683 | 10.53 | 350 | 3.22 b | 713 | 11.45 | 345 | 4.15 | 698 | - | - | 5.00 | 697 | 6. |
| | 21.46 | 280 | 14.23 | 680 | 22.30 | 294 | 15.03 | 705 | 23.18 | 312 | 16.05 | 704 | 23.28 | 311 | 16.23 | 667 | 23.18 | 363 | 16.14 | 698 | 23.34 | 395 | 17.27 | 678 | 12.31 | 337 | 17.22 | 636 | |
| 7. | 10.03 | 298 | 2.53 | 678 | 10.34 | 288 | 3.25 | 659 | 11.21 | 321 | 4.17 | 676 | 11.33 | 347 | 4.38 | 677 | 11.22 | 376 | 4.18 b | 710 | - | - | 5.14 | 714 | 0.31 | 307 | 5.33 | 616 | 7. |
| | 22.44 | 284 | 15.01 | 708 | 23.13 | 288 | 15.43 | 705 | 23.45 | 330 | 16.25 | 728 | 23.57 | 342 | 16.48 | 701 | 23.59 | 380 | 16.36 b | 725 | 12.46 | 379 | 17.38 | 666 | 13.05 | 303 | 18.40 | 606 | |
| 8. | 10.48 | 303 | 3.46 | 670 | 11.20 | 289 | 4.12 | 658 | 11.46 | 312 | 4.33 | 670 | - | - | 4.57 | 668 | - | - | 4.47 | 691 | 0.39 | 377 | 5.59 | 695 | 1.07 | 336 | 6.28 | 653 | 8. |
| | 23.16 | 317 | 16.03 | 702 | 23.42 | 301 | 16.28 | 697 | - | - | 17.02 | 692 | 12.09 | 328 | 17.17 | 652 | 12.03 | 346 | 17.05 | 641 | 13.18 | 396 | 18.55 | 670 | 14.12 | 308 | 19.38 | 623 | |
| 9. | 11.14 | 318 | 4.08 | 656 | 11.32 | 346 | 5.03 | 667 | 0.16 | 315 | 5.12 | 662 | 0.23 | 324 | 5.32 | 644 | 0.01 | 351 | 5.47 | 706 | 2.03 | 383 | 7.29 | 677 | 2.18 | 322 | 8.41 | 673 | 9. |
| | 23.54 | 324 | 16.29 | 709 | - | - | 16.43 | 723 | 12.18 | 315 | 17.28 | 674 | 12.39 | 314 | 17.54 | 633 | 12.36 | 412 | 17.55 | 666 | 15.04 | 335 | 20.21 | 628 | 15.32 | 378 | 20.35 | 738 | |
| 10. | - | - | 4.59 | 671 | 0.14 | 334 | 5.01 | 675 | 0.42 | 315 | 5.38 | 648 | 0.56 | 337 | 6.45 | 658 | 1.15 | 368 | 6.55 | 659 | 3.23 | 336 | 9.05 | 673 | 4.05 | 448 | 8.39 | 734 | 10. |
| | 12.04 | 322 | 17.10 | 707 | 12.18 | 320 | 17.33 | 703 | 12.46 | 316 | 18.06 | 659 | 13.21 | 366 | 19.13 | 647 | 13.56 | 364 | 19.43 | 636 | 16.11 | 344 | 21.48 | 681 | 16.44 | 339 | 21.56 | 669 | |
| 11. | 0.45 | 298 | 5.35 | 650 | 0.51 | 317 | 5.40 | 648 | 1.17 | 314 | 6.21 | 639 | 1.54 | 376 | 8.17 | 657 | 2.39 | 347 | 8.12 | 654 | 4.40 | 352 | 9.46 | 716 | 5.24 | 315 | 10.18 | 674 | 11. |
| | 12.48 | 303 | 18.03 | 693 | 12.53 | 317 | 18.18 | 691 | 13.24 | 321 | 18.44 | 633 | 14.50 | 402 | 21.03 | 676 | 15.59 | 315 | 21.12 | 616 | 17.32 | 337 | 22.48 | 691 | 17.47 | 303 | 23.19 | 683 | |
| 12. | 1.23 | 308 | 6.27 | 657 | 1.23 | 330 | 6.32 | 660 | 2.00 | 307 | 7.19 | 615 | 3.46 | 394 | 9.22 | 676 | 4.25 | 298 | 9.42 | 619 | 5.53 | 340 | 11.04 | 684 | 6.27 | 311 | 11.21 | 690 | 12. |
| | 13.36 | 320 | 18.56 | 702 | 13.20 | 359 | 18.51 | 701 | 14.25 | 313 | 20.01 | 613 | 16.43 | 376 | 22.14 | 667 | 16.54 | 296 | 22.36 | 667 | 18.31 | 313 | 23.32 | 661 | 18.52 | 305 | - | - | |
| 13. | 2.14 | 324 | 7.22 | 659 | 2.16 | 338 | 7.14 | 648 | 3.09 | 313 | 9.00 | 616 | 5.10 | 363 | 10.49 | 683 | 5.37 | 345 | 10.44 | 657 | 6.54 | 307 | - | - | 7.27 | 309 | 0.01 | 691 | 13. |
| | 14.25 | 335 | 19.47 | 688 | 14.15 | 335 | 19.48 | 653 | 15.56 | 303 | 21.31 | 619 | 18.05 | 339 | 23.25 | 660 | 18.12 | 304 | 23.29 | 646 | 19.27 | 303 | 12.02 ● | 664 | 19.52 | 297 | 12.21 ● | 686 | |
| 14. | 3.08 | 322 | 8.09 | 649 | 2.56 | 340 | 8.59 b | 659 | 4.42 | 301 | 10.15 | 625 | 5.55 | 341 | 11.24 | 688 | 6.27 | 313 | 11.46 | 668 | 7.54 | 301 | 0.42 | 680 | 8.28 | 292 | 1.02 | 687 | 14. |
| | 15.32 | 316 | 20.54 | 659 | 15.30 | 367 | 21.13 b | 686 | 17.26 | 306 | 22.53 | 645 | 18.34 | 421 | 23.44 | 766 | 19.04 | 309 | - | - | 20.21 | 301 | 13.08 | 690 | 21.13 | 255 | 13.14 | 646 | |
| 15. | 4.18 | 293 | 9.14 | 616 | 4.07 | 348 | 9.56 b | 678 | 5.57 | 306 | 11.16 | 645 | 7.15 | 396 | - | - | 7.08 | 326 | 0.17 ● | 650 | 8.46 | 302 | 1.33 | 695 | 9.04 | 288 | 2.10 | 603 | 15. |
| | 16.27 | 294 | 21.56 | 658 | 16.53 | 340 | 22.30 b | 676 | 18.47 | 280 | 23.53 | 633 | 19.49 | 328 | 12.09 | 738 | 20.00 | 317 | 12.15 b | 746 | 21.12 | 304 | 13.51 | 714 | 21.20 | 307 | 14.04 | 647 | |
| 16. | 5.10 | 309 | 10.26 | 649 | 5.18 | 338 | 11.08 | 680 | 6.34 | 325 | - | - | 8.02 | 315 | 0.57 ● | 682 | 8.13 | 304 | 0.56 | 671 | 9.38 | 297 | 2.16 | 697 | 10.00 | 306 | 2.35 | 712 | 16. |
| | 17.33 | 332 | 22.36 | 673 | 18.00 | 343 | 23.20 | 672 | 19.30 | 307 | 12.05 | 673 | 19.54 b | 721 | 13.15 | 713 | 20.25 | 325 | 13.25 | 660 | 21.56 | 310 | 14.46 | 690 | 22.20 | 325 | 15.03 | 706 | |
| 17. | 6.00 | 323 | 11.37 | 670 | 6.18 | 343 | 11.47 | 695 | 7.44 | 310 | 0.38 ● | 660 | 8.31 | 337 | 2.08 b | 660 | 9.07 | 317 | 1.31 b | 743 | 10.29 | 283 | 2.49 | 699 | 10.56 | 303 | 3.10 | 726 | 17. |
| | 18.44 | 334 | 23.31 | 660 | 18.54 | 339 | - | - | 20.25 | 301 | 12.56 | 695 | 21.18 | 324 | 13.35 | 738 | 21.17 | 314 | 13.50 | 694 | 22.36 | 320 | 15.45 | 676 | 23.04 | 319 | 15.55 | 672 | |
| 18. | 6.53 | 303 | - | - | 7.17 | 320 | 0.00 | 684 | 8.37 | 297 | 1.25 | 665 | 9.25 | 328 | 2.18 | 688 | 9.52 | 294 | 2.37 | 691 | 11.01 | 315 | 3.39 | 719 | 11.43 | 316 | 3.53 | 726 | 18. |
| | 19.35 | 312 | 12.28 | 681 | 19.43 | 328 | 12.37 | 689 | 21.01 | 296 | 13.43 | 682 | 21.42 | 360 | 14.45 | 730 | 22.13 | 310 | 15.02 | 700 | 23.16 | 335 | 16.18 | 697 | 23.46 | 308 | 16.14 | 669 | |
| 19. | 7.46 | 303 | 0.29 ● | 679 | 7.52 | 337 | 0.55 ● | 670 | 9.19 | 307 | 2.13 | 688 | 10.03 | 356 | 2.54 | 735 | 10.35 | 298 | 3.21 | 698 | 11.57 | 302 | 4.12 | 716 | - | - | 4.42 | 680 | 19. |
| | 20.15 | 297 | 12.47 | 678 | 20.37 | 392 | 13.18 | 748 | 21.48 | 299 | 14.21 | 707 | 22.36 | 336 | 15.13 | 752 | 22.56 | 302 | 15.42 | 691 | 23.54 | 289 | 16.50 | 622 | 12.27 | 294 | 16.35 | 622 | |
| 20. | 8.28 | 294 | 1.11 | 660 | 8.40 | 338 | 1.03 | 731 | 9.57 | 315 | 2.55 | 684 | 10.48 | 319 | 3.31 | 701 | 11.13 | 300 | 3.57 | 690 | - | - | 5.23 | 650 | 0.32 | 274 | 5.11 | 633 | 20. |
| | 20.59 | 298 | 13.31 | 693 | 21.20 | 315 | 13.36 | 721 | 22.24 | 309 | 14.59 | 714 | 23.14 | 315 | 15.55 | 707 | 23.35 | 313 | 16.33 | 690 | 12.35 | 300 | 18.16 | 654 | 13.17 | 258 | 17.25 | 543 | |
| 21. | 9.08 | 286 | 1.41 | 667 | 9.28 | 310 | 2.19 | 692 | 10.37 | 301 | 3.25 | 684 | 11.25 | 316 | 4.20 | 673 | - | - | 4.39 | 690 | 0.42 | 341 | 5.42 | 673 | 1.04 | 243 | 5.55 | 567 | 21. |
| | 21.36 | 278 | 14.06 | 674 | 22.05 | 296 | 14.22 | 713 | 23.04 | 296 | 15.39 | 701 | 23.45 | 323 | 16.38 | 679 | 12.04 | 305 | 17.09 | 655 | 13.37 | 297 | 18.58 | 620 | 13.29 | 252 | 18.06 | 547 | |
| 22. | 9.11 | 315 | 2.26 | 653 | 10.12 | 296 | 2.50 | 679 | 11.07 | 325 | 4.18 | 688 | 11.59 | 343 | 5.00 | 691 | 0.11 | 308 | 5.27 | 675 | 1.14 | 354 | 6.41 | 743 | 1.36 | 271 | 6.41 | 600 | 22. |
| | 21.52 | 306 | 14.21 | 682 | 22.43 | 286 | 15.02 | 698 | 23.36 | 325 | 16.14 | 732 | - | - | 17.22 | 690 | 12.44 | 302 | 17.56 | 642 | 14.36 | 340 | 19.28 | 620 | 14.22 | 290 | 18.50 | 569 | |
| 23. | 10.02 | 309 | 3.04 | 646 | 10.48 | 290 | 3.25 | 656 | 11.44 | 327 | 4.42 | 690 | 0.32 | 336 | 5.36 | 670 | 0.57 | 316 | 6.29 | 670 | 2.33 | 314 | 7.53 | 622 | 2.50 | 271 | 7.34 | 572 | 23. |
| | 22.43 | 310 | 15.23 | 692 | 23.15 | 294 | 15.45 | 707 | - | - | 16.56 | 713 | 12.52 | 317 | 18.04 | 639 | 13.51 | 304 | 19.01 | 626 | 15.13 | 330 | 21.00 | 658 | 14.29 | 334 | 19.30 | 616 | |
| 24. | 10.50 | 303 | 3.42 | 656 | 11.24 | 300 | 4.16 | 679 | 0.18 | 315 | 5.23 | 671 | 1.19 | 304 | 6.14 | 591 | 1.57 | 326 | 7.39 | 669 | 3.44 | 358 | 9.13 | 702 | 3.51 | 368 | 8.58 | 685 | 24. |
| | 23.01 | 356 | 16.09 | 686 | 23.54 | 293 | 16.23 | 704 | 12.25 | 314 | 17.42 | 686 | 13.26 | 281 | 19.14 | 585 | 15.05 | 316 | 20.36 | 638 | 16.44 | 331 | 21.56 | 644 | 16.47 | 351 | 21.51 | 663 | |
| 25. | 11.13 | 348 | 4.23 | 691 | 11.58 | 302 | 4.54 | 672 | 0.51 | 313 | 6.10 | 663 | 0.04 | 388 | 7.02 | 640 | 3.19 | 333 | 9.13 | 689 | 5.26 | 288 | 10.33 | 624 | 5.53 | 386 | 9.52 | 677 | 25. |
| | 23.59 | 336 | 16.01 | 756 | - | - | 17.09 | 705 | 13.06 | 325 | 18.34 | 687 | 14.31 | 355 | 20.24 | 622 | 16.20 | 357 | 21.54 | 679 | 16.37 | 419 | 21.59 | 727 | 17.36 | 356 | 21.57 | 692 | |
| 26. | - | - | 4.53 | 689 | 0.36 | 301 | 5.34 | 669 | 1.24 | 354 | 7.04 | 666 | 3.42 | 338 | 9.20 | 641 | 5.30 | 347 | 10.21 | 691 | 5.54 | 363 | 10.46 | 695 | 6.24 | 400 | 10.42 | 704 | 26. |
| | 12.08 | 327 | 17.07 | 701 | 12.45 | 300 | 17.51 | 680 | 13.50 | 373 | 19.44 | 700 | 16.39 | 316 | 22.11 | 634 | 17.36 | 310 | 22.45 | 657 | 18.19 | 330 | 23.50 | 686 | 18.19 | 382 | 22.58 | 697 | |
| 27. | 0.46 | 297 | 5.32 | 651 | 1.15 | 286 | 6.17 | 639 | 2.46 | 366 | 8.06 | 668 | 5.15 | 324 | 10.53 | 676 | 5.37 | 332 | 11.10 | 700 | 6.51 | 330 | 11.52 | 676 | 6.24 | 404 | 11.31 | 706 | 27. |
| | 12.48 | 299 | 18.06 | 687 | 13.23 | 297 | 18.53 | 678 | 15.34 | 310 | 20.37 | 621 | 18.01 | 327 | 23.22 | 681 | 18.18 | 333 | 23.27 | 686 | 19.11 | 308 | - | - | 19.33 | 349 | - | - | |
| 28. | 1.33 | 301 | 6.26 | 654 | 1.59 | 310 | 7.30 | 670 | 4.12 | 290 | 9.47 | 636 | 6.26 | 332 | 11.33 | 690 | 6.45 | 316 | 11.55 | 691 | 7.41 | 316 | 0.40 ○ | 675 | 7.57 | 338 | 0.02 ○ | 715 | 28. |
| | 13.45 | 303 | 18.45 | 666 | 14.31 | 328 | 19.45 | 668 | 16.52 | 328 | 22.35 | 695 | 19.00 | 323 | - | - | 19.14 | 306 | - | - | 19.52 | 321 | 12.54 | 679 | 20.08 | 294 | 11.55 | 649 | |
| 29. | 2.19 | 286 | 7.54 | 656 | 3.05 | 307 | 8.34 | 655 | 5.39 | 347 | 10.52 | 691 | 7.05 | 340 | 0.11 | 660 | 7.21 | 309 | 0.16 ○ | 648 | 8.19 | 320 | 1.05 | 702 | 8.26 | 313 | 0.29 | 621 | 29. |
| | 14.58 | 308 | 20.14 | 671 | 15.43 | 325 | 21.16 | 669 | 18.31 | 314 | 23.55 | 675 | 19.44 | 365 | 12.22 | 738 | 19.38 | 343 | 12.52 | 687 | 20.34 | 326 | 13.25 | 694 | 20.43 | 329 | 13.03 | 646 | |
| 30. | 3.35 | 306 | 8.52 | 657 | 4.32 | 314 | 9.59 | 661 | 6.50 | 334 | - | - | 8.07 | 337 | 0.39 ○ | 714 | 8.07 | 339 | 0.47 b | 715 | 8.57 | 308 | 1.34 | 711 | 9.04 | 380 | 1.56 | 733 | 30. |
| | 16.00 | 317 | 21.23 | 683 | 17.03 | 331 | 22.40 | 675 | 19.13 | 325 | 12.08 | 682 | 20.32 | 316 | 13.02 | 705 | 20.33 | 325 | 13.17 | 715 | 21.09 | 316 | 14.06 | 685 | 21.17 | 382 | 13.03 | 747 | |
| 31. | | | | | 5.40 | 323 | 11.03 | 683 | 7.40 | 336 | 0.37 ○ | 696 | | | | | 8.51 | 316 | 1.31 | 688 | | | | | 9.26 | 382 | 1.41 | 740 | 31. |
| | | | | | 18.31 | 313 | 23.49 | 669 | 20.34 | 327 | 12.51 | 763 | | | | | 20.52 | 319 | 13.51 | 667 | | | | | 21.43 | 342 | 13.42 | 692 | |
| Mittel | | 310 | | 679 | | 315 | | 681 | | 313 | | 675 | | 342 | | 682 | | 328 | | 680 | | 332 | | 682 | | 326 | | 667 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 318 | 679 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei
b = beeinflusst

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide

cm

Pegel : Emden, Neue Seeschleuse

Gewässer : Unterems

Gebiet : Emsmündung

Nr. 3970010

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|
| 1. | 10.05 | 299 | 3.50 | 646 | 10.07 | 282 | 3.57 | 646 |
| | 22.18 | 350 | 16.40 | 636 | 22.04 | 395 | 17.11 | 611 |
| 2. | 10.51 | 342 | 4.25 | 680 | 11.27 | 383 | 4.31 | 742 |
| | 23.05 | 327 | 17.04 | 623 | 23.11 | 356 | 17.28 | 641 |
| 3. | 11.37 | 318 | 5.32 | 621 | 11.29 | 386 | 5.53 | 640 |
| | 23.46 | 359 | 18.33 | 610 | 23.58 | 516 | 19.06 | 700 |
| 4. | - | - | 6.23 | 640 | - | - | 5.59 | 788 |
| | 12.21 | 352 | 19.28 | 621 | 13.27 | 457 | 18.57 | 679 |
| 5. | 1.03 | 376 | 7.29 | 657 | 1.18 | 420 | 7.41 | 712 |
| | 14.04 | 358 | 20.31 | 617 | 14.21 | 445 | 20.03 | 690 |
| 6. | 2.14 | 375 | 8.52 | 653 | 2.38 | 424 | 9.02 | 678 |
| | 15.21 | 358 | 21.31 | 612 | 15.04 | 426 | 21.34 | 718 |
| 7. | 3.36 | 354 | 9.48 | 636 | 4.01 | 410 | 10.13 | 675 |
| | 16.18 | 315 | 22.13 | 598 | 16.01 | 447 | 22.04 | 815 |
| 8. | 4.25 | 320 | 10.41 | 621 | 5.19 | 468 | 10.09 | 698 |
| | 16.56 | 303 | 23.16 | 602 | 16.56 | 299 | 22.43 * | 817 |
| 9. | 5.13 | 311 | 11.29 | 621 | 4.22 | 448 | 0.03 | 661 |
| | 17.34 | 302 | 23.59 | 618 | 17.33 | 520 | 11.06 | 806 |
| 10. | 6.01 | 306 | - | - | 6.31 | 411 | 11.52 | 742 |
| | 18.23 | 296 | 12.17 | 623 | 18.20 | 403 | 23.56 | 709 |
| 11. | 6.37 | 281 | 0.26 | 607 | 6.38 | 336 | - | - |
| | 18.41 | 266 | 12.35 | 585 | 18.37 | 300 | 12.41 | 656 |
| 12. | 6.51 | 264 | 0.47 | 565 | 7.14 | 315 | 1.15 | 667 |
| | 19.18 | 288 | 13.29 | 586 | 19.35 | 363 | 13.56 | 698 |
| 13. | 7.47 | 328 | 1.41 | 643 | 7.42 | 284 | 1.23 | 686 |
| | 20.07 | 317 | 13.45 | 646 | 19.50 | 378 | 14.42 | 639 |
| 14. | 8.16 | 296 | 2.09 | 626 | 8.26 | 377 | 2.02 | 717 |
| | 20.26 | 305 | 14.19 | 609 | 20.24 | 384 | 14.47 | 663 |
| 15. | 8.57 | 312 | 2.41 | 635 | 9.10 | 354 | 2.31 | 732 |
| | 21.03 | 300 | 14.56 | 603 | 21.10 | 349 | 15.53 | 657 |
| 16. | 9.21 | 294 | 3.07 | 612 | 9.45 | 294 | 3.26 | 683 |
| | 21.32 | 309 | 15.43 | 592 | 22.08 | 370 | 16.41 | 670 |
| 17. | 9.58 | 322 | 3.58 | 624 | 10.48 | 400 | 4.08 | 745 |
| | 22.07 | 330 | 16.16 | 608 | 22.57 | 360 | 16.41 | 696 |
| 18. | 10.46 | 329 | 4.41 | 635 | 11.35 | 384 | 5.07 | 720 |
| | 22.47 | 342 | 17.16 | 599 | 23.36 | 353 | 17.47 | 674 |
| 19. | 11.49 | 350 | 5.30 | 644 | - | - | 6.02 | 690 |
| | 23.53 | 353 | 18.18 | 613 | 12.15 | 329 | 18.41 | 631 |
| 20. | - | - | 6.34 | 631 | 0.26 | 308 | 7.37 | 640 |
| | 12.53 | 338 | 19.32 | 609 | 13.05 | 389 | 19.32 | 713 |
| 21. | 1.15 | 349 | 7.48 | 631 | 1.53 | 409 | 7.59 | 679 |
| | 14.13 | 325 | 20.47 | 610 | 14.35 | 310 | 21.10 | 638 |
| 22. | 2.37 | 339 | 9.10 | 639 | 3.06 | 291 | 10.04 | 660 |
| | 15.28 | 315 | 21.58 | 621 | 15.54 | 331 | 22.17 | 683 |
| 23. | 3.53 | 326 | 10.14 | 649 | 4.26 | 318 | 10.58 | 660 |
| | 16.37 | 322 | 23.02 | 644 | 16.46 | 333 | 23.14 | 700 |
| 24. | 5.00 | 346 | 11.07 | 676 | 5.32 | 416 | 11.30 | 748 |
| | 17.36 | 337 | 23.48 | 639 | 18.09 | 353 | 23.46 | 674 |
| 25. | 5.59 | 310 | 12.44 | 668 | 6.04 | 310 | - | - |
| | 18.19 | 395 | 23.57 | 814 | 18.41 | 354 | 12.49 | 681 |
| 26. | 7.06 | 406 | - | - | 7.23 | 319 | 0.54 | 698 |
| | 19.01 | 376 | 12.28 | 723 | 19.39 | 342 | 13.08 | 717 |
| 27. | 7.36 | 356 | 1.05 | 686 | 8.04 | 324 | 1.58 | 677 |
| | 20.20 | 484 | 14.41 | 745 | 20.23 | 336 | 14.01 | 697 |
| 28. | 8.49 | 378 | 1.21 | 827 | 8.36 | 249 | 2.10 | 688 |
| | 20.47 | 284 | 14.18 | 665 | 20.36 | 306 | 15.33 | 603 |
| 29. | 9.12 | 281 | 2.58 | 640 | 9.51 | 473 | 3.57 | 754 |
| | 21.23 | 319 | 15.45 | 624 | 21.45 | 428 | 14.59 | 786 |
| 30. | 9.56 | 373 | 3.57 | 718 | 10.23 | 391 | 3.16 | 783 |
| | 21.56 | 350 | 15.35 | 678 | 22.26 | 317 | 15.51 | 708 |
| 31. | | | | | 10.32 | 246 | 4.19 | 657 |
| | | | | | 22.38 | 306 | 17.19 | 611 |
| Mittel | | 331 | | 640 | | 366 | | 694 |

| Tag | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|
| 1. | 11.15 | 350 | 5.14 | 683 | 11.12 | 267 | 5.19 | 562 |
| | 23.13 | 347 | 17.26 | 642 | 23.25 | 273 | 17.19 | 544 |
| 2. | - | - | 5.56 | 688 | 11.38 R | 308 | 6.06 R | 550 |
| | 12.03 | 378 | 18.34 | 663 | - | - | 18.34 R | 566 |
| 3. | 0.10 | 391 | 5.55 | 655 | 0.28 R | 329 | 7.29 R | 588 |
| | 12.12 | 348 | 18.59 | 683 | 13.38 R | 325 | 20.26 R | 586 |
| 4. | 22.58 * | 569 | 6.34 | 754 | 2.13 R | 321 | 9.05 R | 596 |
| | 14.04 | 547 | 18.52 | 748 | 14.51 R | 302 | 21.22 R | 589 |
| 5. | 1.28 | 483 | 8.24 | 760 | 3.38 R | 236 | 10.25 R | 558 |
| | 12.30 | 606 | 21.20 | 853 | 15.59 R | 295 | 22.47 R | 616 |
| 6. | 4.21 | 616 | 8.49 | 776 | 4.45 T | 287 | 11.23 T | 606 |
| | 16.22 | 411 | 22.12 | 653 | 17.05 T | 290 | 23.17 T | 611 |
| 7. | 4.00 | 303 | 11.08 | 687 | 5.27 T | 263 | - | - |
| | 16.59 | 414 | 23.04 | 762 | 17.51 T | 253 | 12.00 T | 597 |
| 8. | 5.24 | 447 | 10.54 | 740 | 6.09 T | 242 | 0.01 T | 602 |
| | 18.06 | 350 | 23.46 | 676 | 18.42 T | 249 | 12.21 T | 575 |
| 9. | 6.08 | 258 | - | - | 7.11 T | 265 | 0.55 T | 610 |
| | 18.21 | 330 | 12.42 | 660 | 19.24 T | 264 | 13.19 T | 625 |
| 10. | 7.07 | 305 | 0.34 | 724 | 7.40 T | 241 | 1.37 T | 629 |
| | 19.00 | 287 | 13.08 | 664 | 19.56 T | 227 | 13.41 T | 583 |
| 11. | 7.32 | 305 | 1.21 | 684 | 8.25 D | 231 | 2.19 D | 602 |
| | 19.47 | 290 | 13.35 | 673 | 20.40 D | 251 | 14.46 D | 599 |
| 12. | 8.00 | 329 | 1.56 | 685 | 9.14 D | 271 | 3.14 D | 644 |
| | 20.44 | 397 | 15.25 | 765 | 21.35 D | 275 | 15.33 D | 622 |
| 13. | 9.17 | 414 | 2.10 | 816 | 10.02 T | 283 | 3.37 T | 652 |
| | 21.42 | 354 | 14.54 | 765 | 22.19 T | 302 | 16.18 T | 638 |
| 14. | 9.32 | 261 | 2.56 | 717 | 10.45 T | 341 | 4.38 T | 688 |
| | 21.44 | 254 | 15.42 | 648 | 22.44 T | 335 | 16.52 T | 658 |
| 15. | 10.12 | 254 | 3.57 | 684 | 11.44 R | 410 | 5.19 R | 736 |
| | 22.26 | 256 | 16.30 | 636 | - | - | 17.29 R | 690 |
| 16. | 10.57 | 270 | 4.43 | 661 | 0.03 R | 324 | 6.11 R | 640 |
| | 23.12 | 284 | 17.15 | 627 | 12.17 R | 298 | 19.00 R | 630 |
| 17. | 11.59 | 293 | 5.37 | 655 | 0.43 | 317 | 7.31 | 635 |
| | 23.59 | 317 | 18.11 | 637 | 13.33 | 331 | 20.07 | 635 |
| 18. | - | - | 6.30 | 650 | 2.23 | 301 | 9.16 | 611 |
| | 12.44 | 315 | 20.00 | 652 | 14.45 | 329 | 21.58 | 672 |
| 19. | 1.26 | 363 | 7.44 | 710 | 3.42 | 369 | 10.14 | 724 |
| | 14.02 | 379 | 20.03 b | 735 | 16.48 | 407 | 22.35 | 700 |
| 20. | 1.58 | 408 | 8.42 b | 740 | 5.07 | 281 | 11.28 | 614 |
| | 15.27 b | 394 | 21.13 b | 717 | 17.16 | 277 | - | - |
| 21. | 4.00 b | 322 | 11.38 | 670 | 5.57 | 314 | 0.00 | 641 |
| | 16.54 | 386 | 22.48 | 798 | 18.21 | 314 | 12.26 | 656 |
| 22. | 5.41 | 494 | 10.28 | 782 | 6.33 | 273 | 0.21 | 659 |
| | 17.57 | 450 | 23.59 | 712 | 18.51 | 313 | 13.19 | 628 |
| 23. | 6.16 | 324 | - | - | 7.40 | 317 | 1.18 | 694 |
| | 18.20 | 311 | 12.19 | 676 | 19.36 | 311 | 13.31 | 665 |
| 24. | 6.59 | 305 | 0.43 | 711 | 8.00 | 309 | 2.04 | 688 |
| | 19.18 | 274 | 13.08 | 672 | 20.25 | 338 | 14.13 | 680 |
| 25. | 7.45 | 237 | 1.20 | 676 | 8.38 | 328 | 2.15 | 711 |
| | 19.44 | 199 | 13.47 | 591 | 20.39 | 285 | 14.27 | 679 |
| 26. | 8.01 | 188 | 1.58 | 592 | 9.06 | 285 | 2.46 | 675 |
| | 19.54 | 224 | 14.30 | 545 | 21.10 | 265 | 15.00 | 638 |
| 27. | 8.46 | 275 | 3.01 | 654 | 9.30 | 265 | 3.18 | 635 |
| | 20.53 | 284 | 15.05 | 635 | 21.35 | 298 | 15.54 | 632 |
| 28. | 9.30 | 270 | 3.07 | 665 | 9.50 | 315 | 3.56 | 652 |
| | 21.23 | 246 | 15.36 | 614 | 22.06 | 319 | 16.10 | 653 |
| 29. | 9.51 | 257 | 3.45 | 626 | 10.22 | 309 | 4.16 | 641 |
| | 21.51 | 251 | 15.58 | 597 | 22.29 | 303 | 16.23 | 623 |
| 30. | 10.13 | 241 | 4.06 | 604 | | | | |
| | 22.13 | 230 | 16.18 | 565 | | | | |
| 31. | 10.32 | 248 | 4.42 | 568 | | | | |
| | 22.33 | 248 | 16.15 | 551 | | | | |
| Mittel | | 336 | | 681 | | 297 | | 633 |

| Tag | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 10.49 | 323 | 5.01 | 622 | 11.40 | 362 | 6.05 | 602 | 0.28 | 288 | 7.01 | 574 |
| | 23.08 | 328 | 17.13 | 621 | - | - | 19.02 | 644 | 12.33 | 297 | 19.48 | 624 |
| 2. | 11.18 | 326 | 5.40 | 607 | 0.57 | 380 | 7.35 | 624 | 1.54 | 290 | 8.44 | 607 |
| | 23.52 | 299 | 17.54 | 585 | 13.32 | 345 | 20.04 | 626 | 14.30 | 308 | 21.06 | 628 |
| 3. | - | - | 6.37 | 549 | 2.26 | 310 | 9.18 | 608 | 2.59 | 277 | 9.57 | 623 |
| | 12.16 | 307 | 19.34 | 583 | 15.00 | 301 | 21.33 | 616 | 15.39 | 307 | 22.00 | 654 |
| 4. | 1.23 | 317 | 8.41 | 589 | 3.43 | 260 | 10.21 | 596 | 4.18 | 276 | 10.47 | 643 |
| | 14.06 | 358 | 21.11 | 648 | 16.02 | 282 | 22.31 | 621 | 16.48 | 311 | 23.00 | 670 |
| 5. | 3.31 | 324 | 10.09 | 608 | 4.37 | 263 | 11.22 | 609 | 5.24 | 297 | 11.36 | 658 |
| | 15.35 | 325 | 22.14 | 637 | 17.10 | 270 | 23.31 | 636 | 17.44 | 296 | 23.39 | 668 |
| 6. | 4.25 | 293 | 10.58 | 615 | 5.34 | 264 | - | - | 6.11 | 271 | - | - |
| | 16.54 | 284 | 23.23 | 627 | 18.05 | 301 | 12.18 | 644 | 18.36 | 274 | 12.24 | 652 |
| 7. | 5.18 | 257 | 11.49 | 591 | 6.35 | 317 | 0.08 | 701 | 7.00 | 273 | 0.38 | 668 |
| | 17.26 | 290 | - | - | 19.02 | 282 | 12.32 | 664 | 19.36 | 251 | 13.11 | 654 |
| 8. | 6.30 | 360 | 0.32 | 691 | 7.27 | 266 | 0.50 | 676 | 7.40 | 244 | 1.27 | 618 |
| | 18.36 | 315 | 12.24 | 687 | 19.34 | 268 | 13.36 | 650 | 20.20 | 254 | 14.15 | 640 |
| 9. | 6.52 | 246 | 0.26 | 676 | 8.00 | 275 | 2.03 | 651 | 8.35 | 280 | 2.34 | 647 |
| | 19.12 | 283 | 13.18 | 628 | 20.31 | 295 | 14.20 | 678 | 21.04 | 273 | 15.01 | 666 |
| 10. | 7.49 | 289 | 1.22 | 679 | 8.42 | 305 | 2.55 | 671 | 9.26 | 278 | 3.28 | 640 |
| | 20.11 | 292 | 13.54 | 670 | 21.07 | 293 | 15.05 | 681 | 21.54 | 290 | 15.52 | 664 |
| 11. | 8.27 | 274 | 1.59 | 697 | 9.29 | 315 | 3.17 | 676 | 10.05 | 329 | 4.16 | 645 |
| | 20.51 | 270 | 14.43 | 656 | 21.58 | 295 | 15.49 | 686 | 22.42 | 325 | 16.23 | 689 |
| 12. | 9.28 | 268 | 2.50 | 676 | 10.19 | 311 | 4.14 | 660 | 10.59 | 355 | 5.00 | 658 |
| | 21.34 | 259 | 15.22 | 655 | 22.24 b | 275 | 16.25 | 670 | 23.30 | 294 | 16.37 | 685 |
| 13. | 9.52 | 272 | 3.30 | 657 | 10.53 | 325 | 4.51 b | 646 | 11.24 | 298 | 5.38 | 599 |
| | 22.05 | 258 | 16.00 | 631 | 23.32 | 310 | 17.19 | 667 | - | - | 18.08 | 640 |
| 14. | 10.34 | 277 | 4.32 | 636 | 11.49 | 348 | 6.04 | 636 | 0.22 | 291 | 7.09 | 603 |
| | 22.41 | 268 | 16.41 | 624 | - | - | 18.21 | 660 | 12.24 | 356 | 19.07 | 686 |
| 15. | 11.04 | 295 | 5.24 | 617 | 0.40 | 328 | 7.26 | 622 | 1.27 | 354 | 8.04 | 618 |
| | 23.30 | 290 | 17.32 | 631 | 13.03 | 356 | 19.42 | 653 | 13.36 | 351 | 20.35 | 672 |
| 16. | - | - | 6.27 | 621 | 2.01 | 326 | 8.32 | 616 | 2.34 | 396 | 9.17 | 680 |
| | 12.05 | 342 | 18.38 | 633 | 14.33 | 351 | 20.48 | 654 | 15.20 | 394 | 21.02 | 686 |
| 17. | 0.43 | 303 | 7.48 | 609 | 3.21 | 291 | 9.35 | 602 | 3.37 | 331 | 9.37 | 629 |
| | 13.13 | 366 | 19.55 | 646 | 15.30 | 296 | 21.34 | 601 | 15.49 | 314 | 22.02 | 640 |
| 18. | 2.20 | 318 | 9.07 | 610 | 3.57 | 284 | 11.07 | 622 | 4.23 | 283 | 10.48 | 607 |
| | 14.31 | 367 | 21.37 | 668 | 16.31 | 322 | 22.55 | 646 | 16.43 | 285 | 23.09 | 644 |
| 19. | 3.54 | 325 | 10.30 | 635 | 5.03 | 280 | 11.45 | 618 | 5.09 | 296 | 11.50 | 641 |
| | 16.17 | 324 | 22.23 | 646 | 17.25 | 297 | 23.51 | 649 | 17.42 | 308 | 23.49 | 650 |
| 20. | 4.40 | 287 | 11.26 | 627 | 5.50 | 292 | - | - | 5.59 | 304 | - | - |
| | 17.10 | 324 | 23.23 | 661 | 18.08 | 298 | 12.26 | 635 | 18.16 | 297 | 12.10 | 643 |
| 21. | 5.42 | 292 | - | - | 6.29 | 291 | 0.25 | 652 | 6.38 | 303 | 0.32 | 646 |
| | 17.57 | 299 | 12.06 | 634 | 18.45 | 306 | 12.53 | 641 | 19.01 | 305 | 12.46 | 657 |
| 22. | 6.25 | 275 | 0.09 | 653 | 7.06 | 299 | 0.57 | 660 | 7.11 | 312 | 1.06 | 656 |
| | 18.41 | 274 | 12.39 | 626 | 19.25 | 309 | 13.22 | 658 | 19.31 | 295 | 13.06 | 663 |
| 23. | 7.03 | 266 | 0.45 | 643 | 7.29 | 294 | 1.26 | 647 | 7.45 | 297 | 1.41 | 643 |
| | 19.09 | 260 | 13.21 | 625 | 19.58 | 289 | 13.49 | 645 | 20.06 | 286 | 13.54 | 655 |
| 24. | 7.37 | 265 | 1.21 | 642 | 8.02 | 295 | 2.00 | 634 | 8.14 | 279 | 2.10 | 622 |
| | 19.55 | 266 | 13.46 | 630 | 20.24 | 290 | 14.08 | 650 | 20.44 | 273 | 14.26 | 637 |
| 25. | 8.12 | 277 | 2.04 | 643 | 8.32 | 292 | 2.36 | 641 | 8.49 | 286 | 2.51 | 611 |
| | 20.27 | 269 | 14.17 | 634 | 20.48 | 266 | 14.43 | 630 | 21.14 | 278 | 14.59 | 639 |
| 26. | 8.35 | 278 | 2.21 | 638 | 8.53 | 306 | 3.32 | 613 | 9.15 | 284 | 3.18 | 604 |
| | 20.49 | 276 | 14.42 | 629 | 21.22 | 299 | 15.02 | 642 | 21.48 | 275 | 15.35 | 633 |
| 27. | 9.04 | 284 | 2.56 | 629 | 9.25 | 322 | 3.43 | 606 | 9.57 | 303 | 4.04 | 609 |
| | 21.17 | 279 | 15.08 | 625 | 21.55 | 312 | 15.53 | 646 | 22.31 | 300 | 16.19 | 649 |
| 28. | 9.28 | 297 | 3.24 | 621 | 9.54 | 302 | 3.59 | 608 | 10.39 | 317 | 4.54 | 617 |
| | 21.45 | 310 | 15.47 | 635 | 22.22 | 294 | 16.03 | 612 | 23.18 | 318 | 17.05 | 652 |
| 29. | 9.55 | 346 | 3.59 | 646 | 9.52 | 297 | 3.52 | 559 | 11.40 | 328 | 5.58 | 630 |
| | 22.18 | 364 | 16.01 | 673 | 22.48 | 320 | 17.08 | 602 | - | - | 17.52 | 651 |
| 30. | 10.32 | 369 | 4.15 | 663 | 11.26 | 321 | 5.38 | 596 | 0.08 | 310 | 6.59 | 624 |
| | 22.56 | 346 | 16.26 | 658 | - | - | 18.04 | 621 | 12.42 | 322 | 18.56 | 643 |
| 31. | 11.09 | 408 | 5.03 | 647 | | | | | 1.16 | 299 | 7.55 | 616 |
| | 23.29 | 352 | 17.16 | 664 | | | | | 13.43 | 312 | 20.32 | 661 |
| Mittel | | 303 | | 637 | | 303 | | 638 | | 301 | | 642 |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 323 | 654 |

* 5. Wert am 09.12.2011 03.01.2012

Winterhalbjahr: 1.11. bis 30.4.
6 Tage Randeis
7 Tage Treibeis
2 Tage Eisdecke
b = berechnet

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide

cm

Pegel : Emden, Neue Seeschleuse

Gewässer : Unterems

Gebiet : Emsmündung

Nr. 3970010

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.32 | 316 | 9.12 | 661 | 3.09 | 312 | 9.55 | 649 | 5.18 | 311 | 11.45 | 651 | 6.56 | 292 | 0.38 | 646 | 7.07 | 321 | 1.12 | 624 | 7.35 | 304 | 1.47 | 627 | 8.01 | 329 | 1.36 | 671 | 1. |
| | 15.07 | 340 | 21.14 | 670 | 15.46 | 332 | 22.22 | 650 | 17.58 | 275 | - | - | 19.23 | 285 | 12.58 | 674 | 19.30 | 333 | 13.09 | 676 | 19.38 | 347 | 14.17 | 633 | 20.14 | 326 | 14.14 | 648 | |
| 2. | 3.43 | 315 | 10.01 | 658 | 4.17 | 312 | 10.47 | 637 | 6.19 | 297 | 0.23 | 629 | 7.32 | 298 | 1.28 | 636 | 7.47 | 328 | 1.48 | 659 | 8.13 | 372 | 2.13 | 690 | 8.30 | 339 | 2.29 | 654 | 2. |
| | 16.13 | 317 | 22.32 | 662 | 16.59 | 296 | 23.11 | 634 | 18.58 | 309 | 12.41 | 685 | 20.06 | 318 | 13.45 | 680 | 19.59 | 319 | 13.43 | 667 | 20.21 | 362 | 14.25 | 664 | 20.22 | 328 | 14.30 | 642 | |
| 3. | 4.48 | 288 | 11.03 | 646 | 5.21 | 284 | 11.54 | 650 | 7.13 | 303 | 1.11 | 652 | 8.18 | 303 | 1.59 | 657 | 8.04 | 309 | 2.06 | 642 | 8.39 | 360 | 2.46 | 662 | 8.55 | 321 | 2.41 | 655 | 3. |
| | 17.13 | 303 | 23.26 | 676 | 18.03 | 271 | - | - | 19.51 | 290 | 13.30 | 680 | 20.38 | 295 | 14.17 | 674 | 20.21 | 348 | 14.30 | 661 | 20.32 | 358 | 15.04 | 651 | 20.46 | 321 | 15.05 | 616 | |
| 4. | 5.44 | 307 | 11.55 | 677 | 6.28 | 281 | 0.17 | 645 | 7.54 | 298 | 2.01 | 637 | 8.42 | 297 | 2.40 | 640 | 8.35 | 334 | 2.37 | 662 | 9.14 | 356 | 2.56 | 693 | 9.39 | 371 | 3.39 | 680 | 4. |
| | 18.12 | 308 | - | - | 19.03 | 261 | 12.46 | 656 | 20.31 | 290 | 14.06 | 682 | 21.12 | 334 | 14.55 | 680 | 21.01 | 359 | 14.50 | 682 | 21.13 | 342 | 15.16 | 644 | 21.38 | 368 | 15.54 | 641 | |
| 5. | 6.49 | 312 | 0.21 | 689 | 7.27 | 276 | 1.12 | 639 | 8.34 | 295 | 2.36 | 637 | 9.17 | 351 | 3.05 | 685 | 9.07 | 322 | 2.56 | 656 | 9.43 | 359 | 3.25 | 676 | 10.07 | 332 | 3.53 | 668 | 5. |
| | 19.10 | 274 | 12.37 | 678 | 19.54 | 266 | 13.27 | 665 | 21.08 | 281 | 14.42 | 677 | 21.41 | 338 | 15.09 | 691 | 21.29 | 401 | 15.52 | 676 | 21.46 | 367 | 16.00 | 656 | 22.06 | 417 | 16.35 | 629 | |
| 6. | 7.30 | 261 | 1.12 | 637 | 8.15 | 282 | 2.06 | 642 | 9.01 | 300 | 3.16 | 635 | 9.40 | 314 | 3.18 | 647 | 9.18 | 354 | 2.56 | 672 | 10.10 | 357 | 4.03 | 661 | 11.03 | 348 | 4.41 | 669 | 6. |
| | 19.55 | 263 | 13.42 | 648 | 20.46 | 286 | 14.22 | 672 | 21.39 | 317 | 15.26 | 673 | 21.56 | 313 | 15.45 | 634 | 21.49 | 366 | 15.51 | 663 | 22.19 | 410 | 16.58 | 642 | 22.56 | 314 | 16.56 | 602 | |
| 7. | 8.19 | 291 | 2.24 | 647 | 8.54 | 281 | 2.49 | 628 | 9.47 | 327 | 3.52 | 644 | 10.00 | 354 | 4.05 | 645 | 10.05 | 384 | 3.52 | 672 | 11.28 | 393 | 5.07 | 686 | 11.29 | 311 | 5.29 | 590 | 7. |
| | 21.00 | 269 | 14.31 | 674 | 21.29 | 276 | 15.04 | 673 | 22.11 | 334 | 16.11 | 688 | 22.25 | 346 | 16.07 | 666 | 22.34 | 389 | 16.23 | 678 | 23.24 | 394 | 17.21 | 632 | 23.39 | 353 | 18.24 | 588 | |
| 8. | 9.02 | 302 | 3.15 | 638 | 9.31 | 284 | 3.37 | 627 | 10.07 | 314 | 4.06 | 637 | 10.32 | 335 | 4.26 | 635 | 10.30 | 351 | 4.09 | 651 | - | - | 6.03 | 663 | - | - | 6.21 | 626 | 8. |
| | 21.37 | 315 | 15.36 | 674 | 22.02 | 293 | 15.53 | 667 | 22.37 | 319 | 16.36 | 658 | 22.45 | 330 | 16.42 | 621 | 22.33 | 362 | 16.49 | 608 | 12.01 | 410 | 18.45 | 643 | 12.39 | 315 | 19.24 | 595 | |
| 9. | 9.37 | 323 | 4.01 | 626 | 10.01 | 350 | 4.36 | 639 | 10.40 | 320 | 4.44 | 629 | 11.04 | 337 | 4.56 | 615 | 11.23 | 420 | 5.01 | 672 | 0.37 | 398 | 7.02 | 647 | 0.41 | 335 | 8.20 | 650 | 9. |
| | 22.21 | 326 | 16.00 | 676 | 22.40 | 334 | 16.27 | 685 | 23.05 | 324 | 16.59 | 640 | 23.27 | 349 | 17.31 | 606 | 23.56 | 384 | 17.39 | 634 | 13.28 | 342 | 20.26 | 601 | 14.07 | 395 | 20.33 | 702 | |
| 10. | 10.24 | 323 | 4.44 | 643 | 10.45 | 322 | 4.32 | 640 | 11.15 | 325 | 5.12 | 614 | - | - | 6.19 | 631 | - | - | 6.31 | 628 | 1.56 | 348 | 8.37 | 643 | 3.01 | 459 | 8.16 | 697 | 10. |
| | 22.56 | 290 | 16.34 | 671 | 23.18 | 316 | 16.58 | 671 | 23.44 | 324 | 17.41 | 625 | 12.01 | 377 | 18.48 | 624 | 12.43 | 373 | 19.31 | 607 | 14.41 | 353 | 21.27 | 654 | 15.03 | 340 | 21.27 | 635 | |
| 11. | 11.01 | 303 | 5.18 | 618 | 11.18 | 316 | 5.23 | 618 | 11.46 | 331 | 6.00 | 608 | 0.40 | 391 | 7.53 | 638 | 1.20 | 360 | 7.58 | 624 | 3.14 | 364 | 9.44 | 678 | 3.48 | 315 | 9.56 | 638 | 11. |
| | 23.45 | 306 | 17.29 | 660 | 23.47 | 335 | 17.55 | 662 | - | - | 18.18 | 605 | 13.41 | 416 | 20.27 | 649 | 14.25 | 325 | 20.56 | 587 | 15.59 | 346 | 22.18 | 656 | 16.15 | 294 | 22.58 | 650 | |
| 12. | 11.59 | 328 | 6.11 | 624 | 11.55 | 367 | 6.08 | 632 | 0.26 | 319 | 7.06 | 587 | 2.31 | 409 | 8.45 | 648 | 2.44 | 307 | 9.07 | 592 | 4.19 | 347 | 10.35 | 649 | 4.45 | 306 | 11.12 | 656 | 12. |
| | - | - | 18.30 | 667 | - | - | 18.24 | 669 | 12.59 | 331 | 19.53 | 588 | 15.30 | 387 | 21.27 | 636 | 15.13 | 303 | 22.19 | 640 | 16.47 | 309 | 23.18 | 630 | 17.17 | 303 | 23.45 | 658 | |
| 13. | 0.35 | 334 | 7.04 | 628 | 0.43 | 345 | 6.50 | 618 | 1.42 | 330 | 8.31 | 590 | 3.42 | 374 | 10.01 | 653 | 4.07 | 358 | 10.30 | 629 | 5.12 | 302 | 11.37 | 635 | 5.39 | 305 | - | - | 13. |
| | 12.53 | 346 | 19.19 | 654 | 12.45 | 345 | 19.37 | 628 | 14.15 | 317 | 21.17 | 594 | 16.31 | 345 | 22.46 | 629 | 16.29 | 306 | 23.07 | 617 | 17.40 | 300 | - | - | 18.24 | 300 | 12.06 | 655 | |
| 14. | 1.35 | 327 | 7.49 | 615 | 1.19 | 349 | 8.25 b | 634 | 3.03 | 313 | 9.55 | 604 | 4.20 | 348 | 11.04 | 657 | 4.47 | 318 | 11.16 | 640 | 6.14 | 295 | 0.11 | 648 | 6.41 | 280 | 0.29 | 656 | 14. |
| | 13.54 | 327 | 20.26 | 628 | 14.02 | 381 | 20.36 b | 654 | 15.49 | 321 | 22.26 | 617 | 17.18 | 430 | 22.58 | 731 | 17.26 | 311 | - | - | 18.42 | 297 | 12.28 | 656 | 19.16 | 223 | 12.56 | 618 | |
| 15. | 2.35 | 292 | 8.51 | 587 | 2.39 | 357 | 9.25 b | 645 | 4.22 | 318 | 10.56 | 621 | 5.54 | 405 | 11.26 | 697 | 5.37 | 335 | 0.12 | 624 | 7.03 | 300 | 0.53 | 660 | 7.21 | 279 | 1.55 | 578 | 15. |
| | 14.43 | 303 | 21.33 | 630 | 15.17 | 349 | 21.53 b | 640 | 17.01 | 284 | 23.21 | 602 | 18.12 | 327 | - | - | 18.19 | 319 | 11.44 | 701 | 19.28 | 300 | 13.11 | 672 | 19.44 | 302 | 14.04 | 621 | |
| 16. | 3.33 | 317 | 10.18 | 622 | 3.45 | 345 | 10.16 | 650 | 4.57 | 336 | 11.44 | 645 | 6.23 | 315 | 0.19 | 649 | 6.29 | 302 | 0.39 | 640 | 7.52 | 289 | 1.38 | 662 | 8.15 | 300 | 2.07 | 682 | 16. |
| | 15.59 | 348 | 22.19 | 640 | 16.30 | 352 | 22.55 | 641 | 17.49 | 313 | - | - | 18.38 b | 307 | 12.41 | 672 | 18.47 | 329 | 13.21 | 638 | 20.18 | 309 | 14.07 | 657 | 20.45 | 325 | 14.50 | 676 | |
| 17. | 4.24 | 330 | 11.18 | 643 | 4.46 | 349 | 11.17 | 663 | 6.06 | 314 | 0.04 | 631 | 7.02 | 343 | 0.54 b | 662 | 7.30 | 318 | 0.51 | 707 | 8.46 | 276 | 2.21 | 661 | 9.16 | 290 | 2.54 | 695 | 17. |
| | 17.06 | 340 | 23.08 | 628 | 17.27 | 342 | 23.36 | 650 | 18.39 | 302 | 12.22 | 665 | 19.42 | 323 | 13.08 | 695 | 19.40 | 315 | 13.16 | 660 | 20.59 | 326 | 15.08 | 645 | 21.24 | 314 | 15.48 | 649 | |
| 18. | 5.14 | 300 | - | - | 5.41 | 318 | - | - | 6.54 | 297 | 0.46 | 635 | 7.49 | 329 | 1.37 | 657 | 8.08 | 278 | 2.03 | 661 | 9.27 | 324 | 3.04 | 683 | 10.03 | 308 | 3.47 | 692 | 18. |
| | 17.50 | 305 | 12.05 | 651 | 18.06 | 327 | 12.07 | 654 | 19.16 | 292 | 13.12 | 654 | 20.09 | 363 | 14.08 | 689 | 20.33 | 304 | 14.28 | 667 | 21.46 | 346 | 15.45 | 664 | 22.02 | 300 | 16.21 | 642 | |
| 19. | 6.01 | 296 | 0.00 | 645 | 6.21 | 340 | 0.36 | 642 | 7.42 | 310 | 1.34 | 658 | 8.37 | 361 | 2.06 | 699 | 8.50 | 286 | 2.41 | 665 | 10.16 | 302 | 3.43 | 676 | 10.37 | 276 | 4.33 | 651 | 19. |
| | 18.30 | 292 | 12.16 | 644 | 19.16 | 398 | 12.54 | 710 | 20.06 | 294 | 13.37 | 677 | 21.03 | 337 | 14.12 | 713 | 21.13 | 296 | 15.08 | 659 | 22.08 | 286 | 16.29 | 591 | 22.40 | 256 | 16.45 | 591 | |
| 20. | 6.39 | 287 | 0.36 | 627 | 7.03 | 342 | 0.58 | 690 | 8.19 | 319 | 2.21 | 653 | 9.07 | 314 | 2.50 | 667 | 9.33 | 296 | 3.21 | 657 | 10.56 | 301 | 4.58 | 623 | 11.17 | 231 | 5.00 | 603 | 20. |
| | 19.13 | 292 | 12.57 | 659 | 19.36 | 312 | 13.02 | 682 | 20.46 | 306 | 14.23 | 680 | 21.36 | 312 | 15.12 | 673 | 21.58 | 317 | 15.57 | 656 | 23.13 | 358 | 17.49 | 630 | 22.54 | 224 | 17.06 | 515 | |
| 21. | 7.22 | 279 | 1.08 | 633 | 7.48 | 309 | 1.40 | 657 | 8.58 | 299 | 2.48 | 653 | 9.45 | 312 | 3.50 | 644 | 10.28 | 306 | 4.07 | 657 | 11.55 | 298 | 5.24 | 642 | 11.36 | 233 | 5.43 | 542 | 21. |
| | 19.44 | 268 | 13.40 | 641 | 20.20 | 287 | 13.44 | 673 | 21.25 | 292 | 14.59 | 669 | 22.03 | 323 | 16.03 | 650 | 22.35 | 316 | 16.46 | 624 | 23.53 | 377 | 18.42 | 598 | 23.47 | 260 | 18.41 | 526 | |
| 22. | 7.37 | 318 | 1.58 | 619 | 8.27 | 290 | 2.22 | 642 | 9.31 | 327 | 3.43 | 654 | 10.25 | 346 | 4.21 | 658 | 11.07 | 312 | 4.49 | 641 | - | - | 6.19 | 707 | - | - | 6.55 | 578 | 22. |
| | 20.09 | 298 | 14.06 | 652 | 20.51 | 271 | 14.30 | 662 | 21.58 | 327 | 15.30 | 692 | 23.01 | 342 | 16.50 | 657 | 23.27 | 330 | 17.35 | 612 | 13.13 | 358 | 19.06 | 590 | 12.36 | 290 | 18.58 | 540 | |
| 23. | 8.24 | 311 | 2.52 | 619 | 9.01 | 290 | 2.55 | 623 | 10.11 | 332 | 4.11 | 659 | 11.16 | 320 | 5.04 | 636 | - | - | 6.04 | 640 | 1.08 | 330 | 7.56 | 597 | 0.59 | 269 | 7.59 | 547 | 23. |
| | 21.00 | 306 | 14.51 | 660 | 21.32 | 292 | 15.05 | 673 | 22.42 | 317 | 16.17 | 681 | 23.37 | 310 | 17.27 | 609 | 12.13 | 312 | 18.48 | 598 | 13.47 | 347 | 20.45 | 634 | 13.02 | 336 | 20.45 | 608 | |
| 24. | 9.05 | 303 | 3.22 | 626 | 9.46 | 303 | 3.40 | 646 | 10.49 | 318 | 4.50 | 641 | 11.35 | 286 | 5.35 | 567 | 0.22 | 341 | 7.17 | 640 | 2.24 | 378 | 8.53 | 664 | 2.18 | 375 | 9.00 | 658 | 24. |
| | 21.23 | 358 | 15.39 | 658 | 22.15 | 289 | 15.39 | 670 | 23.15 | 319 | 16.58 | 655 | 22.42 | 412 | 18.50 | 562 | 13.34 | 327 | 20.07 | 608 | 15.14 | 343 | 21.31 | 615 | 15.11 | 352 | 22.01 | 643 | |
| 25. | 9.35 | 343 | 4.03 | 660 | 10.23 | 307 | 4.18 | 639 | 11.34 | 333 | 5.43 | 636 | - | - | 6.44 | 628 | 1.53 | 349 | 8.40 | 659 | 3.43 | 293 | 10.17 | 591 | 4.24 | 392 | 10.21 | 644 | 25. |
| | 22.20 | 335 | 15.44 | 712 | 22.55 | 302 | 16.31 | 669 | 23.56 | 366 | 18.16 | 661 | 13.11 | 372 | 20.15 | 601 | 14.57 | 369 | 21.53 | 651 | 15.27 | 432 | 21.42 | 688 | 15.51 | 348 | 22.59 | 672 | |
| 26. | 10.27 | 323 | 4.20 | 654 | 11.04 | 304 | 4.59 | 636 | - | - | 6.40 | 645 | 2.18 | 352 | 8.53 | 616 | 4.04 | 362 | 9.34 | 655 | 4.34 | 381 | 10.33 | 661 | 5.02 | 405 | 11.01 | 676 | 26. |
| | 22.56 | 287 | 16.32 | 664 | 23.34 | 284 | 17.10 | 646 | 12.25 | 381 | 19.10 | 672 | 15.02 | 317 | 22.05 | 613 | 16.02 | 314 | 22.17 | 623 | 16.45 | 341 | 23.24 | 656 | 16.50 | 382 | 23.07 | 671 | |
| 27. | 11.03 | 297 | 5.06 | 616 | 11.45 | 304 | 5.50 | 608 | 1.19 | 378 | 7.32 | 638 | 3.41 | 334 | 10.23 | 649 | 4.09 | 347 | 10.28 | 664 | 5.15 | 337 | 11.43 | 646 | 5.07 | 406 | 11.28 | 688 | 27. |
| | 23.48 | 296 | 17.36 | 653 | - | - | 18.19 | 644 | 14.01 | 313 | 20.36 | 594 | 16.17 | 326 | 22.59 | 650 | 16.51 | 345 | 22.53 | 647 | 17.31 | 309 | - | - | 17.52 | 333 | - | - | |
| 28. | - | - | 6.16 | 622 | 0.21 | 319 | 7.08 | 642 | 2.26 | 292 | 9.36 | 613 | 4.54 | 339 | 11.03 | 658 | 5.15 | 324 | 11.16 | 655 | 6.02 | 317 | 0.09 | 644 | 6.17 | 324 | 0.04 | 691 | 28. |
| | 12.03 | 305 | 18.15 | 633 | 12.59 | 338 | 19.19 | 638 | 15.15 | 337 | 22.12 | 668 | 17.25 | 324 | 23.57 | 632 | 17.30 | 305 | 23.52 | 619 | 18.15 | 324 | 12.21 | 645 | 18.12 | 243 | 12.07 | 616 | |
| 29. | 0.32 | 281 | 7.34 | 631 | 1.28 | 314 | 8.15 | 630 | 4.09 | 360 | 10.23 | 662 | 5.34 | 349 | - | - | 5.44 | 316 | - | - | 6.40 | 326 | 0.29 | 664 | 6.41 | 286 | 1.03 | 609 | 29. |
| | 13.18 | 311 | 19.51 | 644 | 14.05 | 334 | 20.50 | 641 | 16.49 | 320 | 23.33 | 647 | 18.16 | 374 | 12.07 | 701 | 18.07 | 356 | 12.14 | 659 | 18.57 | 333 | 12.51 | 656 | 19.04 | 313 | 13.22 | 632 | |
| 30. | 1.51 | 306 | 8.41 | 632 | 2.57 | 321 | 9.39 | 633 | 5.12 | 340 | 11.46 | 654 | 6.32 | 341 | 0.07 | 680 | 6.38 | 349 | 0.43 | 683 | 7.25 | 317 | 1.00 | 670 | 7.38 | 384 | 1.29 | 709 | 30. |
| | 14.27 | 326 | 20.58 | 654 | 15.35 | 343 | 22.11 | 646 | 17.39 | 330 | 23.54 | 664 | 18.54 | 314 | 12.21 | 667 | 18.59 | 327 | 12.44 | 682 | 19.35 | 320 | 13.28 | 650 | 19.48 | 387 | 13.20 | 714 | |
| 31. | | | | | 4.05 | 331 | 10.34 | 653 | 6.02 | 344 | - | - | | | | | 7.13 | 322 | 1.01 | 654 | | | | | 8.06 | 386 | 1.31 | 711 | 31. |
| | | | | | 16.53 | 319 | 23.16 | 639 | 18.56 | 324 | 12.00 | 723 | | | | | 19.15 | 325 | 13.21 | 639 | | | | | 20.10 | 341 | 14.07 | 656 | |
| Mittel | | 308 | | 647 | | 316 | | 649 | | 317 | | 645 | | 340 | | 651 | | 333 | | 648 | | 339 | | 649 | | 323 | | 639 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 319 | 647 |

Sommerhalbjahr: 1.5. bis 31.10.
eisfrei
b = berechnet

Bundesanstalt für Gewässerkunde Koblenz

PNP : NN - 5.00 m

W Tide

cm

Pegel : Emden, Neue Seeschleuse

Gewässer : Unterems

Gebiet : Emsmündung

Nr. 3970010

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 12. | 12. | 31. | 28. | 26. | 26. | 10. | 1. | 9. | 3. | 4. | 29. | 8. | 1. | 6. | 15. | 4. | 27. | 1. | 12. | 1. | 24. | 18. | 11. | 17. | 22. | 14. | 20. |
| N | 264 | 565 | 246 | 603 | 188 | 545 | 227 | 544 | 246 | 549 | 260 | 559 | 244 | 574 | 261 | 587 | 261 | 608 | 275 | 587 | 285 | 562 | 278 | 587 | 276 | 590 | 223 | 515 |
| M | 331 | 640 | 366 | 694 | 336 | 681 | 297 | 633 | 303 | 637 | 303 | 638 | 301 | 642 | 308 | 647 | 316 | 649 | 317 | 645 | 340 | 651 | 333 | 648 | 339 | 649 | 323 | 639 |
| H | 484 | 827 | 520 | 817 | 616 | 853 | 410 | 736 | 408 | 697 | 380 | 701 | 396 | 689 | 358 | 712 | 398 | 710 | 381 | 723 | 430 | 731 | 420 | 707 | 432 | 707 | 459 | 714 |
| Tag | 27. | 28. | 9. | 9. | 6. | 5. | 15. | 15. | 31. | 11. | 2. | 7. | 16. | 11. | 24. | 25. | 19. | 19. | 26. | 31. | 14. | 14. | 9. | 17. | 25. | 22. | 10. | 30. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2002 | 2002 | 2008 | 2010 | 2012 | 2004 | 2011 | 2011 | 2006 | 2006 | 2008+ | 2004 | 2012 | 2011 | 2005+ | 2012 | 2004+ | 2004 | 2009 | 2005 | 2010 | 2004+ | 2011 | 2011 | 2010 | 2005 | 2008 | 2010 |
| N | 195 | 537 | 195 | 509 | 188 | 512 | 201 | 507 | 210 | 546 | 236 | 551 | 244 | 559 | 257 | 587 | 249 | 567 | 254 | 579 | 225 | 562 | 226 | 522 | 232 | 552 | 195 | 509 |
| MN | 264 | 568 | 244 | 560 | 234 | 560 | 239 | 555 | 238 | 563 | 247 | 576 | 260 | 578 | 268 | 596 | 264 | 598 | 274 | 596 | 267 | 583 | 262 | 563 | 273 | 574 | 245 | 560 |
| M | 340 | 654 | 331 | 650 | 331 | 656 | 311 | 641 | 310 | 645 | 301 | 639 | 309 | 642 | 316 | 648 | 322 | 651 | 328 | 651 | 334 | 650 | 336 | 647 | 343 | 655 | 334 | 653 |
| MH | 506 | 814 | 469 | 770 | 482 | 776 | 443 | 765 | 440 | 771 | 390 | 712 | 378 | 700 | 402 | 721 | 401 | 722 | 412 | 724 | 448 | 730 | 458 | 747 | 507 | 812 | 477 | 773 |
| H | 590 | 1017 | 574 | 848 | 616 | 905 | 550 | 852 | 609 | 910 | 423 | 779 | 421 | 726 | 538 | 776 | 458 | 762 | 455 | 748 | 524 | 782 | 507 | 817 | 590 | 1017 | 574 | 848 |
| Jahr | 2006 | 2006 | 2003 | 2005 | 2012 | 2007 | 2008 | 2004 | 2008 | 2008 | 2011 | 2003 | 2011 | 2011 | 2007 | 2007 | 2011 | 2008 | 2009 | 2011 | 2004 | 2004 | 2009 | 2009 | 2006 | 2006 | 2003 | 2005 |
| HThw ab 1901 | 1017 | | 943 | | 1004 | | 1012 | | 1018 | | 885 | | 778 | | 779 | | 788 | | 830 | | 825 | | 899 | | 1017 | | 943 | |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NTnw | 188 | 26.01.2012 | 188 | 244 | 188 | 26.01.2012 |
| NThw | 544 | 01.02.2012 | 544 | 562 | 515 | 20.12.2012 |
| M | 321 651 | | 323 654 | 319 647 | 318 647 | |
| HTnw | 616 | 06.01.2012 | 616 | 430 | 616 | 06.01.2012 |
| HThw | 853 | 05.01.2012 | 853 | 731 | 853 | 05.01.2012 |
| | 2003/2012 (*) 10 Jahre | | | | 2003/2012 | |
| NTnw | 188 | 26.01.2012 | 188 | 225 | 188 | 26.01.2012 |
| NThw | 507 | 12.02.2011 | 507 | 522 | 507 | 12.02.2011 |
| MN | 210 527 | | 210 527 | 244 559 | 213 526 | |
| M | 322 648 | | 321 648 | 324 648 | 323 648 | |
| MH | 553 856 | | 549 853 | 488 769 | 558 873 | |
| HTnw | 616 | 06.01.2012 | 616 | 538 | 616 | 06.01.2012 |
| HThw | 1017 | 01.11.2006 | 1017 | 817 | 1017 | 01.11.2006 |

## Extremwerte **)

| | NTnw cm | | Datum | NThw cm | Datum | HTnw cm | Datum | HThw cm | Datum |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 120 | e | 15.03.1964 | 368 | 16.01.1905 | 769 | 13.12.1894 | 1018 | 13.03.1906 |
| 2 | 132 | e | 02.03.1987 | 378 | 07.12.1959 | 701 | 23.12.1954 | 1017 | 01.11.2006 |
| 3 | 141 | e | 25.01.1937 | 386 | 18.11.1916 | 692 | 06.11.1985 | 1012 | 04.02.1944 |
| 4 | 150 | e | 26.01.1937 | 398 | 18.01.1912 | 668 | 26.02.1990 | 1004 | 28.01.1901 |
| 5 | 150 | e | 21.11.1927 | 405 | 25.01.1937 | 665 | 14.02.1989 | 976 | 09.11.2007 |
| 6 | 150 | | 12.01.1913 | 410 | 11.11.1941 | 664 | 01.11.1965 | 972 | 16.02.1962 |
| 7 | 154 | | 14.02.1994 | 420 | 06.02.1915 | 650 | 17.02.1962 | 970 | 13.01.1916 |
| 8 | 157 | | 10.02.1947 | 424 | 08.03.1952 | 650 | 10.10.1926 | 962 | 28.01.1994 |
| 9 | 160 | | 09.01.1970 | 429 | 31.01.1950 | 648 | 07.01.1905 | 958 | 04.01.1976 |
| 10 | 160 | | 19.11.1916 | 430 | 20.11.1927 | 646 | 14.01.1916 | 938 | 21.01.1976 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | | | | | | | | | | | | | | | | | |
| 640 | | | | | | | | | | | | | | | | | | | |
| 620 | | | 60 | | | | | | | | | | | | 351 | | 707 | 707 | 705.9 |
| 600 | | | 58 | | | | | | | | | | | | 349 | | 705 | 705 | 705.6 |
| 580 | | | 58 | | | | | | | | | | | | 349 | | 705 | 705 | 705.5 |
| 560 | | | 57 | | | | | | | | | | | | 348 | | 704 | 704 | 705.2 |
| 540 | | 60 | 56 | | | | | | | | | | | | 347 | | 703 | 703 | 704.2 |
| 520 | | 59 | 56 | | | | | | | | | | | | 346 | | 702 | 703 | 703.5 |
| 500 | 58 | 58 | 56 | | | | | | | | | | | | 345 | | 701 | 703 | 701.6 |
| 480 | 57 | 58 | 54 | | | | | | | | | | | | 342 | | 698 | 701 | 699.6 |
| 460 | 57 | 56 | 54 | | | | | | | | | | | 60 | 340 | | 696 | 701 | 696.8 |
| 440 | 57 | 52 | 52 | | | | | | | | 58 | 60 | 58 | 59 | 334 | 356 | 690 | 698 | 691.8 |
| 420 | 57 | 48 | 52 | 56 | 60 | | | | | | 57 | 59 | 57 | 59 | 330 | 354 | 684 | 695 | 683.6 |
| 400 | 56 | 42 | 48 | 54 | 59 | 57 | 60 | | 60 | 60 | 53 | 58 | 55 | 56 | 316 | 349 | 665 | 678 | 666.5 |
| 380 | 55 | 35 | 44 | 54 | 59 | 56 | 58 | | 58 | 59 | 51 | 55 | 51 | 50 | 303 | 339 | 642 | 653 | 641.2 |
| 360 | 50 | 30 | 41 | 53 | 54 | 55 | 58 | 58 | 57 | 56 | 45 | 49 | 44 | 47 | 283 | 323 | 606 | 617 | 593.1 |
| 340 | 36 | 23 | 36 | 52 | 49 | 51 | 54 | 52 | 44 | 54 | 33 | 38 | 27 | 41 | 247 | 275 | 522 | 531 | 502.7 |
| 320 | 24 | 17 | 32 | 43 | 41 | 44 | 49 | 41 | 35 | 35 | 18 | 24 | 19 | 29 | 201 | 202 | 403 | 410 | 373.2 |
| 300 | 10 | 7 | 25 | 28 | 35 | 31 | 34 | 19 | 20 | 14 | 6 | 4 | 7 | 15 | 136 | 97 | 233 | 238 | 215.0 |
| 280 | 2 | 2 | 20 | 19 | 21 | 9 | 14 | 6 | 6 | 1 | | 1 | 1 | 10 | 73 | 28 | 101 | 108 | 87.6 |
| 260 | | 2 | 15 | 8 | 4 | | 3 | | | | | | | 6 | 29 | 3 | 32 | 36 | 25.8 |
| 240 | | | 5 | 3 | | | | | | | | | | 4 | 8 | | 8 | 12 | 6.1 |
| 220 | | | 2 | | | | | | | | | | | | 2 | | 2 | 2 | 1.1 |
| 200 | | | 2 | | | | | | | | | | | | 2 | | 2 | 2 | 0.4 |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | 705.8 |
| 1000 | | | | | | | | | | | | | | | | | | | 705.7 |
| 980 | | | | | | | | | | | | | | | | | | | 705.7 |
| 960 | | | | | | | | | | | | | | | | | | | 705.6 |
| 940 | | | | | | | | | | | | | | | | | | | 705.6 |
| 920 | | | | | | | | | | | | | | | | | | | 705.6 |
| 900 | | | | | | | | | | | | | | | | | | | 705.4 |
| 880 | | | | | | | | | | | | | | | | | | | 705.3 |
| 860 | | | 60 | | | | | | | | | | | | 352 | | 707 | 707 | 705.3 |
| 840 | 58 | | 59 | | | | | | | | | | | | 351 | | 706 | 706 | 705.0 |
| 820 | 57 | 60 | 59 | | | | | | | | | | | | 350 | | 705 | 706 | 704.6 |
| 800 | 56 | 57 | 58 | | | | | | | | | | | | 345 | | 700 | 705 | 703.1 |
| 780 | 56 | 54 | 56 | | | | | | | | | | | | 340 | | 695 | 703 | 701.1 |
| 760 | 56 | 54 | 51 | | | | | | | | | | | | 335 | | 690 | 698 | 698.1 |
| 740 | 55 | 49 | 47 | 56 | | | | | | 59 | 58 | | | | 325 | 355 | 680 | 694 | 691.1 |
| 720 | 54 | 47 | 45 | 54 | | 58 | | 58 | 60 | 58 | 57 | 60 | 58 | 60 | 318 | 353 | 671 | 688 | 678.6 |
| 700 | 53 | 38 | 40 | 52 | 60 | 57 | 60 | 57 | 59 | 58 | 55 | 58 | 57 | 56 | 300 | 347 | 647 | 669 | 652.3 |
| 680 | 51 | 26 | 33 | 47 | 57 | 55 | 55 | 56 | 56 | 51 | 46 | 55 | 52 | 49 | 269 | 319 | 588 | 612 | 593.5 |
| 660 | 47 | 13 | 22 | 43 | 48 | 45 | 47 | 41 | 43 | 41 | 38 | 40 | 36 | 42 | 218 | 250 | 468 | 486 | 470.0 |
| 640 | 37 | 6 | 14 | 33 | 35 | 27 | 22 | 22 | 19 | 24 | 20 | 19 | 15 | 24 | 152 | 126 | 278 | 274 | 287.9 |
| 620 | 19 | 3 | 9 | 21 | 11 | 16 | 12 | 6 | 3 | 12 | 8 | 9 | 7 | 18 | 79 | 50 | 129 | 132 | 137.8 |
| 600 | 6 | | 7 | 13 | 5 | 3 | 2 | 1 | | 5 | 2 | 3 | 5 | 11 | 34 | 13 | 47 | 57 | 53.9 |
| 580 | 1 | | 4 | 6 | 1 | 1 | 1 | | | | 2 | | | 7 | 13 | 3 | 16 | 22 | 18.4 |
| 560 | | | 2 | 3 | 1 | 1 | | | | | | | | 5 | 7 | | 7 | 12 | 5.5 |
| 540 | | | | | | | | | | | | | | 2 | | | | 2 | 2.0 |
| 520 | | | | | | | | | | | | | | 1 | | | | 1 | 0.5 |
| 500 | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

**) Extremwerte ab 1901

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 1327 $km^2$

PNP : NN - 5.00 m

Lage: 5.0 km rechts

W Tide cm

Pegel : Nortmoor Nr. 3889102

Gewässer : Jümme

Gebiet : Leda

## Hauptwerte

| | 2011 Nov Tnw | 2011 Nov Thw | 2011 Dez Tnw | 2011 Dez Thw | 2012 Jan Tnw | 2012 Jan Thw | 2012 Feb Tnw | 2012 Feb Thw | 2012 Mrz Tnw | 2012 Mrz Thw | 2012 Apr Tnw | 2012 Apr Thw | 2012 Mai Tnw | 2012 Mai Thw | 2012 Jun Tnw | 2012 Jun Thw | 2012 Jul Tnw | 2012 Jul Thw | 2012 Aug Tnw | 2012 Aug Thw | 2012 Sep Tnw | 2012 Sep Thw | 2012 Okt Tnw | 2012 Okt Thw | 2012 Nov Tnw | 2012 Nov Thw | 2012 Dez Tnw | 2012 Dez Thw |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 12. | 27. | 28. | 28. | 31. | 19. | 1. | 15. | 11. | 11. | 29. | 7. | 26. | 1. | 15. | 15. | 27. | 9. | 13. | 12. | 24. | 17. | 5. | 6. | 27.+ | 5. | 21. | 1. |
| N | 394 | 495 | 412 | 532 | 412 | 544 | 402 | 508 | 403 | 523 | 405 | 544 | 421 | 596 | 416 | 609 | 429 | 628 | 415 | 607 | 400 | 573 | 408 | 528 | 394 | 492 | 386 | 512 |
| M | 432 | 632 | 482 | 613 | 499 | 625 | 456 | 610 | 445 | 644 | 447 | 652 | 446 | 662 | 447 | 665 | 449 | 665 | 445 | 662 | 450 | 658 | 446 | 651 | 437 | 619 | 445 | 607 |
| H | 469 | 684 | 577 | 682 | 645 | 691 | 489 | 679 | 485 | 702 | 584 | 705 | 577 | 708 | 471 | 697 | 476 | 702 | 470 | 701 | 562 | 701 | 479 | 699 | 468 | 682 | 507 | 679 |
| Tag | 27. | 25. | 9. | 31. | 6. | 4. | 17. | 21. | 31. | 29. | 13. | 11. | 1. | 11. | 25. | 5. | 19. | 20. | 27. | 2.+ | 16. | 4. | 9. | 30. | 25. | 16. | 25. | 24. |

| | 2002/2011 | | | | 2003/2012 10 Jahre | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2003 | 2007 | 2002 | 2006 | 2008 | 2008 | 2009 | 2010 | 2011 | 2006 | 2003 | 2003 | 2005 | 2005 | 2012 | 2011 | 2004 | 2005 | 2012 | 2011 | 2010 | 2010 | 2004 | 2007 | 2003 | 2007 | 2010 | 2006 |
| N | 387 | 466 | 363 | 494 | 373 | 493 | 380 | 479 | 388 | 487 | 378 | 482 | 392 | 493 | 416 | 563 | 408 | 517 | 415 | 539 | 391 | 520 | 369 | 506 | 387 | 466 | 374 | 494 |
| MN | 405 | 514 | 401 | 510 | 405 | 521 | 399 | 514 | 406 | 518 | 410 | 566 | 411 | 575 | 424 | 602 | 424 | 576 | 424 | 586 | 410 | 574 | 397 | 546 | 404 | 512 | 403 | 508 |
| M | 456 | 628 | 456 | 623 | 464 | 616 | 454 | 620 | 452 | 625 | 444 | 648 | 443 | 654 | 447 | 660 | 448 | 659 | 450 | 659 | 449 | 652 | 447 | 644 | 452 | 627 | 456 | 622 |
| MH | 544 | 685 | 526 | 683 | 553 | 683 | 530 | 677 | 547 | 681 | 507 | 696 | 484 | 697 | 517 | 700 | 486 | 700 | 491 | 700 | 523 | 698 | 499 | 694 | 529 | 684 | 526 | 684 |
| H | 615 | 694 | 593 | 694 | 645 | 702 | 571 | 691 | 638 | 702 | 584 | 705 | 577 | 710 | 593 | 707 | 563 | 709 | 575 | 705 | 582 | 705 | 528 | 708 | 598 | 694 | 593 | 694 |
| Jahr | 2002 | 2005 | 2007 | 2007 | 2012 | 2008 | 2009 | 2006 | 2007 | 2012 | 2012 | 2012 | 2012 | 2006 | 2005+ | 2006 | 2003 | 2009 | 2008 | 2006+ | 2007 | 2009 | 2010 | 2009 | 2006 | 2005 | 2007 | 2007 |
| HThw ab 1968 | 710* | | 708* | | 710 | | 700 | | 702 | | 709* | | 710 | | 711 | | 709 | | 705 | | 706 | | 714 | | 710* | | 708* | |

| | Abflussjahr (*) 2012 Jahr | | Datum | | Winter | | Sommer | | Kalenderjahr 2012 Jahr | | Datum | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NTnw | 394 | | 12.11.2011 | | 394 | | 400 | | 386 | | 21.12.2012 | |
| NThw | | 495 | 27.11.2011 | | | 495 | | 528 | | 492 | 05.11.2012 | |
| M | 454 | 645 | | | 460 | 629 | 447 | 660 | 451 | 643 | | |
| HTnw | 645 | | 06.01.2012 | | 645 | | 577 | | 645 | | 06.01.2012 | |
| HThw | | 708 | 11.05.2012 | | | 705 | | 708 | | 708 | 11.05.2012 | |
| | 2003/2012 (*) 10 Jahre | | | | | | | | 2003/2012 | | | |
| NTnw | 363 | | 10.12.2002 | | 363 | | 369 | | 369 | | 12.10.2004 | |
| NThw | | 466 | 25.11.2007 | | | 466 | | 493 | | 466 | 25.11.2007 | |
| MN | 381 | 488 | | | 383 | 488 | 393 | 529 | 381 | 488 | | |
| M | 451 | 641 | | | 454 | 627 | 447 | 655 | 450 | 640 | | |
| MH | 606 | 704 | | | 600 | 697 | 563 | 704 | 600 | 704 | | |
| HTnw | 645 | | 06.01.2012 | | 645 | | 593 | | 645 | | 06.01.2012 | |
| HThw | | 710 | 19.05.2006 | | | 705 | | 710 | | 710 | 19.05.2006 | |

## Extremwerte **)

| | NTnw cm | NTnw Datum | NThw cm | NThw Datum | HTnw cm | HTnw Datum | HThw cm | HThw Datum |
|---|---|---|---|---|---|---|---|---|
| 1 | 288 | * 08.12.1959 | 382 | * 07.12.1959 | 674 | 03.01.1976 | 714 | 28.10.1998 |
| 2 | 298 | * 15.03.1964 | 406 | * 15.03.1964 | 663 | 28.01.1994 | 711 | 23.06.1997 |
| 3 | 337 | 18.12.1997 | 416 | 22.12.2000 | 661 | 10.01.1995 | 710 | 19.05.2006 |
| 4 | 338 | 17.12.1997 | 435 | 17.01.1972 | 658 | * 17.02.1962 | 710 | 04.01.1976 |
| 5 | 343 | 21.10.1999 | 436 | * 08.12.1959 | 656 | 01.02.1983 | 710 | * 26.11.1960 |
| 6 | 350 | 22.12.2000 | 436 | * 17.11.1965 | 645 | 06.01.2012 | 709 | 23.07.2009 |
| 7 | 352 | 14.02.1994 | 440 | 01.03.1971 | 644 | 02.02.1983 | 709 | * 07.04.1959 |
| 8 | 354 | 21.10.1999 | 441 | 21.12.2000 | 642 | 15.01.1968 | 708 | 12.06.1998 |
| 9 | 354 | 01.03.1981 | 446 | 28.02.1971 | 640 | * 23.02.1967 | 708 | 15.06.1995 |
| 10 | 355 | 02.03.1987 | 446 | * 19.01.1963 | 639 | 03.01.1976 | 708 | * 05.12.1960 |

## Häufigkeitstabelle (Unterschreitungstiden)

### Tideniedrigwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | |
| 700 | | | | | | | | | | | | | | | | | | | |
| 680 | | | | | | | | | | | | | | | | | | | |
| 660 | | | 60 | | | | | | | | | | | | 352 | | 708 | 708 | 705.9 |
| 640 | | | 59 | | | | | | | | | | | | 351 | | 707 | 707 | 705.8 |
| 620 | | | 57 | | | | | | | | | | | | 349 | | 705 | 705 | 705.4 |
| 600 | | | 55 | | | 58 | | | | | | | | | 347 | | 703 | 703 | 705.1 |
| 580 | | 60 | 54 | | | 57 | 60 | | | | 58 | | | | 345 | 356 | 701 | 701 | 703.7 |
| 560 | | 59 | 52 | | | 57 | 59 | | | | 57 | | | | 342 | 354 | 696 | 697 | 700.2 |
| 540 | | 59 | 48 | | | 57 | 59 | | | | 57 | | | | 338 | 354 | 692 | 693 | 697.0 |
| 520 | | 54 | 41 | | | 57 | 59 | | | | 57 | | | 60 | 326 | 354 | 680 | 686 | 690.3 |
| 500 | | 49 | 36 | 56 | 60 | 57 | 59 | | | | 57 | | | 58 | 316 | 354 | 670 | 679 | 677.7 |
| 480 | 58 | 27 | 29 | 52 | 58 | 57 | 58 | 58 | 60 | 60 | 56 | 60 | 58 | 54 | 281 | 352 | 633 | 660 | 642.9 |
| 460 | 56 | 12 | 14 | 33 | 53 | 48 | 53 | 53 | 54 | 57 | 49 | 55 | 53 | 43 | 216 | 321 | 537 | 565 | 523.8 |
| 440 | 42 | 5 | 7 | 9 | 15 | 18 | 21 | 12 | 10 | 17 | 12 | 15 | 25 | 24 | 96 | 87 | 183 | 185 | 220.4 |
| 420 | 10 | 2 | 1 | 2 | 4 | 2 | | 1 | | 4 | 1 | 4 | 10 | 14 | 21 | 10 | 31 | 43 | 44.3 |
| 400 | 1 | | | | | | | | | | | | 2 | 4 | 1 | | 1 | 6 | 6.8 |
| 380 | | | | | | | | | | | | | | | | | | | 0.8 |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |
| 300 | | | | | | | | | | | | | | | | | | | |
| 280 | | | | | | | | | | | | | | | | | | | |
| 260 | | | | | | | | | | | | | | | | | | | |
| 240 | | | | | | | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | |
| 120 | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |

### Tidehochwasser

| cm a.P. | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez | Abflussjahr (*) 2012 Wi | So | Jahr | Kalenderjahr 2012 Jahr | 2003/2012 10 Jahre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1200 | | | | | | | | | | | | | | | | | | | |
| 1180 | | | | | | | | | | | | | | | | | | | |
| 1160 | | | | | | | | | | | | | | | | | | | |
| 1140 | | | | | | | | | | | | | | | | | | | |
| 1120 | | | | | | | | | | | | | | | | | | | |
| 1100 | | | | | | | | | | | | | | | | | | | |
| 1080 | | | | | | | | | | | | | | | | | | | |
| 1060 | | | | | | | | | | | | | | | | | | | |
| 1040 | | | | | | | | | | | | | | | | | | | |
| 1020 | | | | | | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | | | | | | |
| 980 | | | | | | | | | | | | | | | | | | | |
| 960 | | | | | | | | | | | | | | | | | | | |
| 940 | | | | | | | | | | | | | | | | | | | |
| 920 | | | | | | | | | | | | | | | | | | | |
| 900 | | | | | | | | | | | | | | | | | | | |
| 880 | | | | | | | | | | | | | | | | | | | |
| 860 | | | | | | | | | | | | | | | | | | | |
| 840 | | | | | | | | | | | | | | | | | | | |
| 820 | | | | | | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | | | | | | |
| 780 | | | | | | | | | | | | | | | | | | | |
| 760 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | 60 | 58 | 60 | | 59 | 60 | 58 | | | | 352 | 355 | 707 | 707 | 705.9 |
| 700 | 58 | 60 | 60 | | 59 | 57 | 57 | 58 | 58 | 57 | 57 | 60 | 58 | | 350 | 347 | 697 | 697 | 700.0 |
| 680 | 56 | 59 | 57 | 56 | 54 | 46 | 48 | 44 | 46 | 45 | 46 | 50 | 54 | 60 | 328 | 279 | 607 | 606 | 632.9 |
| 660 | 47 | 51 | 46 | 49 | 41 | 31 | 26 | 22 | 18 | 26 | 24 | 31 | 37 | 46 | 265 | 147 | 412 | 397 | 453.8 |
| 640 | 31 | 41 | 34 | 41 | 17 | 20 | 10 | 2 | 3 | 13 | 15 | 16 | 26 | 40 | 184 | 59 | 243 | 237 | 273.9 |
| 620 | 9 | 32 | 25 | 32 | 9 | 6 | 1 | 1 | | 6 | 5 | 7 | 22 | 32 | 113 | 20 | 133 | 146 | 153.5 |
| 600 | 5 | 23 | 18 | 23 | 7 | 4 | 1 | | | | 4 | 5 | 16 | 25 | 80 | 10 | 90 | 103 | 92.4 |
| 580 | 4 | 16 | 11 | 13 | 5 | 2 | | | | | 1 | 4 | 15 | 21 | 51 | 5 | 56 | 72 | 59.9 |
| 560 | 4 | 9 | 5 | 5 | 4 | 1 | | | | | | 4 | 14 | 15 | 28 | 4 | 32 | 48 | 39.6 |
| 540 | 4 | 1 | | 4 | 3 | | | | | | | 4 | 12 | 8 | 12 | 4 | 16 | 31 | 21.2 |
| 520 | 3 | | | 1 | | | | | | | | | 7 | 1 | 4 | | 4 | 9 | 8.1 |
| 500 | 2 | | | | | | | | | | | | 2 | | 2 | | 2 | 2 | 1.7 |
| 480 | | | | | | | | | | | | | | | | | | | 0.2 |
| 460 | | | | | | | | | | | | | | | | | | | |
| 440 | | | | | | | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | | | | | | | | |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

* Vor der Zeitangabe

NLWKN

$A_{Eo}$ : 1327 $km^2$

PNP : NN - 5.00 m

Lage: 5.0 km rechts

W Tide

cm

Pegel : Nortmoor

Gewässer : Jümme

Gebiet : Leda

Nr. 3889102

| Tag | 2011 November Tnw Zeit | cm | Thw Zeit | cm | Dezember Tnw Zeit | cm | Thw Zeit | cm | 2012 Januar Tnw Zeit | cm | Thw Zeit | cm | Februar Tnw Zeit | cm | Thw Zeit | cm | März Tnw Zeit | cm | Thw Zeit | cm | April Tnw Zeit | cm | Thw Zeit | cm | Mai Tnw Zeit | cm | Thw Zeit | cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.38 | 443 | 5.16 | 664 | 0.42 | 416 | 5.15 | 663 | 1.31 | 487 | 8.42 b | 597 | 2.04 | 402 | 6.29 | 586 | 1.31 | 462 | 5.50 | 648 | 2.26 | 470 | 6.57 | 632 | 3.33 | 424 | 8.16 | 596 | 1. |
| | 13.03 | 440 | 18.04 | 653 | 13.10 | 425 | 17.55 | 635 | 14.00 | 471 | 18.03 | 658 | 14.36 | 416 | 18.37 | 572 | 13.46 | 458 | 17.59 | 644 | 14.31 | 450 | 20.10 | 667 | 16.05 b | 577 | 21.00 | 646 | |
| 2. | 1.07 | 456 | 3.27 b | 620 | 0.42 | 454 | 9.51 b | 540 | 2.05 | 505 | 8.50 b | 640 | 2.58 | 422 | 7.21 | 569 | 2.06 | 457 | 6.25 | 630 | 3.46 | 466 | 8.43 | 647 | 4.58 | 441 | 9.46 | 627 | 2. |
| | 13.46 | 435 | 18.25 | 643 | 13.56 | 433 | 18.29 | 663 | 14.44 | 528 | 20.21 b | 661 | 15.09 | 440 | 19.48 | 582 | 14.28 | 447 | 18.41 | 607 | 16.34 | 446 | 21.23 | 647 | 17.26 | 431 | 22.19 | 646 | |
| 3. | 2.04 | 436 | 6.51 | 640 | 2.11 | 457 | 6.47 | 661 | 2.54 | 533 | 8.27 b | 646 | 3.43 | 449 | 8.56 | 597 | 3.09 | 430 | 7.15 | 570 | 5.29 | 435 | 10.22 | 627 | 6.16 | 430 | 11.17 | 641 | 3. |
| | 14.33 | 431 | 19.26 | 625 | 14.05 | 469 | 17.05 b | 637 | 15.09 | 513 | 22.08 b | 644 | 16.40 | 455 | 21.47 | 598 | 15.24 | 411 | 20.03 | 594 | 18.04 | 429 | 22.50 | 635 | 18.36 | 435 | 23.25 | 674 | |
| 4. | 2.38 | 442 | 7.38 | 653 | 1.59 | 529 | 11.41 b | 597 | 0.53 | 601 | 10.42 b | 688 | 5.32 | 464 | 10.32 | 602 | 4.28 | 427 | 9.16 | 599 | 6.51 | 424 | 11.36 | 616 | 7.17 | 440 | - | - | 4. |
| | 15.26 | 444 | 20.32 | 637 | 15.48 | 496 | 22.51 b | 578 | 16.11 | 600 | 21.39 b | 691 | 18.20 | 462 | 23.04 | 599 | 17.00 | 441 | 22.19 | 658 | 19.09 | 421 | 23.49 | 643 | 19.40 | 446 | 12.18 | 664 | |
| 5. | 3.54 | 450 | 8.56 | 674 | 3.41 | 467 | - | - | 3.54 | 576 | - | - | 7.24 | 455 | 11.52 | 567 | 6.32 | 450 | 11.01 | 625 | 7.57 | 422 | - | - | 8.16 | 450 | 0.29 | 688 | 5. |
| | 17.02 | 448 | 21.56 | 637 | 16.36 | 472 | 13.03 b | 543 | 17.03 | 624 | 12.16 b | 686 | 19.19 | 449 | - | - | 18.39 | 446 | 23.29 | 653 | 20.17 | 422 | 12.37 | 630 | 20.41 | 453 | 13.01 | 678 | |
| 6. | 5.08 | 449 | 10.23 | 671 | 5.05 | 465 | 1.19 b | 549 | 6.19 | 645 | 3.45 b | 663 | 8.21 | 469 | 0.22 | 611 | 7.32 | 448 | - | - | 8.49 | 430 | 0.59 | 658 | 9.12 | 449 | 1.14 | 689 | 6. |
| | 18.12 | 448 | 22.57 | 636 | 17.32 | 471 | 13.37 b | 544 | 19.27 | 559 | 12.57 b | 674 | 20.34 | 468 | 13.01 | 604 | 19.55 | 441 | 12.09 | 634 | 21.02 | 445 | 13.40 | 667 | 21.33 | 444 | 13.53 | 672 | |
| 7. | 6.37 | 437 | 11.29 | 654 | 6.37 | 481 | 2.31 b | 575 | 7.32 | 531 | 0.49 b | 634 | 9.15 | 469 | 1.10 | 611 | 8.34 | 439 | 0.28 | 647 | 9.30 | 413 | 4.33 b | 544 | 9.58 | 447 | 2.11 | 688 | 7. |
| | 19.19 | 429 | 23.49 | 622 | 18.06 | 497 | 14.31 b | 571 | 19.36 | 539 | 14.40 b | 618 | 21.38 | 462 | 13.52 | 599 | 20.26 | 435 | 12.43 | 612 | 21.54 | 439 | 14.02 | 685 | 22.28 | 442 | 14.38 | 675 | |
| 8. | 7.26 | 418 | - | - | 7.40 | 529 | 3.44 b | 611 | 8.18 | 550 | 4.44 b | 628 | 10.20 | 455 | 1.57 | 602 | 9.06 | 436 | 4.45 b | 536 | 10.23 | 447 | 2.33 | 699 | 10.44 | 427 | 2.56 | 642 | 8. |
| | 19.47 | 429 | 12.06 | 639 | 19.51 | 496 | 13.33 b | 626 | 21.01 | 523 | 15.15 b | 622 | 22.23 | 444 | 14.28 | 577 | 21.30 | 448 | 11.40 b | 641 | 22.39 | 445 | 14.58 | 673 | 23.12 | 434 | 15.47 | 657 | |
| 9. | 8.04 | 425 | 0.25 | 622 | 6.46 | 530 | 2.55 b | 618 | 9.15 | 497 | 3.16 b | 598 | 10.43 | 457 | 2.54 | 606 | 10.06 | 409 | 4.30 b | 543 | 10.59 | 447 | 3.22 | 673 | 11.27 | 445 | 4.01 | 666 | 9. |
| | 20.26 | 428 | 12.43 | 639 | 19.48 | 577 | 16.01 b | 658 | 21.17 | 495 | 15.34 b | 619 | 22.54 | 466 | 15.17 | 620 | 22.15 | 442 | 14.33 | 646 | 23.18 | 460 | 15.54 | 696 | 23.58 | 452 | 16.16 | 686 | |
| 10. | 8.52 | 429 | 1.14 | 637 | 9.07 | 538 | 3.24 b | 668 | 10.07 | 489 | 4.21 b | 611 | 11.22 | 466 | 3.28 | 627 | 10.42 | 412 | 5.33 b | 535 | 11.32 | 469 | 4.11 | 687 | - | - | 4.42 | 661 | 10. |
| | 21.15 | 427 | 13.34 | 641 | 20.59 | 528 | 15.16 b | 659 | 22.08 | 477 | 16.15 b | 595 | 23.40 | 451 | 15.50 | 587 | 23.00 | 436 | 13.32 b | 637 | - | - | 16.29 | 698 | 12.13 | 449 | 17.10 | 681 | |
| 11. | 9.35 | 417 | 1.47 | 624 | 9.36 | 506 | 3.07 b | 643 | 10.38 | 465 | 4.58 b | 586 | 11.58 | 451 | 4.11 | 604 | 11.27 | 403 | 6.30 b | 523 | 0.02 | 469 | 4.43 | 697 | 0.48 | 457 | 5.42 | 665 | 11. |
| | 21.44 | 400 | 13.56 | 600 | 21.38 | 477 | 15.34 b | 610 | 22.51 | 448 | 17.30 b | 564 | - | - | 16.50 | 602 | 23.49 | 445 | 16.03 | 678 | 12.19 | 471 | 17.07 | 705 | 12.49 | 459 | 17.47 | 708 | |
| 12. | 9.58 | 394 | 2.14 | 585 | 10.08 | 460 | 4.35 b | 584 | 11.04 | 453 | 6.03 b | 559 | 0.03 | 457 | 4.53 | 638 | - | - | 1.50 b | 620 | 0.51 | 472 | 5.23 | 683 | 1.30 | 471 | 6.20 | 680 | 12. |
| | 22.10 | 407 | 14.51 | 605 | 22.16 | 461 | 17.44 b | 570 | 23.14 | 486 | 20.06 b | 563 | 12.37 | 469 | 17.14 | 626 | 12.07 | 433 | 14.55 b | 635 | 13.03 | 468 | 17.55 b | 569 | 13.39 | 470 | 18.24 | 707 | |
| 13. | 10.36 | 432 | 3.02 | 662 | 10.27 | 440 | 5.28 b | 555 | 11.53 | 490 | 8.03 b | 574 | 0.48 | 470 | 5.32 | 651 | 0.24 | 435 | 4.53 | 681 | 1.45 b | 584 | 8.09 b | 595 | 2.33 | 466 | 6.46 | 628 | 13. |
| | 22.49 | 437 | 15.07 | 669 | 22.27 | 498 | 16.02 | 655 | - | - | 19.47 b | 574 | 13.19 | 476 | 18.06 | 643 | 12.48 | 449 | 17.12 | 659 | 13.44 | 448 | 18.28 | 685 | 14.30 | 439 | 19.31 | 658 | |
| 14. | 11.06 | 428 | 3.22 | 651 | 11.07 | 479 | 5.54 b | 604 | 0.25 | 473 | 7.22 b | 559 | 1.28 | 482 | 9.06 b | 538 | 1.08 | 447 | 5.38 | 661 | 2.27 | 457 | 7.04 | 656 | 3.21 | 441 | 8.06 | 621 | 14. |
| | 23.15 | 424 | 15.45 | 632 | 23.01 | 470 | 18.06 b | 582 | 12.48 | 436 | 16.56 | 665 | 13.47 | 451 | 16.05 b | 574 | 13.27 | 448 | 18.00 | 652 | 14.39 | 458 | 19.37 | 680 | 15.14 | 444 | 20.38 | 698 | |
| 15. | 11.45 | 429 | 3.58 | 654 | 11.56 | 458 | 7.10 b | 571 | 0.48 | 466 | 7.51 b | 558 | 1.52 | 456 | 10.51 b | 508 | 1.49 | 444 | 6.19 | 642 | 3.33 | 459 | 8.18 | 644 | 4.18 | 463 | 8.51 | 641 | 15. |
| | 23.56 | 417 | 16.15 | 624 | 23.49 | 491 | 16.42 | 668 | 13.16 | 432 | 17.30 | 651 | 14.17 | 456 | 16.50 b | 596 | 14.06 | 442 | 18.43 | 655 | 15.55 | 455 | 21.01 | 675 | 16.29 | 453 | 21.54 | 687 | |
| 16. | - | - | 4.30 | 630 | - | - | 6.51 b | 599 | 1.30 | 460 | 8.39 b | 547 | 3.16 | 474 | 7.59 | 639 | 2.36 | 445 | 7.21 | 642 | 4.59 | 452 | 9.40 | 643 | 5.14 | 474 | 10.40 | 703 | 16. |
| | 12.18 | 416 | 16.56 | 611 | 12.45 | 461 | 16.04 b | 654 | 13.58 | 429 | 18.12 | 643 | 15.46 | 483 | 20.39 | 634 | 14.52 | 451 | 19.41 | 655 | 17.19 | 452 | 22.27 | 677 | 17.52 | 487 | 20.47 b | 659 | |
| 17. | 0.21 | 416 | 5.11 | 643 | 0.47 | 514 | 7.59 b | 639 | 2.13 | 455 | 6.49 | 674 | 4.14 | 489 | 9.04 | 640 | 3.47 | 447 | 8.39 | 629 | 6.23 | 445 | 10.53 | 625 | 6.27 | 455 | 10.51 | 655 | 17. |
| | 12.49 | 430 | 17.34 | 628 | 13.22 | 515 | 19.55 b | 623 | 14.50 | 466 | 19.20 | 657 | 16.43 | 484 | 21.42 | 643 | 16.03 | 452 | 21.09 | 665 | 18.30 | 433 | 22.53 | 627 | 18.50 | 442 | 23.35 | 662 | |
| 18. | 0.55 | 433 | 5.46 | 653 | 1.39 | 495 | 8.46 b | 610 | 2.56 | 473 | 7.37 | 668 | 5.31 | 472 | 10.22 | 625 | 5.18 | 451 | 9.55 | 632 | 7.00 | 424 | - | - | 7.27 | 438 | - | - | 18. |
| | 13.36 | 440 | 18.19 | 622 | 14.12 | 491 | 21.08 b | 593 | 15.40 | 470 | 21.27 | 662 | 17.52 | 459 | 20.58 b | 634 | 17.13 | 460 | 20.40 b | 646 | 19.25 | 444 | 12.28 | 630 | 19.42 | 426 | 12.07 | 627 | |
| 19. | 1.40 | 432 | 6.40 | 662 | 2.26 | 477 | 9.48 b | 579 | 4.09 | 492 | 11.47 b | 586 | 6.32 | 465 | 15.26 b | 539 | 6.47 | 446 | 11.38 | 659 | 8.02 | 442 | 0.14 | 663 | 8.07 | 439 | 0.33 | 664 | 19. |
| | 14.32 | 440 | 19.22 | 634 | 15.14 | 465 | 19.20 | 652 | 16.38 | 473 | 22.02 b | 544 | 19.15 | 455 | 21.43 b | 625 | 19.10 | 452 | 23.44 | 672 | 20.19 | 437 | 12.51 | 639 | 20.33 | 443 | 13.00 | 659 | |
| 20. | 2.43 | 438 | 7.46 | 650 | 3.27 | 484 | 9.12 | 648 | 5.38 b | 587 | - | - | 8.18 | 438 | - | - | 7.46 | 448 | - | - | 8.45 | 447 | 1.10 | 667 | 8.50 | 446 | 1.18 | 671 | 20. |
| | 15.45 | 433 | 20.40 | 630 | 15.52 | 506 | 18.29 b | 669 | 18.17 b | 629 | 12.18 b | 616 | 20.22 | 442 | 12.50 | 640 | 20.04 | 450 | 12.24 | 651 | 21.02 | 443 | 13.28 | 654 | 21.15 | 440 | 13.35 | 665 | |
| 21. | 4.10 | 433 | 9.03 | 651 | 4.41 | 518 | 10.47 b | 634 | 7.02 | 504 | 0.43 b | 651 | 8.58 | 457 | 0.59 | 662 | 8.43 | 452 | 0.41 | 686 | 9.22 | 447 | 1.45 | 673 | 9.30 | 443 | 1.58 | 668 | 21. |
| | 17.07 | 429 | 21.57 | 631 | 17.41 | 480 | 22.05 | 659 | 19.30 | 514 | 14.42 b | 621 | 21.17 | 467 | 13.38 | 679 | 20.58 | 447 | 13.16 | 659 | 21.37 | 448 | 14.03 | 658 | 21.53 | 445 | 14.23 | 677 | |
| 22. | 5.29 | 430 | 10.28 | 658 | 6.10 | 481 | 11.01 | 673 | 7.55 | 562 | 4.34 b | 641 | 9.46 | 424 | 4.09 b | 557 | 9.28 | 448 | 1.36 | 677 | 9.56 | 451 | 2.20 | 681 | 10.06 | 447 | 2.33 | 678 | 22. |
| | 18.19 | 438 | 23.14 | 641 | 18.49 | 495 | 21.18 b | 655 | 20.25 | 554 | 14.45 b | 653 | 21.47 | 454 | 14.22 | 649 | 21.43 | 441 | 13.58 | 651 | 22.15 | 460 | 14.44 | 681 | 22.27 | 446 | 14.38 | 680 | |
| 23. | 6.41 | 436 | 11.36 | 669 | 7.24 | 487 | 11.43 | 677 | 9.16 | 546 | 2.48 b | 675 | 10.25 | 425 | 5.48 b | 533 | 10.06 | 442 | 2.10 | 670 | 10.26 | 453 | 2.48 | 669 | 10.38 | 443 | 3.04 | 664 | 23. |
| | 19.21 | 439 | - | - | 19.45 | 493 | - | - | 21.21 | 535 | 14.41 b | 669 | 22.32 | 436 | 12.29 b | 594 | 22.16 | 439 | 14.35 | 651 | 22.51 | 449 | 15.19 | 663 | 23.04 | 442 | 15.12 | 674 | |
| 24. | 7.45 | 445 | 0.11 | 665 | 8.08 | 496 | 2.50 b | 608 | 10.10 | 520 | 3.30 b | 664 | 10.57 | 439 | 0.10 b | 580 | 10.36 | 443 | 2.47 | 668 | 10.57 | 444 | 3.19 | 656 | 11.13 | 432 | 3.36 | 644 | 24. |
| | 20.22 | 432 | 10.28 b | 636 | 20.58 | 490 | 15.53 b | 601 | 22.21 | 501 | 15.49 b | 639 | 23.12 | 445 | 12.23 b | 564 | 22.52 | 443 | 15.07 | 658 | 23.19 | 447 | 15.36 | 670 | 23.40 | 430 | 15.58 | 653 | |
| 25. | 8.49 | 435 | 1.01 | 660 | 9.13 | 482 | 2.51 b | 625 | 10.58 | 476 | 4.24 b | 619 | 11.31 | 446 | 6.30 b | 571 | 11.07 | 445 | 3.20 | 671 | 11.27 | 445 | 3.53 | 662 | 11.43 | 425 | 4.09 | 632 | 25. |
| | 20.53 | 467 | 13.57 | 684 | 21.29 | 492 | 11.57 b | 656 | 23.05 | 462 | 14.07 | 616 | 23.43 | 440 | 12.59 b | 577 | 23.21 | 443 | 15.35 | 662 | 23.48 | 438 | 15.59 | 650 | - | - | 16.31 | 658 | |
| 26. | 9.33 | 440 | 5.57 b | 536 | 10.09 | 467 | 4.46 b | 595 | 11.36 | 447 | 2.26 | 618 | - | - | 1.42 b | 608 | 11.34 | 442 | 3.45 | 666 | 11.43 | 440 | 4.25 | 630 | 0.15 | 429 | 4.46 | 627 | 26. |
| | 21.36 | 435 | 11.29 b | 622 | 22.26 | 454 | 17.24 b | 572 | 23.17 | 432 | 14.29 | 571 | 12.05 | 438 | 16.10 | 664 | 23.49 | 441 | 15.59 | 657 | - | - | 16.40 | 661 | 12.18 | 421 | 17.05 | 651 | |
| 27. | 10.14 | 431 | 23.55 b* | 615 | 10.55 | 437 | 5.50 b | 551 | 11.52 | 476 | 4.09 | 661 | 0.12 | 457 | 4.22 | 664 | - | - | 4.18 | 658 | 0.12 | 450 | 4.37 | 629 | 0.50 | 425 | 5.34 | 631 | 27. |
| | 22.24 | 469 | 21.02 b | 495 | 23.14 | 451 | 13.03 b | 622 | - | - | 15.39 | 653 | 12.27 | 459 | 16.41 | 657 | 12.01 | 439 | 16.27 | 656 | 12.10 | 440 | 17.04 | 662 | 12.51 | 427 | 17.45 | 669 | |
| 28. | 11.28 | 413 | 8.05 b | 497 | 11.42 | 412 | 6.30 b | 532 | 0.01 | 478 | 2.04 b | 625 | 0.37 | 467 | 4.58 | 677 | 0.16 | 440 | 4.44 | 651 | 0.50 | 446 | 5.06 | 634 | 1.27 | 438 | 6.10 | 638 | 28. |
| | 23.41 | 425 | 15.57 | 681 | 23.30 | 452 | 15.44 | 613 | 12.31 | 462 | 16.23 | 634 | 12.46 | 472 | 17.17 | 678 | 12.20 | 439 | 17.01 | 665 | 12.58 | 433 | 17.34 | 634 | 13.34 | 434 | 18.31 | 673 | |
| 29. | - | - | 4.29 | 658 | 11.53 | 490 | 9.12 b | 547 | 0.42 | 459 | 4.53 | 645 | 1.04 | 477 | 5.15 | 670 | 0.36 | 450 | 5.21 | 675 | 1.45 | 425 | 5.40 | 586 | 2.13 | 445 | 7.06 | 651 | 29. |
| | 12.04 | 428 | 16.45 | 645 | 23.59 | 478 | 20.44 b | 547 | 13.04 | 457 | 17.00 | 621 | 13.20 | 468 | 17.28 | 652 | 12.36 | 464 | 17.27 | 702 | 13.13 | 405 | 18.32 | 621 | 14.35 | 446 | 19.21 | 672 | |
| 30. | 0.04 | 440 | 8.49 b | 510 | - | - | 8.43 b | 591 | 1.12 | 449 | 5.22 | 624 | | | | | 0.58 | 477 | 5.39 | 695 | 1.59 | 421 | 6.58 | 616 | 3.13 | 443 | 8.07 | 644 | 30. |
| | 12.32 | 412 | 14.47 b | 620 | 12.57 | 499 | 19.26 b | 611 | 13.33 | 439 | 17.19 | 589 | | | | | 13.07 | 480 | 17.44 | 689 | 14.26 | 424 | 19.34 | 639 | 15.34 | 440 | 20.26 | 663 | |
| 31. | | | | | 1.20 | 488 | 5.23 | 682 | 1.40 | 422 | 5.47 | 589 | | | | | 1.40 | 473 | 6.19 | 679 | | | | | 4.17 | 436 | 9.18 | 635 | 31. |
| | | | | | 13.36 | 491 | 17.21 | 633 | 13.52 | 412 | 17.45 | 575 | | | | | 13.40 | 485 | 18.37 | 691 | | | | | 16.41 | 438 | 21.52 | 679 | |
| Mittel | | 432 | | 632 | | 482 | | 613 | | 499 | | 625 | | 456 | | 610 | | 445 | | 644 | | 447 | | 652 | | 446 | | 662 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Winter | 460 | 629 |

* 5. Wert am 26.11.2011

Winterhalbjahr: 1.11. bis 30.4.

NLWKN

$A_{E_0}$ : 1327 $km^2$

PNP : NN - 5.00 m

Lage: 5.0 km rechts

W Tide cm

Pegel : Nortmoor Nr. 3889102

Gewässer : Jümme

Gebiet : Leda

2012

| Tag | Juni Tnw Zeit | Juni Tnw cm | Juni Thw Zeit | Juni Thw cm | Juli Tnw Zeit | Juli Tnw cm | Juli Thw Zeit | Juli Thw cm | August Tnw Zeit | August Tnw cm | August Thw Zeit | August Thw cm | September Tnw Zeit | September Tnw cm | September Thw Zeit | September Thw cm | Oktober Tnw Zeit | Oktober Tnw cm | Oktober Thw Zeit | Oktober Thw cm | November Tnw Zeit | November Tnw cm | November Thw Zeit | November Thw cm | Dezember Tnw Zeit | Dezember Tnw cm | Dezember Thw Zeit | Dezember Thw cm | Tag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.27 | 455 | 10.42 | 682 | 6.03 | 448 | 11.12 | 667 | 8.13 | 445 | 0.38 | 658 | 9.49 | 440 | 2.07 | 670 | 9.52 | 445 | 2.29 | 646 | 10.27 | 445 | 2.56 | 644 | 10.42 | 397 | 6.06 b | 512 | 1. |
| | 18.01 | 463 | 22.48 | 692 | 18.34 | 454 | 23.26 | 668 | 20.56 | 441 | 13.05 | 667 | 22.15 | 445 | 14.31 | 691 | 22.15 | 457 | 14.42 | 693 | 22.21 | 453 | 15.36 | 647 | 22.58 | 435 | 15.38 | 666 | |
| 2. | 6.46 | 456 | 11.34 | 680 | 7.10 | 451 | - | - | 9.08 | 441 | 1.45 ○ | 648 | 10.23 | 440 | 2.51 | 656 | 10.27 | 458 | 3.09 | 678 | 10.44 | 433 | 6.39 b | 538 | 11.21 | 449 | 3.49 | 676 | 2. |
| | 19.14 | 453 | 23.58 | 682 | 19.52 | 441 | 12.04 | 654 | 21.48 | 458 | 14.09 | 701 | 22.50 | 453 | 15.17 | 695 | 22.42 | 460 | 15.14 | 687 | 23.00 | 457 | 15.36 | 676 | 23.23 | 448 | 15.48 | 669 | |
| 3. | 7.50 | 448 | - | - | 8.20 | 437 | 0.32 ○ | 654 | 9.59 | 452 | 2.25 | 674 | 11.04 | 446 | 3.26 | 678 | 10.52 | 452 | 3.26 | 663 | 11.23 | 464 | 3.51 | 680 | 11.48 | 450 | 4.07 | 678 | 3. |
| | 20.11 | 444 | 12.37 | 665 | 21.00 | 439 | 13.19 | 666 | 22.39 | 456 | 14.57 | 699 | 23.28 | 450 | 15.49 | 692 | 23.04 | 462 | 15.52 | 680 | 23.19 | 467 | 16.04 | 669 | 23.31 | 450 | 16.28 | 638 | |
| 4. | 8.42 | 454 | 0.58 ○ | 694 | 9.23 | 438 | 1.47 | 663 | 10.40 | 448 | 3.16 | 659 | 11.33 | 446 | 4.07 | 663 | 11.21 | 417 | 6.36 b | 534 | 11.55 | 426 | 7.18 b | 542 | - | - | 8.09 b | 521 | 4. |
| | 21.10 | 455 | 13.35 | 695 | 22.00 | 441 | 14.09 | 674 | 23.18 | 454 | 15.28 | 699 | 23.55 | 460 | 16.29 | 701 | 23.40 | 448 | 15.15 b | 672 | 23.59 | 447 | 16.42 | 658 | 12.15 | 422 | 17.20 | 659 | |
| 5. | 9.37 | 446 | 0.15 b | 661 | 10.17 | 437 | 2.43 | 660 | 11.25 | 445 | 3.55 | 659 | - | - | 2.04 b | 623 | 12.00 | 408 | 6.57 b | 530 | - | - | 8.03 b | 521 | 0.21 | 453 | 8.06 b | 536 | 5. |
| | 22.10 | 447 | 14.14 | 697 | 22.49 | 441 | 14.59 | 681 | 23.55 | 451 | 16.07 | 694 | 12.03 | 440 | 15.23 b | 676 | 23.59 | 454 | 15.23 b | 637 | 12.27 | 420 | 13.18 b | 492 | 12.56 | 415 | 17.56 | 651 | |
| 6. | 10.28 | 441 | 2.39 | 660 | 11.05 | 439 | 3.34 | 662 | 11.58 | 445 | 4.32 | 659 | 0.27 | 444 | 4.46 | 674 | - | - | 7.24 b | 528 | 0.27 | 410 | 1.31 b | 495 | 0.29 | 466 | 9.15 b | 530 | 6. |
| | 22.54 | 439 | 15.07 | 668 | 23.37 | 448 | 15.48 | 689 | - | - | 17.01 | 690 | 12.35 | 438 | 17.14 | 661 | 12.07 | 416 | 17.06 | 682 | 13.00 | 401 | 14.28 b | 506 | 13.50 | 415 | 18.15 | 627 | |
| 7. | 11.11 | 445 | 3.46 | 665 | 11.42 | 438 | 4.10 | 650 | 0.24 | 458 | 5.03 | 667 | 0.41 | 440 | 5.25 | 670 | 0.34 | 459 | 8.09 b | 536 | 0.45 | 428 | 2.03 b | 524 | 1.53 | 425 | 6.21 | 612 | 7. |
| | 23.52 | 449 | 16.04 | 693 | - | - | 16.31 | 690 | 12.29 | 456 | 15.16 b | 645 | 12.48 | 452 | 17.37 | 691 | 12.38 | 429 | 16.39 b | 677 | 13.55 | 423 | 15.06 b | 515 | 14.29 | 419 | 19.46 | 602 | |
| 8. | 11.54 | 448 | 4.38 | 661 | 0.18 | 446 | 4.58 | 648 | 0.55 | 449 | 5.21 | 659 | 1.12 | 457 | 5.46 | 663 | 1.14 | 462 | 5.38 | 679 | 1.52 | 420 | 3.16 b | 520 | 2.28 | 434 | 7.24 | 644 | 8. |
| | - | - | 17.05 | 690 | 12.23 | 438 | 17.11 | 683 | 13.00 | 445 | 17.50 | 679 | 13.27 | 448 | 18.07 | 647 | 13.32 | 455 | 17.54 | 635 | 14.31 | 429 | 19.50 | 659 | 15.37 | 432 | 20.28 | 618 | |
| 9. | 0.26 | 462 | 5.02 | 648 | 0.51 | 450 | 5.49 | 658 | 1.27 | 453 | 6.01 | 653 | 1.40 | 442 | 6.22 | 639 | 1.27 | 451 | 6.37 | 689 | 3.16 | 461 | 8.15 | 669 | 3.45 | 435 | 9.39 | 664 | 9. |
| | 12.25 | 451 | 17.34 | 695 | 12.42 | 459 | 15.12 b | 628 | 13.36 | 445 | 18.18 | 662 | 11.16 b | 488 | 18.45 | 630 | 13.53 | 479 | 18.40 | 658 | 16.30 | 452 | 21.11 | 624 | 16.49 | 469 | 19.31 b | 664 | |
| 10. | 1.06 | 463 | 5.56 | 663 | 1.24 | 441 | 5.50 | 663 | 1.58 | 445 | 6.25 | 638 | 2.16 | 439 | 7.35 | 651 | 2.46 | 461 | 7.45 | 651 | 4.53 | 445 | 9.57 | 661 | 5.11 | 505 | 12.27 b | 582 | 10. |
| | 13.18 | 456 | 18.04 | 692 | 13.31 | 442 | 18.27 | 688 | 14.07 | 436 | 18.55 | 648 | 14.47 | 454 | 20.05 | 644 | 15.35 | 452 | 20.39 | 629 | 17.31 | 453 | 22.38 | 670 | 18.07 | 451 | 22.46 | 662 | |
| 11. | 2.00 | 456 | 6.43 | 642 | 2.03 | 454 | 6.30 | 641 | 2.35 | 438 | 7.12 | 630 | 3.18 | 458 | 9.05 | 654 | 4.11 | 445 | 9.09 | 642 | 5.59 | 465 | 7.50 b | 596 | 6.49 | 456 | - | - | 11. |
| | 14.05 | 441 | 18.56 | 678 | 14.01 | 444 | 19.08 | 677 | 14.49 | 431 | 19.34 | 625 | 16.06 | 472 | 21.50 | 667 | 17.26 | 433 | 22.05 | 610 | 18.52 | 438 | 23.42 | 676 | 19.05 | 410 | 13.39 b | 534 | |
| 12. | 2.42 | 447 | 7.16 | 648 | 2.35 | 457 | 7.17 | 651 | 3.23 | 425 | 8.16 | 608 | 5.01 | 473 | 10.10 | 667 | 5.51 | 420 | 10.29 | 610 | 7.12 | 453 | 11.53 | 671 | 7.44 | 449 | 0.14 | 672 | 12. |
| | 14.52 | 444 | 19.48 | 688 | 14.33 | 458 | 19.40 | 687 | 15.57 | 418 | 20.54 | 607 | 18.04 | 465 | 22.56 | 657 | 18.11 | 418 | 23.30 | 655 | 19.45 | 450 | - | - | 20.08 | 407 | 15.08 b | 524 | |
| 13. | 3.33 | 453 | 8.22 | 651 | 3.29 | 460 | 8.01 | 639 | 4.35 | 419 | 9.38 | 608 | 6.29 | 455 | 11.33 | 669 | 6.52 | 454 | 11.38 | 650 | 8.08 | 446 | 0.24 ● | 652 | 8.40 | 448 | 1.01 ● | 678 | 13. |
| | 15.49 | 449 | 20.44 | 676 | 15.38 | 445 | 20.37 | 643 | 17.20 | 415 | 22.24 | 612 | 19.24 | 449 | - | - | 19.31 | 441 | - | - | 20.36 | 444 | 12.59 | 653 | 21.08 | 403 | 16.02 b | 522 | |
| 14. | 4.30 | 450 | 9.08 | 641 | 4.10 | 448 | 9.51 | 649 | 6.00 | 419 | 11.04 | 617 | 7.20 | 449 | 0.13 | 650 | 7.46 | 443 | 0.19 | 639 | 9.06 | 447 | 1.34 | 667 | 9.39 | 440 | 1.57 | 672 | 14. |
| | 16.55 | 438 | 21.45 | 650 | 16.44 | 460 | 22.01 | 671 | 18.44 | 422 | 23.41 | 636 | 19.42 | 479 | 12.21 | 673 | 20.19 | 447 | 12.38 | 658 | 21.31 | 449 | 13.58 | 675 | 22.21 | 433 | 14.12 | 639 | |
| 15. | 5.39 | 433 | 10.07 | 609 | 5.26 | 459 | 10.43 | 665 | 7.15 | 429 | - | - | 8.28 | 463 | 22.06 b* | 647 | 8.26 | 449 | 1.06 ● | 642 | 9.55 | 451 | 2.22 | 681 | 10.13 | 444 | 3.01 | 605 | 15. |
| | 17.50 | 416 | 22.47 | 648 | 18.12 | 452 | 23.15 | 661 | 20.04 | 422 | 12.12 | 636 | 21.07 | 433 | 10.52 b | 631 | 21.12 | 443 | 11.08 b | 644 | 22.19 | 439 | 12.55 b | 640 | 22.29 | 466 | 14.53 | 642 | |
| 16. | 6.24 | 433 | 11.20 | 642 | 6.34 | 452 | 11.45 | 667 | 7.54 | 430 | 0.41 | 626 | 9.12 | 439 | 1.45 ● | 668 | 9.22 | 451 | 1.51 | 661 | 10.47 | 445 | 3.05 | 682 | 11.09 | 451 | 0.14 b | 596 | 16. |
| | 18.51 | 441 | 23.34 | 663 | 19.16 | 456 | - | - | 20.43 | 439 | 12.58 | 663 | 17.14 b | 562 | 12.15 b | 631 | 21.35 | 458 | 14.13 | 653 | 23.05 | 449 | 15.33 | 675 | 23.31 | 462 | 13.32 b | 619 | |
| 17. | 7.16 | 446 | - | - | 7.30 | 455 | 0.05 | 661 | 8.57 | 437 | 1.26 ● | 652 | 9.47 | 424 | 4.27 b | 573 | 10.15 | 441 | 23.50 b* | 624 | 11.34 | 411 | 0.23 b | 554 | - | - | 6.58 b | 552 | 17. |
| | 19.59 | 454 | 12.29 | 662 | 20.13 | 459 | 12.38 | 680 | 21.32 | 444 | 13.48 | 681 | 22.27 | 437 | 13.32 b | 683 | 22.28 | 448 | 14.40 | 680 | 23.43 | 442 | 16.30 | 661 | 12.01 | 431 | 16.57 | 661 | |
| 18. | 8.13 | 438 | 0.27 | 651 | 8.30 | 454 | 0.53 | 672 | 9.46 | 437 | 2.11 | 656 | 10.36 | 442 | 2.59 | 678 | 10.58 | 452 | 3.28 | 679 | - | - | 7.28 b | 520 | 0.13 | 467 | 2.46 b | 650 | 18. |
| | 20.49 | 450 | 13.31 | 670 | 20.54 | 464 | 13.21 | 675 | 22.09 | 441 | 14.34 | 672 | 22.53 | 460 | 14.42 b | 690 | 23.18 | 458 | 15.53 | 686 | 12.13 | 404 | 17.04 | 680 | 12.52 | 465 | 19.50 b | 550 | |
| 19. | 9.00 | 449 | 1.26 ● | 668 | 9.02 | 463 | 1.39 ● | 660 | 10.28 | 446 | 2.57 | 678 | 11.14 | 434 | 0.32 b | 597 | 11.41 | 455 | 4.13 | 685 | 0.32 | 443 | 2.35 b | 607 | 0.59 | 433 | 5.36 | 669 | 19. |
| | 21.32 | 443 | 13.43 | 665 | 21.42 | 476 | 11.40 b | 651 | 22.53 | 451 | 15.10 | 694 | 23.46 | 442 | 14.35 b | 680 | - | - | 16.30 | 678 | 13.10 | 419 | 17.42 | 614 | 13.40 | 453 | 20.13 b | 531 | |
| 20. | 9.40 | 436 | 2.08 | 649 | 9.53 | 452 | 23.55 b* | 640 | 11.02 | 454 | 3.39 | 675 | 11.59 | 448 | 4.19 | 688 | 0.04 | 455 | 4.55 | 679 | 1.10 | 419 | 6.10 | 639 | 1.47 | 409 | 6.01 | 622 | 20. |
| | 22.10 | 441 | 14.17 | 679 | 22.33 | 460 | 14.24 | 702 | 23.31 | 459 | 15.48 | 701 | - | - | 16.43 | 693 | 12.23 | 453 | 17.21 | 679 | 13.51 | 432 | 19.04 | 645 | 14.37 | 419 | 18.06 | 545 | |
| 21. | 10.21 | 433 | 2.36 | 656 | 10.40 | 456 | 3.01 | 678 | 11.44 | 450 | 4.11 | 676 | 0.24 | 452 | 5.09 | 665 | 0.47 | 456 | 5.28 | 678 | 1.58 | 450 | 6.36 | 662 | 2.33 | 386 | 6.43 | 563 | 21. |
| | 22.48 | 431 | 14.58 | 659 | 23.13 | 455 | 15.13 | 694 | - | - | 16.25 | 689 | 12.36 | 448 | 17.30 | 669 | 13.19 | 450 | 17.57 | 646 | 14.53 | 441 | 19.46 | 615 | 14.55 | 391 | 19.01 | 545 | |
| 22. | 10.20 | 440 | 3.20 | 642 | 11.19 | 447 | 3.40 | 666 | 0.11 | 452 | 5.05 | 679 | 0.59 | 449 | 5.51 | 679 | 1.32 | 441 | 6.19 | 662 | 2.29 | 449 | 5.19 b | 636 | 2.59 | 397 | 7.37 | 591 | 22. |
| | 23.02 | 450 | 15.10 | 670 | 23.49 | 447 | 15.57 | 681 | 12.12 | 456 | 15.22 b | 665 | 13.21 | 454 | 18.15 | 679 | 14.04 | 438 | 18.56 | 634 | 15.52 | 442 | 20.16 | 615 | 15.43 | 416 | 19.35 | 566 | |
| 23. | 11.13 | 444 | 3.44 | 639 | 11.54 | 437 | 4.12 | 646 | 0.42 | 452 | 5.30 | 680 | 1.49 | 456 | 6.19 | 660 | 2.15 | 437 | 7.18 | 658 | 3.58 | 426 | 8.40 | 613 | 4.17 | 404 | 8.27 | 570 | 23. |
| | 23.51 | 453 | 16.09 | 679 | - | - | 16.36 | 688 | 12.55 | 454 | 17.48 | 700 | 14.16 | 441 | 18.49 | 631 | 15.12 | 438 | 19.51 | 620 | 16.34 | 429 | 21.54 | 649 | 15.54 | 454 | 20.18 | 619 | |
| 24. | - | - | 4.22 | 649 | 0.25 | 448 | 5.06 | 667 | 1.28 | 456 | 6.10 | 663 | 2.47 | 426 | 7.16 | 586 | 3.22 | 434 | 8.38 | 657 | 5.07 | 451 | 8.40 b | 648 | 5.09 | 494 | 9.46 | 679 | 24. |
| | 12.03 | 443 | 16.55 | 674 | 12.35 | 446 | 17.14 | 687 | 13.37 | 448 | 18.26 | 673 | 14.57 | 400 | 19.58 | 580 | 16.31 | 437 | 21.26 | 630 | 18.09 | 440 | 22.44 | 635 | 18.08 | 493 | 23.34 | 664 | |
| 25. | 0.19 | 468 | 5.11 | 682 | 1.04 | 449 | 5.42 | 661 | 2.04 | 448 | 6.56 | 655 | 1.21 | 449 | 8.08 | 634 | 4.44 | 439 | 10.06 | 675 | 6.48 | 426 | 11.28 | 614 | 7.01 | 507 | - | - | 25. |
| | 12.26 | 471 | 14.46 b | 651 | 13.13 | 445 | 17.57 | 691 | 14.17 | 447 | 19.26 | 676 | 16.00 | 448 | 21.16 | 618 | 17.46 | 455 | 22.54 | 668 | 17.46 | 468 | 20.49 b | 644 | 18.52 | 488 | 12.45 b | 621 | |
| 26. | 1.11 | 459 | 5.41 | 675 | 1.46 | 450 | 6.22 | 660 | 2.36 | 464 | 7.58 | 660 | 5.03 | 437 | 10.07 | 633 | 6.49 | 457 | 11.10 | 677 | 7.06 | 454 | - | - | 7.31 | 494 | 2.39 b | 603 | 26. |
| | 13.22 | 456 | 17.52 | 685 | 13.59 | 442 | 18.41 | 668 | 15.05 | 465 | 20.33 | 689 | 17.54 | 434 | 23.11 | 627 | 18.59 | 442 | 23.38 | 646 | 19.36 | 406 | 14.57 b | 517 | 19.35 | 476 | 14.40 b | 588 | |
| 27. | 1.59 | 451 | 6.18 | 640 | 2.30 | 438 | 6.59 | 631 | 4.04 | 470 | 8.49 | 659 | 6.30 | 439 | 11.45 | 665 | 7.02 | 442 | 11.57 | 682 | 8.08 | 442 | 0.42 | 670 | 7.34 | 476 | 2.57 b | 573 | 27. |
| | 14.04 | 438 | 18.54 | 671 | 14.42 | 429 | 19.37 | 665 | 16.56 | 446 | 21.29 | 615 | 19.14 | 451 | - | - | 19.40 | 448 | - | - | 20.22 | 394 | 15.45 b | 507 | 20.41 | 452 | 15.42 b | 564 | |
| 28. | 2.45 | 447 | 7.18 | 642 | 3.13 | 443 | 8.20 | 662 | 5.33 | 424 | 10.46 | 627 | 7.40 | 455 | 0.18 | 670 | 8.09 | 440 | 0.14 | 671 | 8.57 | 433 | 1.30 ○ | 660 | 9.10 | 439 | 4.12 b | 552 | 28. |
| | 15.03 | 438 | 19.34 | 652 | 15.48 | 451 | 20.31 | 660 | 18.09 | 435 | 23.27 | 682 | 20.14 | 454 | 12.26 | 677 | 20.29 | 443 | 12.49 | 675 | 21.11 | 442 | 13.39 | 664 | 21.12 | 448 | 12.53 ○ | 637 | |
| 29. | 3.35 | 434 | 8.45 | 646 | 4.23 | 446 | 9.35 | 648 | 6.55 | 454 | 11.47 | 679 | 8.20 | 455 | 0.55 | 653 | 8.38 | 437 | 1.05 ○ | 639 | 9.37 | 417 | 22.55 b* | 575 | 9.39 | 455 | 1.37 | 621 | 29. |
| | 16.10 | 443 | 21.08 | 661 | 17.00 | 447 | 22.05 | 659 | 19.43 | 448 | - | - | 20.56 | 453 | 11.01 b | 633 | 20.52 | 456 | 13.38 | 674 | 21.49 | 441 | 14.18 | 676 | 21.53 | 470 | 13.59 | 641 | |
| 30. | 4.47 | 446 | 9.46 | 648 | 5.47 | 445 | 10.50 | 652 | 8.01 | 452 | 0.48 | 664 | 9.18 | 459 | 1.36 ○ | 698 | 9.22 | 435 | 22.53 b* | 598 | 10.10 | 394 | 5.21 b | 511 | 10.09 | 458 | 5.39 b | 566 | 30. |
| | 17.20 | 445 | 22.12 | 670 | 18.21 | 452 | 23.29 | 664 | 20.32 | 452 | 13.03 | 672 | 21.44 | 455 | 13.56 | 690 | 21.43 | 454 | 14.14 | 699 | 22.22 | 435 | 14.56 | 667 | 22.23 | 460 | 18.18 b | 559 | |
| 31. | | | | | 6.57 | 452 | 11.58 | 671 | 8.54 | 455 | 1.28 ○ | 683 | | | | | 10.00 | 452 | 2.22 | 677 | | | | | 10.37 | 454 | 6.12 b | 555 | 31. |
| | | | | | 19.48 | 448 | - | - | 21.42 | 452 | 12.13 b | 690 | | | | | 22.07 | 446 | 14.42 | 657 | | | | | 22.52 | 461 | 13.09 b | 635 | |
| Mittel | | 447 | | 665 | | 449 | | 665 | | 445 | | 662 | | 450 | | 658 | | 446 | | 651 | | 437 | | 619 | | 445 | | 607 | Mittel |

| | MTnw (cm) | MThw (cm) |
|---|---|---|
| Sommer | 447 | 660 |

* 5. Wert am 19.07.2012 14.09.2012 16.10.2012 29.10.2012 29.10.2012 28.11.2012

Sommerhalbjahr: 1.5. bis 31.10.

NLWKN

$A_{Eo}$ : 98.73 km²
PNP : NHN+ 84.53 m
Lage : 348.79 km oberhalb der Mündung rechts

# Q

m³/s

Pegel : Steinhorst Nr. 3113000000100
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.553 | 0.754 | 1.61 | 1.15 | 1.39 | 0.925 | 0.636 | 0.614 | 0.676 | 0.691 | 0.399 | 0.669 | 0.690 | 0.679 |
| 2. | 0.707 | 0.685 | 2.01 | 1.08 | 1.31 | 0.886 | 0.641 | 0.563 | 0.639 | 0.631 | 0.388 | 0.843 | 0.697 | 0.717 |
| 3. | 0.823 | 0.765 | 1.97 | 1.02 | 1.26 | 0.883 | 0.671 | 0.599 | 0.610 | 0.619 | 0.383 | 0.625 | 0.703 | 0.741 |
| 4. | 0.715 | 0.872 | 1.89 | 0.989 | 1.25 | 0.878 | 0.640 | 0.712 | 0.551 | 0.608 | 0.360 | 0.968 | 0.739 | 0.808 |
| 5. | 0.615 | 0.890 | 2.47 | 0.955 | 1.33 | 0.874 | 0.642 | 0.825 | 0.508 | 0.553 | 0.349 | 1.24 | 0.747 | 0.882 |
| 6. | 0.633 | 0.901 | 2.70 | 0.908 | 1.27 | 0.870 | 0.660 | 0.747 | 0.482 | 0.599 | 0.338 | 1.19 | 0.716 | 0.842 |
| 7. | 0.843 | 1.06 | 2.65 | 0.855 | 1.19 | 0.866 | 0.657 | 0.755 | 0.475 | 0.592 | 0.304 | 1.11 | 0.747 | 0.798 |
| 8. | 0.703 | 1.07 | 2.67 | 0.869 | 1.41 | 0.862 | 0.627 | 0.665 | 0.537 | 0.568 | 0.323 | 0.972 | 0.762 | 0.729 |
| 9. | 0.548 | 1.13 | 2.41 | 0.855 | 1.33 | 0.846 | 0.600 | 0.601 | 0.586 | 0.570 | 0.341 | 0.888 | 0.736 | 0.799 |
| 10. | 0.471 | 1.06 | 2.16 | 0.820 | 1.23 | 0.910 | 0.611 | 0.553 | 0.536 | 0.546 | 0.353 | 0.840 | 0.729 | 1.20 |
| 11. | 0.383 | 0.996 | 1.84 | 0.820 | 1.21 | 0.901 | 0.766 | 0.529 | 0.592 | 0.539 | 0.374 | 0.806 | 0.796 | 1.16 |
| 12. | 0.441 | 1.05 | 1.78 | 0.821 | 1.16 | 0.874 | 0.746 | 0.603 | 0.701 | 0.518 | 0.448 | 0.794 | 0.729 | 1.07 |
| 13. | 0.520 | 1.18 | 1.89 | 0.835 | 1.14 | 0.860 | 0.690 | 0.641 | 0.795 | 0.503 | 0.448 | 0.810 | 0.692 | 1.02 |
| 14. | 0.582 | 1.26 | 1.70 | 0.889 | 1.10 | 0.880 | 0.646 | 0.586 | 0.897 | 0.488 | 0.453 | 0.776 | 0.666 | 0.988 |
| 15. | 0.632 | 1.28 | 1.53 | 1.03 | 1.09 | 0.816 | 0.649 | 0.551 | 0.878 | 0.460 | 0.470 | 0.774 | 0.625 | 1.29 |
| 16. | 0.649 | 1.53 | 1.41 | 0.983 | 1.05 | 0.745 | 0.678 | 0.581 | 0.874 | 0.475 | 0.487 | 0.741 | 0.609 | 1.35 |
| 17. | 0.654 | 1.99 | 1.31 | 1.03 | 1.05 | 0.730 | 0.657 | 0.562 | 1.45 | 0.491 | 0.501 | 0.713 | 0.610 | 1.35 |
| 18. | 0.649 | 1.77 | 1.27 | 1.09 | 1.05 | 0.726 | 0.608 | 0.519 | 1.60 | 0.467 | 0.528 | 0.677 | 0.608 | 1.32 |
| 19. | 0.653 | 1.60 | 2.01 | 1.20 | 1.06 | 0.741 | 0.576 | 0.513 | 1.08 | 0.433 | 0.534 | 0.650 | 0.736 | 1.54 |
| 20. | 0.658 | 1.57 | 2.66 | 1.20 | 1.02 | 0.781 | 0.548 | 0.548 | 0.981 | 0.420 | 0.538 | 0.614 | 0.621 | 1.44 |
| 21. | 0.663 | 1.86 | 2.46 | 1.15 | 0.989 | 0.758 | 0.534 | 0.616 | 0.810 | 0.404 | 0.533 | 0.592 | 0.587 | 1.36 |
| 22. | 0.667 | 1.76 | 2.66 | 1.15 | 0.934 | 0.766 | 0.521 | 0.607 | 0.720 | 0.396 | 0.526 | 0.741 | 0.586 | 1.44 |
| 23. | 0.672 | 1.91 | 2.57 | 1.22 | 0.928 | 0.755 | 0.497 | 0.559 | 0.666 | 0.394 | 0.499 | 0.589 | 0.601 | 2.49 |
| 24. | 0.676 | 1.92 | 2.24 | 1.38 | 0.923 | 0.740 | 0.479 | 0.561 | 0.626 | 0.391 | 0.488 | 0.586 | 0.682 | 3.15 |
| 25. | 0.688 | 1.92 | 1.90 | 1.59 | 0.912 | 0.712 | 0.462 | 0.672 | 0.589 | 0.413 | 0.522 | 0.585 | 0.706 | 2.43 |
| 26. | 0.731 | 1.61 | 1.68 | 1.49 | 0.914 | 0.697 | 0.445 | 0.649 | 0.562 | 0.421 | 0.679 | 0.595 | 0.654 | 2.12 |
| 27. | 0.735 | 1.46 | 1.60 | 1.41 | 0.875 | 0.693 | 0.432 | 0.630 | 0.547 | 0.456 | 0.826 | 0.592 | 0.712 | 2.26 |
| 28. | 0.740 | 1.35 | 1.48 | 1.39 | 0.881 | 0.721 | 0.431 | 0.657 | 0.693 | 0.444 | 0.744 | 0.572 | 0.682 | 2.44 |
| 29. | 0.721 | 1.29 | 1.39 | 1.44 | 0.853 | 0.691 | 0.429 | 0.660 | 0.698 | 0.431 | 0.615 | 0.587 | 0.676 | 2.00 |
| 30. | 0.731 | 1.68 | 1.31 | | 0.930 | 0.672 | 0.428 | 0.761 | 0.696 | 0.479 | 0.568 | 0.710 | 0.688 | 1.81 |
| 31. | | 1.59 | 1.23 | | 0.948 | | 0.462 | | 0.703 | 0.461 | | 0.719 | | 1.67 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 11. | 2. | 31. | 10.+ | 29. | 30. | 30. | 19. | 7. | 24. | 7. | 28. | 22. | 1. |
| NQ | 0.383 | 0.685 | 1.23 | 0.820 | 0.853 | 0.672 | 0.428 | 0.513 | 0.475 | 0.391 | 0.304 | 0.572 | 0.586 | 0.679 |
| MQ | 0.649 | 1.35 | 1.95 | 1.09 | 1.10 | 0.802 | 0.583 | 0.621 | 0.734 | 0.499 | 0.477 | 0.760 | 0.684 | 1.42 |
| HQ | 1.39 | 2.17 | 2.99 | 1.64 | 1.46 | 0.957 | 0.828 | 0.898 | 2.67 | 0.710 | 1.02 | 1.76 | 1.07 | 3.48 |
| Tag | 7. | 17.+ | 5. | 25. | 8. | 10. | 11. | 5. | 18. | 4. | 28. | 22. | 19. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 17 | 37 | 53 | 28 | 30 | 21 | 16 | 16 | 20 | 14 | 13 | 21 | 18 | 38 |

| | 1974/2011 | | 1975/2012 38 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 2011 | 1999 | 2007 | 1996 | 2001 | 1997 | 1976 | 1986 | 1976 | 1976 | 1976 | 1976 | 2011 | 1999 |
| NQ | 0.383 | 0.391 | 0.417 | 0.598 | 0.340 | 0.516 | 0.394 | 0.311 | 0.093 | 0.099 | 0.165 | 0.348 | 0.383 | 0.391 |
| MNQ | 0.784 | 0.895 | 1.01 | 1.02 | 0.987 | 0.823 | 0.657 | 0.546 | 0.463 | 0.449 | 0.534 | 0.664 | 0.773 | 0.872 |
| MQ | 1.16 | 1.37 | 1.56 | 1.41 | 1.43 | 1.13 | 0.938 | 0.786 | 0.705 | 0.712 | 0.798 | 0.910 | 1.14 | 1.34 |
| MHQ | 2.47 | 2.83 | 3.17 | 2.67 | 2.86 | 2.00 | 1.86 | 1.67 | 1.74 | 1.72 | 1.81 | 1.86 | 2.43 | 2.82 |
| HQ | 5.29 | 5.06 | 7.09 | 5.06 | 6.24 | 4.65 | 5.26 | 5.20 | 6.00 | 5.09 | 5.68 | 5.09 | 5.29 | 5.06 |
| Jahr | 1998 | 1988 | 1982 | 1984 | 1987 | 1986 | 1984 | 1981 | 1981 | 2005 | 2007 | 1993 | 1998 | 1988 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 31 | 37 | 42 | 35 | 39 | 30 | 25 | 21 | 19 | 19 | 21 | 25 | 30 | 36 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.304 | am 07.09.2012 | 0.383 | 0.304 | 0.304 | am 07.09.2012 |
| MQ | m³/s | 0.886 | | 1.16 | 0.613 | 0.894 | |
| HQ | m³/s | 2.99 | am 05.01.2012 bei W = 83.0 cm | 2.99 | 2.67 | 3.48 | am 23.12.2012 bei W = 89.0 cm |
| Nq | l/(skm²) | 3.08 | | 3.88 | 3.08 | 3.08 | |
| Mq | l/(skm²) | 8.97 | | 11.8 | 6.21 | 9.06 | |
| Hq | l/(skm²) | 30.3 | | 30.3 | 27.0 | 35.2 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 284 | | 185 | 99 | 286 | |

| | | 1975/2012 (*) 38 Jahre | | | | 1975/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.093 | am 13.07.1976 | 0.339 | 0.093 | 0.093 | am 13.07.1976 |
| MNQ | m³/s | 0.368 | | 0.664 | 0.373 | 0.366 | |
| MQ | m³/s | 1.07 | | 1.34 | 0.808 | 1.07 | |
| MHQ | m³/s | 4.51 | | 4.20 | 3.13 | 4.48 | |
| HQ | m³/s | 7.09 | am 31.01.1982 bei W = 132 cm | 7.09 | 6.00 | 7.09 | am 31.01.1982 bei W = 132 cm |
| $HQ_1$ | m³/s | | | | | | |
| $HQ_5$ | m³/s | | | | | | |
| MNq | l/(skm²) | 3.73 | | 6.73 | 3.78 | 3.71 | |
| Mq | l/(skm²) | 10.9 | | 13.6 | 8.19 | 10.8 | |
| MHq | l/(skm²) | 45.7 | | 42.5 | 31.7 | 45.4 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 343 | | 213 | 130 | 342 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.093 | 0.942 | 13.07.1976 | 7.09 | 71.8 | 132 | 31.01.1982 |
| 2 | 0.216 | 2.19 | 20.08.1983 | 6.24 | 63.2 | 128 | 02.03.1987 |
| 3 | 0.237 | 2.40 | 05.09.1991 | 6.00 | 60.8 | 151 | 01.07.1981 |
| 4 | 0.249 | 2.52 | 22.08.1989 | 5.94 | 60.1 | 115 | 04.01.2003 |
| 5 | 0.253 | 2.56 | 12.07.1977 | 5.88 | 59.6 | 119 | 18.03.1987 |
| 6 | 0.258 | 2.61 | 02.07.1986 | 5.68 | 57.6 | 115 | 29.09.2007 |
| 7 | 0.265 | 2.68 | 13.08.1990 | 5.65 | 57.2 | 116 | 18.07.2002 |
| 8 | 0.266 | 2.70 | 11.08.1992 | 5.57 | 56.5 | 110 | 10.03.1981 |
| 9 | 0.272 | 2.76 | 21.07.2010 | 5.56 | 56.3 | 113 | 13.01.1993 |
| 10 | 0.276 | 2.79 | 04.08.1982 | 5.41 | 54.8 | 113 | 29.01.1982 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1975/2012 38 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 2.70 | 3.15 | 5.66 | 3.75 | 2.43 |
| 363 | 2.67 | 2.70 | 5.16 | 3.38 | 2.19 |
| 362 | 2.66 | 2.67 | 5.05 | 3.22 | 2.06 |
| 361 | 2.66 | 2.66 | 4.91 | 3.05 | 2.03 |
| 360 | 2.65 | 2.66 | 4.81 | 2.87 | 2.03 |
| 359 | 2.57 | 2.65 | 4.25 | 2.73 | 1.96 |
| 358 | 2.47 | 2.57 | 4.14 | 2.63 | 1.89 |
| 357 | 2.46 | 2.49 | 3.90 | 2.53 | 1.85 |
| 356 | 2.41 | 2.47 | 3.82 | 2.46 | 1.75 |
| 350 | 1.97 | 2.24 | 3.09 | 2.17 | 1.56 |
| 340 | 1.77 | 1.84 | 2.60 | 1.91 | 1.37 |
| 330 | 1.59 | 1.54 | 2.31 | 1.74 | 1.24 |
| 320 | 1.41 | 1.41 | 2.12 | 1.62 | 1.18 |
| 300 | 1.24 | 1.23 | 1.89 | 1.45 | 1.10 |
| 270 | 1.03 | 1.02 | 1.66 | 1.27 | 0.898 |
| 240 | 0.881 | 0.875 | 1.43 | 1.14 | 0.835 |
| 210 | 0.810 | 0.795 | 1.32 | 1.03 | 0.751 |
| 183 | 0.730 | 0.729 | 1.22 | 0.950 | 0.665 |
| 150 | 0.671 | 0.679 | 1.16 | 0.863 | 0.555 |
| 130 | 0.642 | 0.649 | 1.13 | 0.812 | 0.492 |
| 120 | 0.627 | 0.627 | 1.10 | 0.789 | 0.472 |
| 110 | 0.610 | 0.611 | 1.08 | 0.763 | 0.438 |
| 100 | 0.592 | 0.601 | 1.06 | 0.742 | 0.414 |
| 90 | 0.585 | 0.589 | 1.05 | 0.720 | 0.396 |
| 80 | 0.562 | 0.572 | 1.04 | 0.698 | 0.384 |
| 70 | 0.548 | 0.553 | 1.01 | 0.676 | 0.373 |
| 60 | 0.529 | 0.536 | 0.990 | 0.646 | 0.320 |
| 50 | 0.503 | 0.518 | 0.964 | 0.615 | 0.277 |
| 40 | 0.479 | 0.487 | 0.928 | 0.583 | 0.240 |
| 30 | 0.456 | 0.461 | 0.886 | 0.548 | 0.180 |
| 25 | 0.444 | 0.448 | 0.814 | 0.528 | 0.165 |
| 20 | 0.431 | 0.431 | 0.739 | 0.506 | 0.148 |
| 15 | 0.413 | 0.420 | 0.688 | 0.481 | 0.135 |
| 10 | 0.391 | 0.394 | 0.671 | 0.452 | 0.126 |
| 9 | 0.388 | 0.391 | 0.662 | 0.447 | 0.123 |
| 8 | 0.383 | 0.388 | 0.662 | 0.443 | 0.120 |
| 7 | 0.383 | 0.383 | 0.646 | 0.438 | 0.119 |
| 6 | 0.374 | 0.374 | 0.642 | 0.433 | 0.115 |
| 5 | 0.360 | 0.360 | 0.637 | 0.427 | 0.111 |
| 4 | 0.353 | 0.353 | 0.636 | 0.419 | 0.108 |
| 3 | 0.349 | 0.349 | 0.633 | 0.413 | 0.107 |
| 2 | 0.341 | 0.341 | 0.631 | 0.405 | 0.106 |
| 1 | 0.338 | 0.338 | 0.625 | 0.395 | 0.105 |
| 0 | 0.304 | 0.304 | 0.606 | 0.366 | 0.093 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
, Beeinflussung durch das HRB oh.

LANUV NRW

$A_{Eo}$ : 342.62 km²
PNP : NHN+ 65.27 m
Lage : 325.93 km oberhalb der Mündung links

# Q
m³/s

Pegel : Rheda Nr. 3119000000200
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.989 | 1.18 | 6.87 | 3.79 | 4.80 | 1.90 | 1.28 | 1.28 | 1.18 | 1.38 | 0.578 | 0.756 | 1.54 | 1.79 |
| 2. | 1.04 | 1.41 | 10.5 | 3.59 | 4.36 | 1.81 | 1.40 | 1.10 | 0.823 | 1.20 | 0.497 | 0.951 | 1.57 | 1.99 |
| 3. | 1.43 | 1.40 | 9.45 | 3.01 | 4.00 | 1.78 | 1.62 | 1.54 | 0.801 | 1.05 | 0.434 | 1.15 | 1.76 | 2.31 |
| 4. | 1.33 | 1.64 | 8.70 | 2.81 | 3.88 | 2.00 | 1.35 | 2.32 | 0.720 | 1.06 | 0.427 | 4.86 | 1.95 | 2.51 |
| 5. | 1.22 | 1.88 | 17.1 | 2.60 | 5.29 | 1.67 | 1.40 | 2.96 | 0.624 | 1.02 | 0.425 | 4.91 | 2.17 | 3.53 |
| 6. | 1.03 | 1.89 | 18.4 | 2.38 | 4.89 | 1.60 | 1.38 | 2.38 | 0.555 | 1.28 | 0.396 | 4.20 | 2.02 | 2.90 |
| 7. | 1.20 | 2.22 | 12.7 | 2.14 | 4.05 | 1.63 | 1.54 | 2.32 | 0.617 | 1.20 | 0.350 | 3.49 | 2.06 | 2.42 |
| 8. | 1.33 | 2.37 | 11.3 | 2.13 | 5.21 | 1.48 | 1.26 | 1.91 | 0.863 | 1.02 | 0.287 | 2.67 | 2.26 | 2.09 |
| 9. | 1.06 | 2.63 | 9.78 | 2.00 | 4.46 | 1.54 | 1.19 | 1.60 | 0.853 | 0.901 | 0.273 | 2.29 | 2.10 | 2.42 |
| 10. | 0.909 | 2.54 | 8.67 | 1.94 | 3.76 | 1.74 | 1.32 | 1.30 | 0.796 | 0.884 | 0.271 | 1.95 | 2.03 | 5.99 |
| 11. | 0.774 | 2.08 | 6.86 | 1.70 | 3.59 | 1.72 | 3.03 | 1.15 | 0.996 | 0.892 | 0.399 | 1.83 | 2.12 | 5.31 |
| 12. | 0.745 | 2.18 | 6.40 | 1.74 | 3.28 | 1.61 | 2.08 | 1.31 | 1.66 | 0.831 | 0.555 | 1.68 | 2.01 | 4.17 |
| 13. | 0.800 | 2.81 | 6.82 | 1.83 | 3.09 | 1.63 | 1.67 | 2.19 | 2.23 | 0.788 | 0.471 | 1.78 | 1.86 | 3.62 |
| 14. | 0.809 | 3.39 | 6.12 | 2.08 | 2.92 | 1.57 | 1.36 | 1.55 | 2.79 | 0.775 | 0.467 | 1.84 | 2.08 | 3.67 |
| 15. | 0.873 | 4.20 | 5.32 | 2.57 | 2.76 | 1.55 | 1.36 | 1.36 | 3.76 | 0.718 | 0.462 | 1.75 | 1.38 | 8.71 |
| 16. | 0.924 | 6.92 | 4.78 | 2.19 | 2.65 | 1.38 | 1.66 | 1.48 | 4.03 | 1.04 | 0.436 | 1.72 | 1.42 | 7.32 |
| 17. | 1.04 | 9.45 | 4.33 | 2.60 | 2.59 | 1.01 | 1.52 | 1.35 | 6.04 | 0.768 | 0.443 | 1.66 | 1.51 | 5.87 |
| 18. | 1.04 | 6.88 | 4.04 | 2.90 | 2.56 | 1.44 | 1.36 | 1.15 | 6.09 | 0.708 | 0.475 | 1.58 | 1.48 | 5.37 |
| 19. | 1.11 | 5.64 | 10.7 | 3.99 | 2.53 | 0.960 | 1.15 | 1.01 | 4.35 | 0.632 | 0.442 | 1.30 | 1.59 | 8.60 |
| 20. | 1.11 | 5.53 | 16.0 | 3.83 | 2.36 | 1.31 | 1.15 | 1.02 | 3.95 | 0.610 | 0.429 | 1.36 | 1.82 | 6.45 |
| 21. | 1.11 | 8.70 | 12.6 | 3.55 | 2.24 | 1.55 | 1.02 | 1.20 | 2.91 | 0.592 | 0.444 | 1.26 | 1.52 | 5.78 |
| 22. | 1.10 | 7.11 | 14.5 | 3.61 | 2.10 | 1.52 | 0.956 | 1.21 | 2.30 | 0.556 | 0.419 | 1.36 | 1.44 | 7.13 |
| 23. | 1.05 | 7.89 | 12.7 | 4.12 | 2.02 | 1.52 | 0.846 | 1.04 | 1.93 | 0.496 | 0.486 | 1.25 | 1.31 | 18.3 |
| 24. | 1.07 | 8.25 | 10.6 | 5.31 | 1.92 | 1.49 | 0.741 | 1.26 | 1.72 | 0.428 | 1.78 | 1.18 | 1.77 | 23.1 |
| 25. | 1.10 | 7.65 | 8.34 | 6.87 | 1.85 | 1.34 | 0.625 | 1.41 | 1.51 | 0.516 | 0.720 | 1.21 | 1.84 | 15.0 |
| 26. | 1.10 | 5.69 | 6.90 | 5.88 | 1.69 | 1.48 | 0.614 | 1.25 | 1.32 | 0.642 | 0.877 | 1.23 | 1.98 | 12.0 |
| 27. | 1.12 | 4.83 | 6.45 | 5.15 | 1.72 | 1.29 | 0.509 | 1.08 | 1.24 | 0.770 | 1.03 | 1.16 | 2.06 | 13.7 |
| 28. | 1.18 | 4.34 | 5.87 | 4.84 | 1.74 | 1.63 | 0.555 | 1.10 | 1.56 | 0.675 | 1.13 | 1.11 | 1.86 | 15.2 |
| 29. | 1.17 | 4.09 | 5.41 | 5.07 | 1.76 | 1.37 | 0.567 | 1.12 | 1.68 | 0.594 | 1.03 | 1.10 | 1.89 | 9.90 |
| 30. | 1.11 | 8.67 | 4.89 | | 1.98 | 1.21 | 0.566 | 1.21 | 1.54 | 0.547 | 0.905 | 1.85 | 1.85 | 8.24 |
| 31. | | 7.05 | 4.39 | | 2.10 | | 0.829 | | 1.56 | 0.611 | | 1.69 | | 7.18 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 12. | 1. | 18. | 11. | 26. | 19. | 27. | 19. | 6. | 24. | 10. | 1. | 23. | 1. |
| NQ | 0.745 | 1.18 | 4.04 | 1.70 | 1.69 | 0.960 | 0.509 | 1.01 | 0.555 | 0.428 | 0.271 | 0.756 | 1.31 | 1.79 |
| MQ | 1.06 | 4.60 | 8.96 | 3.32 | 3.04 | 1.52 | 1.22 | 1.47 | 2.03 | 0.812 | 0.578 | 1.87 | 1.81 | 7.18 |
| HQ | 2.66 | 12.3 | 23.8 | 7.80 | 6.39 | 3.88 | 5.43 | 4.57 | 8.10 | 1.90 | 5.57 | 8.60 | 5.09 | 24.5 |
| Tag | 5. | 17. | 5. | 25. | 5.+ | 4. | 10. | 4. | 18. | 16. | 24. | 4. | 15. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 36 | 70 | 24 | 24 | 12 | 10 | 11 | 16 | 6 | 4 | 15 | 14 | 56 |

| | 1950/2011 | | 1951/2012 – 62 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1970 | 1956 | 1960 | 1960 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 | 1959 |
| NQ | 0.408 | 0.557 | 0.814 | 0.613 | 0.649 | 0.330 | 0.234 | 0.070 | 0.068 | 0.041 | 0.039 | 0.050 | 0.408 | 0.557 |
| MNQ | 1.60 | 2.03 | 2.43 | 2.50 | 2.34 | 1.64 | 1.05 | 0.743 | 0.614 | 0.616 | 0.770 | 1.20 | 1.60 | 2.04 |
| MQ | 3.69 | 5.22 | 5.87 | 5.20 | 4.85 | 3.36 | 2.19 | 1.62 | 1.76 | 1.58 | 1.77 | 2.46 | 3.67 | 5.27 |
| MHQ | 12.9 | 17.9 | 19.6 | 16.5 | 16.6 | 11.1 | 8.14 | 7.02 | 8.33 | 7.36 | 7.81 | 8.90 | 12.8 | 18.1 |
| HQ | 36.0 | 45.6 | 39.4 | 44.8 | 44.3 | 28.6 | 34.2 | 35.4 | 36.5 | 33.7 | 30.5 | 34.3 | 36.0 | 45.6 |
| Jahr | 1998 | 1960 | 2003 | 1970 | 1956 | 1986 | 1978 | 1981 | 1965 | 1981 | 1956 | 1993 | 1998 | 1960 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 28 | 41 | 46 | 37 | 38 | 25 | 17 | 12 | 14 | 12 | 13 | 19 | 28 | 41 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.271 | am 10.09.2012 | 0.745 | 0.271 | 0.271 | am 10.09.2012 |
| MQ m³/s | 2.55 | | 3.78 | 1.34 | 2.83 | |
| HQ m³/s | 23.8 | am 05.01.2012 bei W = 378 cm | 23.8 | 8.60 | 24.5 | am 23.12.2012 bei W = 376 cm |
| Nq l/(skm²) | 0.792 | | 2.18 | 0.792 | 0.792 | |
| Mq l/(skm²) | 7.45 | | 11.0 | 3.90 | 8.26 | |
| Hq l/(skm²) | 69.4 | | 69.4 | 25.1 | 71.4 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 235 | | 174 | 62 | 261 | |

| | 1951/2012 (*) 62 Jahre | | | | 1951/2012 | |
|---|---|---|---|---|---|---|
| NQ m³/s | 0.039 | am 05.09.1959 | 0.330 | 0.039 | 0.039 | am 05.09.1959 |
| MNQ m³/s | 0.387 | | 1.20 | 0.395 | 0.394 | |
| MQ m³/s | 3.29 | | 4.71 | 1.90 | 3.29 | |
| MHQ m³/s | 28.6 | | 27.2 | 14.9 | 28.8 | |
| HQ m³/s | 45.6 | am 05.12.1960 bei W = 444 cm | 45.6 | 36.5 | 45.6 | am 05.12.1960 bei W = 444 cm |
| $HQ_1$ m³/s | | | | | | |
| $HQ_5$ m³/s | | | | | | |
| MNq l/(skm²) | 1.13 | | 3.49 | 1.15 | 1.15 | |
| Mq l/(skm²) | 9.61 | | 13.7 | 5.54 | 9.61 | |
| MHq l/(skm²) | 83.3 | | 79.4 | 43.5 | 84.0 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 303 | | 215 | 88 | 303 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.039 | 0.115 | 05.09.1959 | 45.6 | 133 | 444 | 05.12.1960 |
| 2 | 0.088 | 0.257 | 20.07.1963 | 44.8 | 131 | 441 | 23.02.1970 |
| 3 | 0.101 | 0.295 | 20.07.1976 | 44.3 | 129 | 440 | 04.03.1956 |
| 4 | 0.108 | 0.316 | 09.08.1992 | 42.1 | 123 | 464 | 31.12.2002 |
| 5 | 0.122 | 0.355 | 04.08.1964 | 39.4 | 115 | 448 | 03.01.2003 |
| 6 | 0.124 | 0.361 | 12.08.1969 | 36.9 | 108 | 430 | 29.01.1993 |
| 7 | 0.138 | 0.403 | 24.07.1990 | 36.5 | 106 | 419 | 17.07.1965 |
| 8 | 0.151 | 0.440 | 22.08.1973 | 36.4 | 106 | 427 | 13.03.1981 |
| 9 | 0.154 | 0.451 | 08.09.1971 | 36.2 | 106 | 427 | 30.01.1995 |
| 10 | 0.155 | 0.451 | 16.08.1986 | 36.0 | 105 | 443 | 02.11.1998 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1951/2012 62 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 18.4 | 23.1 | 43.3 | 25.1 | 7.12 |
| 363 | 17.1 | 18.4 | 39.6 | 21.9 | 7.06 |
| 362 | 16.0 | 18.3 | 33.0 | 19.7 | 6.75 |
| 361 | 14.5 | 17.1 | 30.8 | 18.0 | 6.16 |
| 360 | 12.7 | 16.0 | 29.4 | 16.5 | 5.96 |
| 359 | 12.7 | 15.2 | 25.7 | 15.5 | 5.74 |
| 358 | 12.6 | 15.0 | 25.7 | 14.9 | 5.73 |
| 357 | 11.3 | 14.5 | 23.4 | 14.2 | 5.65 |
| 356 | 10.7 | 13.7 | 21.7 | 13.3 | 5.63 |
| 350 | 8.70 | 10.7 | 18.5 | 10.8 | 4.43 |
| 340 | 6.92 | 8.34 | 14.5 | 8.56 | 3.67 |
| 330 | 6.09 | 6.45 | 12.5 | 7.21 | 3.34 |
| 320 | 5.29 | 5.78 | 11.4 | 6.25 | 2.99 |
| 300 | 4.12 | 4.35 | 9.19 | 5.04 | 2.40 |
| 270 | 2.76 | 2.91 | 6.09 | 3.88 | 1.78 |
| 240 | 2.08 | 2.17 | 4.97 | 3.15 | 1.53 |
| 210 | 1.72 | 1.86 | 4.05 | 2.58 | 0.791 |
| 183 | 1.54 | 1.69 | 3.66 | 2.20 | 0.619 |
| 150 | 1.33 | 1.52 | 3.13 | 1.80 | 0.466 |
| 130 | 1.21 | 1.36 | 2.90 | 1.61 | 0.281 |
| 120 | 1.18 | 1.32 | 2.80 | 1.52 | 0.234 |
| 110 | 1.12 | 1.26 | 2.73 | 1.44 | 0.187 |
| 100 | 1.10 | 1.20 | 2.59 | 1.36 | 0.167 |
| 90 | 1.04 | 1.15 | 2.44 | 1.28 | 0.128 |
| 80 | 1.02 | 1.05 | 2.36 | 1.21 | 0.106 |
| 70 | 0.905 | 1.01 | 2.26 | 1.13 | 0.098 |
| 60 | 0.829 | 0.863 | 2.20 | 1.05 | 0.084 |
| 50 | 0.768 | 0.770 | 2.11 | 0.975 | 0.079 |
| 40 | 0.632 | 0.632 | 2.01 | 0.893 | 0.056 |
| 30 | 0.567 | 0.567 | 1.85 | 0.808 | 0.051 |
| 25 | 0.555 | 0.555 | 1.76 | 0.765 | 0.049 |
| 20 | 0.496 | 0.496 | 1.57 | 0.718 | 0.047 |
| 15 | 0.462 | 0.462 | 1.45 | 0.660 | 0.044 |
| 10 | 0.434 | 0.434 | 1.32 | 0.591 | 0.044 |
| 9 | 0.429 | 0.429 | 1.30 | 0.581 | 0.044 |
| 8 | 0.428 | 0.428 | 1.28 | 0.572 | 0.044 |
| 7 | 0.427 | 0.427 | 1.13 | 0.552 | 0.042 |
| 6 | 0.425 | 0.425 | 1.07 | 0.534 | 0.042 |
| 5 | 0.419 | 0.419 | 1.04 | 0.518 | 0.041 |
| 4 | 0.399 | 0.399 | 1.00 | 0.504 | 0.041 |
| 3 | 0.396 | 0.396 | 0.992 | 0.486 | 0.041 |
| 2 | 0.350 | 0.350 | 0.988 | 0.463 | 0.041 |
| 1 | 0.287 | 0.287 | 0.985 | 0.437 | 0.039 |
| 0 | 0.271 | 0.271 | 0.909 | 0.394 | 0.039 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
, durch Umflut und Wehrsteuerung beeinflusst

LANUV NRW

$A_{Eo}$ : 1485.77 km²
PNP : NHN+ 45.23 m
Lage : 284.37 km

# Q

m³/s

Pegel : Einen
Gewässer : Ems
Gebiet : Obere Ems

Nr. 3171000000100

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.17 | 4.94 | 31.5 | 18.5 | 27.3 | 10.8 | 7.34 | 9.30 | 5.28 | 5.21 | 3.16 | 4.13 | 6.62 | 6.43 |
| 2. | 5.08 | 6.57 | 50.2 | 16.6 | 24.9 | 9.17 | 7.25 | 6.02 | 4.80 | 4.54 | 2.87 | 3.98 | 6.52 | 6.84 |
| 3. | 5.33 | 7.82 | 50.9 | 16.3 | 22.8 | 9.50 | 10.5 | 5.60 | 4.44 | 4.55 | 2.78 | 4.47 | 6.44 | 8.59 |
| 4. | 5.36 | 10.5 | 45.2 | 14.0 | 21.7 | 11.3 | 8.48 | 9.94 | 4.18 | 4.64 | 2.83 | 14.3 | 7.84 | 9.02 |
| 5. | 5.17 | 10.6 | 64.0 | 13.2 | 25.6 | 10.1 | 8.41 | 13.1 | 4.00 | 4.69 | 2.86 | 22.0 | 8.61 | 12.7 |
| 6. | 4.80 | 11.7 | 82.0 | 12.6 | 26.3 | 9.52 | 9.93 | 10.7 | 4.02 | 5.37 | 2.71 | 16.4 | 8.12 | 11.3 |
| 7. | 5.21 | 16.1 | 62.0 | 12.3 | 21.8 | 9.03 | 8.75 | 9.85 | 3.73 | 5.21 | 2.66 | 15.5 | 7.83 | 9.01 |
| 8. | 5.34 | 19.3 | 58.8 | 10.4 | 27.4 | 9.09 | 8.01 | 7.56 | 6.03 | 4.74 | 2.60 | 10.3 | 8.68 | 7.87 |
| 9. | 5.17 | 17.3 | 51.4 | 10.5 | 24.9 | 9.47 | 7.53 | 6.63 | 7.09 | 4.13 | 2.57 | 8.27 | 7.50 | 8.05 |
| 10. | 4.91 | 15.4 | 45.2 | 10.2 | 20.9 | 11.3 | 8.43 | 5.57 | 5.18 | 4.02 | 2.25 | 6.94 | 7.34 | 20.3 |
| 11. | 4.72 | 12.3 | 37.7 | 10.7 | 20.2 | 10.9 | 23.3 | 5.33 | 7.36 | 3.97 | 2.63 | 6.72 | 7.77 | 21.8 |
| 12. | 4.57 | 12.3 | 35.0 | 8.87 | 19.3 | 10.5 | 16.1 | 4.86 | 9.60 | 3.84 | 4.46 | 6.23 | 7.08 | 16.2 |
| 13. | 4.19 | 15.4 | 38.3 | 9.19 | 18.4 | 9.77 | 11.3 | 7.90 | 14.5 | 3.47 | 5.16 | 7.06 | 6.72 | 14.1 |
| 14. | 4.72 | 20.1 | 32.8 | 13.2 | 17.4 | 9.48 | 9.94 | 6.50 | 14.5 | 3.44 | 3.06 | 7.14 | 6.33 | 13.3 |
| 15. | 4.75 | 21.1 | 28.8 | 17.5 | 16.8 | 9.22 | 8.91 | 5.55 | 16.4 | 3.36 | 2.19 | 6.92 | 6.75 | 30.0 |
| 16. | 4.75 | 29.1 | 26.4 | 16.1 | 16.4 | 9.20 | 10.3 | 7.24 | 13.7 | 3.99 | 2.66 | 6.20 | 5.43 | 29.7 |
| 17. | 4.76 | 52.2 | 24.2 | 16.8 | 15.1 | 7.46 | 9.88 | 7.41 | 26.3 | 3.12 | 2.70 | 6.06 | 6.02 | 31.6 |
| 18. | 4.80 | 36.8 | 22.1 | 18.7 | 14.7 | 7.89 | 7.97 | 5.62 | 25.7 | 3.14 | 3.69 | 5.68 | 6.25 | 28.3 |
| 19. | 4.91 | 30.7 | 39.2 | 23.8 | 14.9 | 8.25 | 6.97 | 4.98 | 18.1 | 2.79 | 3.36 | 5.75 | 6.44 | 34.4 |
| 20. | 4.79 | 29.2 | 73.1 | 23.6 | 13.5 | 7.79 | 6.77 | 4.73 | 17.2 | 2.84 | 2.81 | 5.32 | 6.20 | 29.0 |
| 21. | 4.83 | 43.4 | 57.2 | 20.8 | 12.7 | 8.47 | 6.65 | 5.08 | 12.0 | 2.72 | 2.88 | 5.51 | 6.09 | 26.0 |
| 22. | 4.83 | 36.5 | 68.2 | 20.5 | 12.4 | 10.8 | 5.81 | 5.61 | 9.55 | 2.84 | 2.96 | 5.09 | 5.99 | 30.9 |
| 23. | 4.91 | 39.3 | 63.1 | 23.4 | 12.0 | 11.0 | 5.89 | 3.98 | 8.47 | 2.72 | 2.67 | 5.30 | 5.50 | 56.4 |
| 24. | 4.81 | 38.3 | 51.2 | 28.5 | 11.1 | 9.95 | 5.25 | 4.25 | 7.42 | 2.75 | 6.57 | 5.15 | 6.67 | 81.7 |
| 25. | 5.03 | 39.8 | 40.7 | 37.6 | 10.7 | 10.8 | 4.60 | 8.11 | 6.54 | 2.87 | 7.45 | 5.17 | 7.37 | 64.2 |
| 26. | 4.86 | 30.8 | 34.3 | 32.3 | 11.1 | 10.0 | 4.29 | 6.35 | 5.90 | 3.13 | 5.00 | 5.04 | 6.73 | 51.4 |
| 27. | 4.82 | 27.4 | 32.0 | 28.9 | 11.0 | 8.86 | 3.87 | 5.17 | 5.11 | 4.01 | 6.01 | 4.97 | 7.88 | 50.9 |
| 28. | 5.05 | 25.0 | 28.2 | 27.3 | 8.89 | 9.61 | 4.07 | 6.15 | 6.09 | 3.46 | 6.83 | 4.97 | 7.47 | 58.2 |
| 29. | 5.05 | 23.5 | 25.9 | 28.3 | 9.67 | 9.38 | 3.90 | 6.44 | 6.02 | 3.19 | 4.89 | 5.01 | 6.78 | 43.6 |
| 30. | 4.89 | 32.7 | 23.9 | | 11.4 | 8.16 | 4.57 | 8.15 | 5.75 | 3.21 | 4.31 | 7.37 | 6.53 | 37.0 |
| 31. | | 32.3 | 21.3 | | 11.5 | | 3.72 | | 5.50 | 2.90 | | 8.55 | | 33.7 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13. | 1. | 31. | 12. | 28. | 17. | 31. | 23. | 7. | 21.+ | 15. | 2. | 16. | 1. |
| NQ | 4.19 | 4.94 | 21.3 | 8.87 | 8.89 | 7.46 | 3.72 | 3.98 | 3.73 | 2.72 | 2.19 | 3.98 | 5.43 | 6.43 |
| MQ | 4.92 | 24.2 | 43.4 | 18.6 | 17.2 | 9.56 | 8.02 | 6.79 | 9.36 | 3.70 | 3.65 | 7.47 | 6.92 | 28.5 |
| HQ | 6.36 | 60.6 | 94.1 | 40.3 | 30.3 | 13.2 | 29.1 | 14.7 | 34.3 | 7.65 | 12.3 | 28.1 | 10.5 | 83.6 |
| Tag | 25.+ | 17. | 6. | 25. | 5. | 4. | 11. | 5. | 17. | 6. | 28. | 4.+ | 7. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 44 | 78 | 31 | 31 | 17 | 14 | 12 | 17 | 7 | 6 | 13 | 12 | 51 |

| | 1980/2011 | | 1981/2012 32 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1995 | 1996 | 1996 | 1986 | 1996 | 2011 | 1989 | 2010 | 1983 | 1983 | 1982 | 1983 | 1995 |
| NQ | 2.66 | 4.89 | 4.05 | 4.17 | 6.61 | 4.67 | 3.34 | 2.78 | 1.89 | 1.36 | 1.46 | 2.80 | 2.66 | 4.89 |
| MNQ | 8.31 | 10.6 | 13.8 | 13.7 | 13.1 | 9.46 | 6.17 | 4.73 | 3.81 | 3.60 | 4.33 | 6.15 | 8.28 | 10.4 |
| MQ | 17.6 | 23.4 | 30.2 | 24.8 | 25.2 | 15.7 | 11.1 | 8.31 | 7.10 | 6.98 | 8.42 | 11.2 | 17.3 | 23.6 |
| MHQ | 53.5 | 74.3 | 86.0 | 66.5 | 71.8 | 37.9 | 29.8 | 25.5 | 22.6 | 22.5 | 27.5 | 33.7 | 52.6 | 75.1 |
| HQ | 149 | 160 | 163 | 125 | 133 | 113 | 135 | 134 | 134 | 120 | 94.5 | 146 | 149 | 160 |
| Jahr | 1998 | 1986 | 2003 | 1982 | 1987 | 1986 | 1984 | 1981 | 1981 | 2007 | 2007 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 31 | 42 | 54 | 41 | 45 | 27 | 20 | 14 | 13 | 13 | 15 | 20 | 30 | 42 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 2.19 | am 15.09.2012 | 4.19 | 2.19 | 2.19 | am 15.09.2012 |
| MQ | m³/s | 13.1 | | 19.8 | 6.51 | 13.6 | |
| HQ | m³/s | 94.1 | am 06.01.2012 bei W = 332 cm | 94.1 | 34.3 | 94.1 | am 06.01.2012 bei W = 332 cm |
| Nq | l/(skm²) | 1.47 | | 2.82 | 1.47 | 1.47 | |
| Mq | l/(skm²) | 8.83 | | 13.3 | 4.38 | 9.18 | |
| Hq | l/(skm²) | 63.3 | | 63.3 | 23.1 | 63.3 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 279 | | 209 | 70 | 290 | |

| | | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 1.36 | am 13.08.1983 | 2.66 | 1.36 | 1.36 | am 13.08.1983 |
| MNQ | m³/s | 2.88 | | 6.90 | 2.94 | 2.94 | |
| MQ | m³/s | 15.8 | | 22.8 | 8.86 | 15.8 | |
| MHQ | m³/s | 114 | | 112 | 52.9 | 117 | |
| HQ | m³/s | 163 | am 03.01.2003 bei W = 437 cm | 163 | 146 | 163 | am 03.01.2003 bei W = 437 cm |
| $HQ_1$ | m³/s | 106 | | | | | |
| $HQ_5$ | m³/s | 140 | | | | | |
| MNq | l/(skm²) | 1.94 | | 4.64 | 1.98 | 1.98 | |
| Mq | l/(skm²) | 10.6 | | 15.4 | 5.96 | 10.6 | |
| MHq | l/(skm²) | 76.7 | | 75.5 | 35.6 | 78.5 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 336 | | 241 | 95 | 335 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.36 | 0.913 | 13.08.1983 | 163 | 110 | 437 | 03.01.2003 |
| 2 | 1.75 | 1.18 | 09.08.2003 | 160 | 108 | 425 | 31.12.1986 |
| 3 | 1.82 | 1.22 | 06.08.1991 | 154 | 103 | 415 | 20.12.1988 |
| 4 | 1.89 | 1.27 | 09.07.2010 | 149 | 100 | 407 | 06.01.1987 |
| 5 | 1.93 | 1.30 | 08.08.1992 | 149 | 100 | 422 | 02.11.1998 |
| 6 | 1.97 | 1.32 | 06.08.1990 | 145 | 97.3 | 417 | 29.01.1993 |
| 7 | 2.05 | 1.38 | 18.08.1986 | 140 | 94.3 | 399 | 31.01.1982 |
| 8 | 2.13 | 1.44 | 04.08.1982 | 137 | 92.0 | 407 | 04.10.1993 |
| 9 | 2.19 | 1.47 | 15.09.2012 | 135 | 91.1 | 408 | 29.05.1984 |
| 10 | 2.20 | 1.48 | 04.08.1999 | 134 | 90.1 | 414 | 01.07.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1981/2012 32 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 82.0 | 82.0 | 156 | 110 | 49.6 |
| 363 | 73.1 | 81.7 | 152 | 96.3 | 49.4 |
| 362 | 68.2 | 73.1 | 142 | 85.9 | 43.4 |
| 361 | 64.0 | 68.2 | 139 | 79.8 | 43.0 |
| 360 | 63.1 | 64.2 | 120 | 73.2 | 40.0 |
| 359 | 62.0 | 64.0 | 112 | 68.2 | 39.2 |
| 358 | 58.8 | 63.1 | 106 | 65.1 | 37.8 |
| 357 | 57.2 | 62.0 | 103 | 62.3 | 37.5 |
| 356 | 52.2 | 58.8 | 96.6 | 60.0 | 37.3 |
| 350 | 45.2 | 51.2 | 75.4 | 48.3 | 31.8 |
| 340 | 36.8 | 37.7 | 64.3 | 38.2 | 26.1 |
| 330 | 30.8 | 31.6 | 53.1 | 32.6 | 23.0 |
| 320 | 27.4 | 28.3 | 44.2 | 28.7 | 18.9 |
| 300 | 22.1 | 22.8 | 34.8 | 23.7 | 15.7 |
| 270 | 16.1 | 15.5 | 28.0 | 18.8 | 11.1 |
| 240 | 11.1 | 11.0 | 23.4 | 15.6 | 8.53 |
| 210 | 9.61 | 9.50 | 19.1 | 12.9 | 7.40 |
| 183 | 8.25 | 8.27 | 17.2 | 10.8 | 6.38 |
| 150 | 6.57 | 7.09 | 15.8 | 8.89 | 5.57 |
| 130 | 5.62 | 6.54 | 14.9 | 7.94 | 4.83 |
| 120 | 5.33 | 6.23 | 14.0 | 7.46 | 4.23 |
| 110 | 5.18 | 6.02 | 13.7 | 6.99 | 4.02 |
| 100 | 5.08 | 5.61 | 12.9 | 6.55 | 3.82 |
| 90 | 4.94 | 5.32 | 12.2 | 6.16 | 3.68 |
| 80 | 4.82 | 5.15 | 11.4 | 5.80 | 3.58 |
| 70 | 4.73 | 4.89 | 11.2 | 5.45 | 3.43 |
| 60 | 4.47 | 4.54 | 10.6 | 5.11 | 3.31 |
| 50 | 4.07 | 4.07 | 10.3 | 4.74 | 3.21 |
| 40 | 3.87 | 3.87 | 9.87 | 4.36 | 3.05 |
| 30 | 3.22 | 3.22 | 9.29 | 4.00 | 2.76 |
| 25 | 3.12 | 3.12 | 9.03 | 3.71 | 2.59 |
| 20 | 2.87 | 2.87 | 8.65 | 3.45 | 2.44 |
| 15 | 2.83 | 2.83 | 8.04 | 3.18 | 2.04 |
| 10 | 2.72 | 2.72 | 7.29 | 2.92 | 1.73 |
| 9 | 2.72 | 2.72 | 7.23 | 2.86 | 1.71 |
| 8 | 2.71 | 2.71 | 7.01 | 2.80 | 1.66 |
| 7 | 2.70 | 2.70 | 6.93 | 2.74 | 1.58 |
| 6 | 2.67 | 2.67 | 6.86 | 2.68 | 1.55 |
| 5 | 2.67 | 2.67 | 6.80 | 2.63 | 1.54 |
| 4 | 2.66 | 2.66 | 6.74 | 2.52 | 1.46 |
| 3 | 2.63 | 2.63 | 6.57 | 2.45 | 1.46 |
| 2 | 2.60 | 2.60 | 6.55 | 2.28 | 1.46 |
| 1 | 2.57 | 2.57 | 6.31 | 2.00 | 1.44 |
| 0 | 2.19 | 2.19 | 5.91 | 1.36 | 1.36 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

$A_{Eo}$ : 2842.10 km²
PNP : NHN+ 32.70 m
Lage : 113.44 km oberhalb der Mündung links

# Q

m³/s

Pegel : Greven Nr. 3331000000100
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 5.81 | 4.70 | 50.7 | 28.1 | 34.7 | 13.1 | 9.59 | 10.5 | 7.41 | 6.06 | 3.40 | 4.19 | 6.98 | 6.45 |
| 2. | 5.71 | 6.19 | 66.0 | 23.1 | 31.9 | 11.9 | 9.20 | 9.55 | 5.35 | 5.88 | 3.41 | 3.85 | 6.67 | 7.37 |
| 3. | 5.75 | 9.37 | 94.4 | 22.4 | 29.1 | 11.2 | 12.6 | 6.66 | 5.29 | 5.13 | 3.24 | 4.09 | 6.31 | 9.22 |
| 4. | 6.04 | 11.3 | 89.9 | 20.9 | 27.0 | 12.4 | 11.8 | 11.0 | 4.76 | 5.02 | 3.20 | 11.4 | 7.57 | 9.38 |
| 5. | 5.71 | 10.8 | 93.7 | 19.4 | 30.9 | 13.5 | 10.2 | 17.0 | 4.66 | 5.88 | 3.06 | 28.7 | 9.60 | 12.5 |
| 6. | 5.47 | 12.2 | 137 | 18.4 | 38.6 | 11.0 | 12.6 | 16.6 | 4.34 | 5.36 | 3.16 | 22.3 | 11.9 | 13.4 |
| 7. | 5.41 | 16.7 | 151 | 16.3 | 30.5 | 10.6 | 10.9 | 15.1 | 4.47 | 6.49 | 2.96 | 21.8 | 9.01 | 11.1 |
| 8. | 5.39 | 23.0 | 134 | 15.3 | 34.5 | 10.8 | 10.2 | 12.3 | 7.42 | 5.61 | 3.03 | 14.5 | 9.35 | 9.23 |
| 9. | 5.23 | 19.8 | 120 | 15.4 | 37.3 | 10.6 | 9.63 | 10.4 | 12.4 | 4.92 | 2.96 | 10.6 | 7.60 | 8.83 |
| 10. | 5.07 | 19.5 | 99.3 | 14.7 | 29.7 | 13.2 | 9.66 | 8.40 | 9.10 | 4.31 | 2.99 | 8.97 | 6.60 | 16.6 |
| 11. | 5.16 | 15.3 | 78.0 | 14.0 | 26.7 | 13.0 | 23.1 | 7.30 | 9.80 | 4.18 | 3.28 | 7.76 | 7.26 | 26.1 |
| 12. | 4.96 | 13.5 | 60.9 | 13.3 | 24.8 | 12.9 | 26.6 | 7.10 | 14.1 | 3.88 | 4.26 | 7.13 | 7.95 | 20.1 |
| 13. | 4.58 | 17.1 | 57.8 | 13.3 | 22.6 | 13.6 | 16.6 | 8.84 | 19.6 | 3.83 | 5.10 | 7.53 | 6.93 | 16.8 |
| 14. | 4.58 | 24.4 | 54.5 | 14.6 | 21.4 | 12.0 | 13.3 | 9.63 | 24.5 | 3.66 | 4.17 | 7.83 | 6.39 | 15.2 |
| 15. | 5.10 | 27.6 | 46.3 | 17.9 | 20.7 | 12.7 | 11.6 | 7.76 | 24.6 | 3.63 | 3.27 | 7.98 | 6.42 | 30.1 |
| 16. | 4.66 | 33.9 | 40.1 | 19.2 | 20.1 | 11.6 | 12.0 | 9.71 | 21.5 | 3.62 | 3.19 | 6.83 | 6.14 | 44.0 |
| 17. | 4.68 | 75.1 | 35.6 | 17.4 | 19.3 | 10.9 | 11.9 | 12.2 | 29.2 | 4.00 | 3.29 | 6.45 | 5.69 | 43.9 |
| 18. | 5.01 | 70.2 | 31.9 | 21.5 | 18.6 | 10.2 | 10.1 | 9.12 | 39.4 | 3.50 | 3.24 | 6.48 | 6.37 | 43.0 |
| 19. | 5.02 | 48.6 | 40.5 | 25.0 | 17.8 | 10.7 | 8.88 | 7.63 | 28.9 | 3.40 | 3.80 | 5.88 | 6.77 | 42.4 |
| 20. | 4.77 | 38.8 | 92.4 | 29.9 | 16.2 | 10.3 | 8.02 | 6.57 | 24.4 | 3.35 | 3.52 | 5.29 | 6.59 | 42.0 |
| 21. | 4.72 | 50.3 | 112 | 24.9 | 15.4 | 10.8 | 7.96 | 6.54 | 19.1 | 3.19 | 3.36 | 5.28 | 6.52 | 34.1 |
| 22. | 4.92 | 56.7 | 113 | 23.6 | 14.9 | 12.7 | 7.09 | 6.54 | 14.1 | 3.26 | 3.43 | 5.07 | 5.91 | 36.9 |
| 23. | 4.77 | 54.2 | 121 | 24.9 | 14.7 | 13.8 | 6.72 | 7.10 | 11.6 | 3.23 | 3.22 | 5.07 | 5.62 | 59.0 |
| 24. | 4.92 | 53.3 | 114 | 32.3 | 13.8 | 12.9 | 6.17 | 4.95 | 10.4 | 3.30 | 6.23 | 4.77 | 6.18 | 108 |
| 25. | 4.73 | 57.8 | 92.3 | 44.5 | 13.0 | 14.3 | 5.56 | 9.65 | 8.96 | 3.50 | 11.5 | 4.92 | 7.52 | 138 |
| 26. | 4.72 | 47.9 | 69.9 | 46.2 | 12.9 | 13.1 | 5.02 | 9.80 | 7.75 | 4.41 | 6.81 | 4.72 | 7.10 | 121 |
| 27. | 4.79 | 39.2 | 55.9 | 38.9 | 12.9 | 12.2 | 4.65 | 6.90 | 6.84 | 6.88 | 7.46 | 4.66 | 7.61 | 99.6 |
| 28. | 4.74 | 35.2 | 48.0 | 35.3 | 11.4 | 11.4 | 4.42 | 6.96 | 7.73 | 5.12 | 7.98 | 4.47 | 7.71 | 100 |
| 29. | 4.94 | 32.3 | 41.7 | 34.4 | 11.6 | 13.3 | 4.26 | 6.83 | 8.31 | 3.77 | 6.36 | 4.59 | 7.14 | 92.6 |
| 30. | 4.80 | 41.9 | 37.8 | | 13.0 | 10.9 | 4.49 | 9.65 | 7.08 | 3.39 | 4.75 | 6.01 | 6.74 | 70.3 |
| 31. | | 57.1 | 33.4 | | 13.9 | | 4.92 | | 7.04 | 3.33 | | 8.98 | | 56.0 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13.+ | 1. | 18. | 13.+ | 28. | 18. | 29. | 24. | 6. | 21. | 7.+ | 2. | 23. | 1. |
| NQ | 4.58 | 4.70 | 31.9 | 13.3 | 11.4 | 10.2 | 4.26 | 4.95 | 4.34 | 3.19 | 2.96 | 3.85 | 5.62 | 6.45 |
| MQ | 5.07 | 33.0 | 77.8 | 23.6 | 21.9 | 12.1 | 9.99 | 9.28 | 13.2 | 4.36 | 4.32 | 8.33 | 7.21 | 43.3 |
| HQ | 7.05 | 83.2 | 156 | 50.5 | 41.3 | 16.2 | 35.1 | 18.6 | 42.3 | 9.95 | 12.7 | 31.6 | 16.7 | 141 |
| Tag | 4. | 17. | 7. | 25.+ | 8.+ | 5. | 11. | 5. | 18. | 27.+ | 25. | 5. | 6. | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 31 | 73 | 21 | 21 | 11 | 9 | 8 | 12 | 4 | 4 | 8 | 7 | 41 |

| | 1980/2011 | | 1981/2012 32 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 2011 | 2009 | 1994 | 2012 | 2007 | 2012 | 1993 | 1993 | 1992 | 1991 | 1982 | 1991 | 2011 |
| NQ | 2.68 | 4.70 | 9.04 | 10.9 | 11.4 | 7.65 | 4.26 | 2.80 | 0.830 | 1.34 | 0.687 | 3.17 | 2.68 | 4.70 |
| MNQ | 11.7 | 16.7 | 22.6 | 22.7 | 21.6 | 15.6 | 9.81 | 7.43 | 5.73 | 5.23 | 6.01 | 8.39 | 11.6 | 16.2 |
| MQ | 31.6 | 43.0 | 60.2 | 45.7 | 46.4 | 26.8 | 18.6 | 13.7 | 11.6 | 11.1 | 12.8 | 17.6 | 30.9 | 42.9 |
| MHQ | 98.3 | 136 | 173 | 121 | 133 | 64.0 | 50.6 | 46.2 | 37.8 | 34.7 | 40.0 | 56.4 | 96.3 | 138 |
| HQ | 402 | 391 | 479 | 265 | 299 | 219 | 297 | 312 | 369 | 194 | 124 | 309 | 402 | 391 |
| Jahr | 1998 | 2002 | 2003 | 1982 | 1981 | 1986 | 1984 | 1981 | 1981 | 2007 | 1998 | 1998 | 1998 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 29 | 41 | 57 | 39 | 44 | 24 | 18 | 12 | 11 | 10 | 12 | 17 | 28 | 40 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 2.96 | am 07.09.2012 | 4.58 | 2.96 | 2.96 | am 07.09.2012 |
| MQ | m³/s | 18.7 | | 29.2 | 8.27 | 19.7 | |
| HQ | m³/s | 156 | am 07.01.2012 bei W = 656 cm | 156 | 42.3 | 156 | am 07.01.2012 bei W = 656 cm |
| Nq | l/(skm²) | 1.04 | | 1.61 | 1.04 | 1.04 | |
| Mq | l/(skm²) | 6.57 | | 10.3 | 2.91 | 6.94 | |
| Hq | l/(skm²) | 54.9 | | 54.9 | 14.9 | 54.9 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 208 | | 162 | 46 | 219 | |

| | | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.687 | am 15.09.1991 | 2.68 | 0.687 | 0.687 | am 15.09.1991 |
| MNQ | m³/s | 4.25 | | 9.76 | 4.42 | 4.42 | |
| MQ | m³/s | 28.2 | | 42.4 | 14.2 | 28.1 | |
| MHQ | m³/s | 236 | | 229 | 96.3 | 246 | |
| HQ | m³/s | 479 | am 04.01.2003 bei W = 749 cm | 479 | 369 | 479 | am 04.01.2003 bei W = 749 cm |
| $HQ_1$ | m³/s | 165 | | | | | |
| $HQ_5$ | m³/s | 265 | | | | | |
| MNq | l/(skm²) | 1.49 | | 3.44 | 1.55 | 1.55 | |
| Mq | l/(skm²) | 9.92 | | 14.9 | 5.00 | 9.90 | |
| MHq | l/(skm²) | 83.0 | | 80.6 | 33.9 | 86.6 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 313 | | 234 | 80 | 312 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.687 | 0.242 | 15.09.1991 | 800 | 281 | | 10.02.1946 |
| 2 | 0.731 | 0.257 | 21.09.1959 | 479 | 168 | 749 | 04.01.2003 |
| 3 | 0.830 | 0.292 | 04.07.1993 | 402 | 142 | 735 | 03.11.1998 |
| 4 | 1.00 | 0.352 | 21.09.1947 | 394 | 139 | | 06.12.1960 |
| 5 | 1.02 | 0.361 | 21.08.1949 | 374 | 132 | | 24.02.1970 |
| 6 | 1.27 | 0.446 | 12.09.1929 | 369 | 130 | 752 | 01.07.1981 |
| 7 | 1.34 | 0.471 | 09.08.1992 | 347 | 122 | 725 | 30.01.1995 |
| 8 | 1.37 | 0.483 | 14.08.1990 | 338 | 119 | 723 | 10.01.2011 |
| 9 | 1.46 | 0.513 | 13.09.1964 | 334 | 118 | 739 | 31.12.1986 |
| 10 | 1.50 | 0.528 | 21.08.1921 | 318 | 112 | 719 | 15.01.2011 |

## Dauertabelle

Unterschrittene Abflüsse m³/s

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1981/2012 32 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 151 | 151 | 460 | 241 | 89.6 |
| 363 | 137 | 138 | 397 | 207 | 84.3 |
| 362 | 134 | 137 | 353 | 181 | 83.7 |
| 361 | 121 | 134 | 325 | 161 | 79.9 |
| 360 | 120 | 121 | 268 | 150 | 78.8 |
| 359 | 114 | 121 | 254 | 141 | 78.4 |
| 358 | 113 | 120 | 232 | 132 | 73.1 |
| 357 | 112 | 114 | 218 | 125 | 72.0 |
| 356 | 99.3 | 113 | 206 | 120 | 71.9 |
| 350 | 78.0 | 94.4 | 170 | 96.4 | 57.0 |
| 340 | 55.9 | 60.9 | 134 | 74.8 | 44.7 |
| 330 | 46.2 | 44.5 | 112 | 62.5 | 38.1 |
| 320 | 38.6 | 38.9 | 87.0 | 54.2 | 34.1 |
| 300 | 29.1 | 29.2 | 65.5 | 42.7 | 26.9 |
| 270 | 19.8 | 19.6 | 49.5 | 32.4 | 19.6 |
| 240 | 14.1 | 14.0 | 38.3 | 26.0 | 14.0 |
| 210 | 12.3 | 12.2 | 31.9 | 20.7 | 12.0 |
| 183 | 10.6 | 10.6 | 28.6 | 17.0 | 9.29 |
| 150 | 7.98 | 8.83 | 24.9 | 13.8 | 7.41 |
| 130 | 6.96 | 7.46 | 23.3 | 12.1 | 6.45 |
| 120 | 6.54 | 7.10 | 21.8 | 11.4 | 6.05 |
| 110 | 6.04 | 6.83 | 20.5 | 10.6 | 5.33 |
| 100 | 5.56 | 6.57 | 19.6 | 9.89 | 4.98 |
| 90 | 5.16 | 6.37 | 18.9 | 9.26 | 4.51 |
| 80 | 5.02 | 5.88 | 18.2 | 8.56 | 4.03 |
| 70 | 4.80 | 5.29 | 17.4 | 7.94 | 3.75 |
| 60 | 4.72 | 4.92 | 16.4 | 7.34 | 3.49 |
| 50 | 4.58 | 4.59 | 15.9 | 6.63 | 3.09 |
| 40 | 4.19 | 4.19 | 15.3 | 5.99 | 2.45 |
| 30 | 3.66 | 3.66 | 14.3 | 5.23 | 2.04 |
| 25 | 3.50 | 3.50 | 13.7 | 4.91 | 1.72 |
| 20 | 3.39 | 3.39 | 12.9 | 4.51 | 1.51 |
| 15 | 3.29 | 3.29 | 12.3 | 4.17 | 1.34 |
| 10 | 3.24 | 3.24 | 11.1 | 3.79 | 1.03 |
| 9 | 3.23 | 3.23 | 10.8 | 3.70 | 1.03 |
| 8 | 3.22 | 3.22 | 10.6 | 3.62 | 1.02 |
| 7 | 3.20 | 3.20 | 10.4 | 3.48 | 1.00 |
| 6 | 3.19 | 3.19 | 9.77 | 3.36 | 0.970 |
| 5 | 3.19 | 3.19 | 9.49 | 3.24 | 0.969 |
| 4 | 3.16 | 3.16 | 9.46 | 2.97 | 0.901 |
| 3 | 3.06 | 3.06 | 9.44 | 2.65 | 0.820 |
| 2 | 3.03 | 3.03 | 9.43 | 2.19 | 0.820 |
| 1 | 2.99 | 2.99 | 9.25 | 1.58 | 0.780 |
| 0 | 2.96 | 2.96 | 9.03 | 0.687 | 0.687 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung; Extremwerte seit 1901

LANUV NRW

$A_{Eo}$ : 3740 km²
PNP : NN + 24.19 m
Lage: 153.0 km Lauflänge ab Quelle, rechts

# Q
m³/s

Pegel : Rheine Unterschl. UP Nr. 33900200
Gewässer : Ems
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 9.03 | 8.00 | 71.1 | 44.7 | 48.8 | 21.0 | 16.2 | 10.4 | 12.1 | 10.9 | 4.68 | 7.06 | 13.1 | 11.3 |
| 2. | 9.26 | 9.27 | 77.1 | 39.0 | 46.2 | 19.4 | 15.2 | 14.8 | 9.12 | 9.65 | 4.64 | 6.21 | 11.6 | 12.0 |
| 3. | 9.22 | 12.6 | 100 | R 36.7 | 42.6 | 18.3 | 16.0 | 11.7 | 7.89 | 9.91 | 4.61 | 6.12 | 10.8 | 13.9 |
| 4. | 9.16 | 17.2 | 116 | R 33.8 | 39.8 | 18.7 | 19.0 | 12.6 | 7.63 | 8.53 | 4.32 | 11.4 | 11.6 | 15.5 |
| 5. | 9.25 | 18.1 | 125 | R 31.0 | 41.6 | 20.8 | 16.4 | 20.4 | 6.94 | 9.05 | 4.17 | 27.9 | 14.6 | 18.0 |
| 6. | 8.82 | 19.3 | 136 | R 29.2 | 51.2 | 18.0 | 17.1 | 22.7 | 6.51 | 9.25 | 4.24 | 34.1 | 16.1 | 21.4 |
| 7. | 8.63 | 23.1 | 147 | R 27.2 | 46.9 | 16.9 | 17.7 | 22.1 | 6.77 | 9.30 | 3.91 | 32.2 | 17.8 | 19.3 |
| 8. | 8.39 | 33.2 | 158 | R 25.4 | 46.1 | 16.8 | 16.2 | 22.3 | 8.00 | 9.10 | 3.83 | 26.4 | 15.5 | 16.5 |
| 9. | 8.61 | 33.1 | 158 | R 24.9 | 53.3 | 16.8 | 15.2 | 17.2 | 15.9 | 8.21 | 4.10 | 19.9 | 14.8 | 15.6 |
| 10. | 7.85 | 31.5 | 150 | R 24.5 | 46.0 | 20.4 | 15.1 | 14.2 | 14.8 | 7.42 | 4.04 | 16.2 | 12.9 | 22.9 |
| 11. | 8.49 | 27.3 | 133 | R 23.7 | 40.7 | 22.1 | 19.0 | 12.1 | 11.7 | 6.42 | 3.99 | 14.0 | 12.4 | 34.8 |
| 12. | 7.77 | 23.6 | 107 | R 22.4 | 37.8 | 21.3 | 35.3 | 12.2 | 14.5 | 6.23 | 6.06 | 13.2 | 13.0 | 33.7 |
| 13. | 7.51 | 25.3 | 86.1 | R 21.8 | 35.1 | 22.8 | 25.8 | 15.8 | 19.4 | 5.91 | 6.61 | 13.0 | 12.8 | 28.4 |
| 14. | 7.10 | 33.9 | 79.7 | R 23.2 | 33.0 | 20.7 | 20.2 | 15.8 | 25.5 | 5.53 | 7.10 | 13.5 | 11.8 | 25.9 |
| 15. | 7.62 | 39.7 | 69.5 | R 25.5 | 31.7 | 21.5 | 18.0 | 13.4 | 27.6 | 5.55 | 4.94 | 13.2 | 11.1 | 33.2 |
| 16. | 7.95 | 44.8 | 59.0 | R 28.7 | 30.8 | 20.6 | 16.5 | 13.0 | 27.6 | 5.42 | 4.26 | 12.4 | 11.3 | 53.6 |
| 17. | 7.51 | 76.3 | 53.6 | R 26.9 | 30.0 | 18.8 | 17.2 | 17.7 | 30.2 | 6.09 | 4.27 | 11.6 | 10.3 | 53.4 |
| 18. | 7.54 | 94.0 | 48.4 | R 30.6 | 28.6 | 17.4 | 16.1 | 17.2 | 41.9 | 4.91 | 4.45 | 11.5 | 10.5 | 56.9 |
| 19. | 8.09 | 77.9 | 52.7 | R 34.5 | 27.8 | 18.1 | 14.1 | 14.5 | 39.4 | 4.74 | 4.85 | 10.7 | 11.9 | 53.8 |
| 20. | 7.86 | 58.1 | 92.1 | R 42.3 | 26.4 | 17.2 | 12.6 | 11.9 | 32.5 | 4.60 | 5.07 | 9.87 | 11.7 | 54.8 |
| 21. | 7.60 | 62.2 | 121 | 37.2 | 24.8 | 16.8 | 11.7 | 10.7 | 28.3 | 4.64 | 4.57 | 9.32 | 11.4 | 49.0 |
| 22. | 7.56 | 76.3 | 135 | 35.7 | 24.0 | 18.8 | 11.9 | 10.9 | 22.0 | 4.29 | 4.63 | 9.05 | 11.0 | 48.8 |
| 23. | 7.78 | 73.0 | 142 | 36.3 | 23.5 | 21.4 | 10.7 | 10.7 | 18.1 | 4.25 | 4.32 | 8.96 | 10.4 | 68.9 |
| 24. | 7.98 | 74.1 | 146 | 42.8 | 22.8 | 21.0 | 11.8 | 9.13 | 15.9 | 4.38 | 7.13 | 8.72 | 10.4 | 99.8 |
| 25. | 7.51 | 75.7 | 142 | 54.5 | 21.5 | 21.3 | 9.66 | 11.4 | 13.9 | 4.74 | 13.5 | 8.66 | 11.6 | 121 |
| 26. | 7.66 | 72.9 | 124 | 64.2 | 20.7 | 20.6 | 9.09 | 14.8 | 12.3 | 5.54 | 12.7 | 8.26 | 12.6 | 136 |
| 27. | 7.31 | 58.8 | 94.3 | 56.7 | 20.5 | 19.7 | 7.59 | 12.2 | 10.9 | 9.71 | 10.3 | 8.21 | 12.6 | 139 |
| 28. | 7.80 | 53.1 | 74.7 | 51.1 | 19.9 | 18.4 | 6.92 | 10.3 | 11.6 | 8.24 | 11.6 | 8.06 | 13.2 | 132 |
| 29. | 7.77 | 48.9 | 63.0 | 48.5 | 17.8 | 19.8 | 6.97 | 10.4 | 14.9 | 6.26 | 10.4 | 7.90 | 12.7 | 127 |
| 30. | 7.89 | 50.8 | 55.6 | | 19.6 | 18.4 | 6.67 | 10.6 | 12.7 | 5.25 | 7.74 | 9.27 | 12.1 | 116 |
| 31. | | 70.7 | 50.6 | | 22.0 | | 7.32 | | 11.4 | 4.49 | | 12.4 | | 90.8 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 14. | 1. | 18. | 13. | 29. | 8.+ | 30. | 24. | 6. | 23. | 8. | 3. | 17. | 1. |
| NQ | 7.10 | 8.00 | 48.4 | 21.8 | 17.8 | 16.8 | 6.67 | 9.13 | 6.51 | 4.25 | 3.83 | 6.12 | 10.3 | 11.3 |
| MQ | 8.08 | 45.9 | 102 | 35.3 | 33.0 | 19.5 | 14.8 | 14.1 | 17.4 | 6.73 | 6.03 | 13.2 | 12.5 | 55.6 |
| HQ | 26.3 | 96.7 | 163 | 66.3 | 55.2 | 25.1 | 38.5 | 31.2 | 45.6 | 11.8 | 19.4 | 36.3 | 20.2 | 142 |
| Tag | 7. | 18. | 8. | 26. | 9. | 15. | 12. | 7. | 18. | 1. | 9. | 6. | 7. | 27. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 6 | 33 | 73 | 24 | 24 | 14 | 11 | 10 | 12 | 5 | 4 | 9 | 9 | 40 |

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1949 | 1959 | 1960 | 1947 | 1947 | 1960 | 1960 | 1959 | 1959 | 1964 | 1959 | 1959 | 1949 | 1959 |
| NQ | 2.50 | 4.14 | 6.29 | 4.00 | 5.00 | 6.12 | 2.24 | 1.80 | 0.820 | 1.60 | 0.960 | 1.40 | 2.50 | 4.14 |
| MNQ | 16.2 | 23.6 | 28.4 | 30.3 | 26.6 | 19.9 | 12.4 | 9.21 | 8.22 | 7.74 | 8.49 | 11.3 | 16.2 | 23.4 |
| MQ | 37.9 | 57.8 | 69.1 | 66.1 | 57.1 | 38.6 | 23.7 | 16.8 | 18.2 | 16.2 | 16.7 | 22.8 | 36.9 | 57.6 |
| MHQ | 86.0 | 130 | 152 | 147 | 131 | 80.8 | 52.8 | 39.0 | 43.4 | 38.2 | 39.3 | 52.3 | 83.5 | 130 |
| HQ | 336 | 472 | 396 | 920 | 343 | 208 | 216 | 270 | 297 | 170 | 157 | 325 | 336 | 472 |
| Jahr | 1998 | 1960 | 1987 | 1946 | 1981 | 1986 | 1984 | 1984 | 1981 | 1954 | 1998 | 1998 | 1998 | 1960 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 26 | 41 | 49 | 44 | 41 | 27 | 17 | 12 | 13 | 12 | 12 | 16 | 26 | 41 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 3.83 | am 08.09.2012 | 7.10 | 3.83 | 3.83 | am 08.09.2012 |
| MQ m³/s | 26.4 | | 41.0 | 12.1 | 27.6 | |
| HQ m³/s | 163 | am 08.01.2012 bei W= 513 cm | 163 | 45.6 | 163 | am 08.01.2012 bei W= 513 cm |
| Nq l/(s km²) | 1.02 | | 1.90 | 1.02 | 1.02 | |
| Mq l/(s km²) | 7.07 | | 11.0 | 3.22 | 7.39 | |
| Hq l/(s km²) | 43.6 | | 43.6 | 12.2 | 43.6 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 223 | | 172 | 51 | 234 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| NQ m³/s | 0.820 | am 19.07.1959 | 2.50 | 0.820 | 0.820 | am 19.07.1959 |
| MNQ m³/s | 5.52 | | 12.6 | 5.75 | 5.74 | |
| MQ m³/s | 36.6 | | 54.4 | 19.1 | 36.5 | |
| MHQ m³/s | 234 | | 228 | 94.9 | 237 | |
| HQ m³/s | 1030 | am 10.02.1946 | 1030 | 325 | 1030 | am 10.02.1946 |
| $HQ_1$ m³/s | 181 | | 178 | 65 | 181 | |
| $HQ_5$ m³/s | 305 | | 303 | 144 | 305 | |
| MNq l/(s km²) | 1.48 | | 3.37 | 1.54 | 1.53 | |
| Mq l/(s km²) | 9.79 | | 14.5 | 5.11 | 9.76 | |
| MHq l/(s km²) | 62.6 | | 61.0 | 25.4 | 63.4 | |
| | 1941/2012 (*) 72 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 309 | | 229 | 81 | 309 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.820 | 0.219 | 19.07.1959 | 1030 | 275 | 1013 | 10.02.1946 |
| 2 | 1.50 | 0.401 | 06.09.1964 | 483 | 129 | 828 | 07.12.1960 |
| 3 | 2.00 | 0.535 | 14.08.1921 | 424 | 113 | 767 | 24.02.1970 |
| 4 | 2.10 | 0.561 | 28.08.1949 | 403 | 108 | 748 | 02.01.1987 |
| 5 | 2.10 | 0.561 | 12.08.1938 | 387 | 103 | 702 | 17.01.1968 |
| 6 | 2.20 | 0.588 | 01.11.1949 | 369 | 98.7 | 759 | 04.01.1926 |
| 7 | 2.20 | 0.588 | 18.08.1935 | 352 | 94.1 | 700 | 13.03.1981 |
| 8 | 2.20 | 0.588 | 12.07.1934 | 350 | 93.6 | 674 | 10.02.1966 |
| 9 | 2.20 | 0.588 | 16.08.1925 | 349 | 93.3 | 699 | 03.11.1998 |
| 10 | 2.40 | 0.642 | 17.09.1929 | 341 | 91.2 | 746 | 05.01.2003 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 72 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 159 | 159 | | | |
| 364 | 158 | 158 | 920 | 255 | 57.5 |
| 363 | 150 | 150 | 910 | 223 | 57.1 |
| 362 | 147 | 147 | 680 | 203 | 51.0 |
| 361 | 146 | 146 | 680 | 188 | 51.0 |
| 360 | 146 | 146 | 430 | 177 | 49.9 |
| 359 | 142 | 142 | 360 | 167 | 47.0 |
| 358 | 136 | 139 | 360 | 160 | 46.2 |
| 357 | 135 | 139 | 290 | 153 | 46.2 |
| 356 | 133 | 136 | 257 | 148 | 45.8 |
| 350 | 100 | 124 | 227 | 126 | 42.5 |
| 340 | 75.7 | 90.8 | 194 | 104 | 36.4 |
| 330 | 62.2 | 59.0 | 165 | 87.1 | 34.5 |
| 320 | 52.7 | 53.3 | 153 | 74.7 | 29.3 |
| 300 | 40.7 | 40.7 | 111 | 58.7 | 24.3 |
| 270 | 28.6 | 28.3 | 81.3 | 43.7 | 18.0 |
| 240 | 22.3 | 22.0 | 63.9 | 34.0 | 10.3 |
| 210 | 19.0 | 18.8 | 49.3 | 26.9 | 6.63 |
| 183 | 16.4 | 16.4 | 40.9 | 22.1 | 5.27 |
| 150 | 12.7 | 13.4 | 34.4 | 17.5 | 4.78 |
| 130 | 11.5 | 12.2 | 30.8 | 15.4 | 4.46 |
| 120 | 10.6 | 11.8 | 29.8 | 14.5 | 4.30 |
| 110 | 9.32 | 11.5 | 28.6 | 13.7 | 3.98 |
| 100 | 9.12 | 11.0 | 27.1 | 12.8 | 3.66 |
| 90 | 8.63 | 10.5 | 26.1 | 12.0 | 3.50 |
| 80 | 8.06 | 9.66 | 25.2 | 11.1 | 3.22 |
| 70 | 7.80 | 9.09 | 24.5 | 10.4 | 2.80 |
| 60 | 7.56 | 8.06 | 23.8 | 9.61 | 2.66 |
| 50 | 7.10 | 7.10 | 22.6 | 8.77 | 2.52 |
| 40 | 6.26 | 6.26 | 22.1 | 7.81 | 2.38 |
| 30 | 5.42 | 5.42 | 20.9 | 7.01 | 2.24 |
| 25 | 4.85 | 4.85 | 19.7 | 6.57 | 2.10 |
| 20 | 4.64 | 4.64 | 17.9 | 6.01 | 2.10 |
| 15 | 4.49 | 4.49 | 16.5 | 5.41 | 1.90 |
| 10 | 4.29 | 4.29 | 14.2 | 4.65 | 1.80 |
| 9 | 4.27 | 4.27 | 13.8 | 4.52 | 1.80 |
| 8 | 4.26 | 4.26 | 13.8 | 4.32 | 1.80 |
| 7 | 4.25 | 4.25 | 13.7 | 4.15 | 1.70 |
| 6 | 4.24 | 4.24 | 13.2 | 4.01 | 1.70 |
| 5 | 4.17 | 4.17 | 13.2 | 3.82 | 1.60 |
| 4 | 4.10 | 4.10 | 12.3 | 3.51 | 1.60 |
| 3 | 4.04 | 4.04 | 12.3 | 3.09 | 1.40 |
| 2 | 3.99 | 3.99 | 12.2 | 3.08 | 1.10 |
| 1 | 3.91 | 3.91 | 11.8 | 2.40 | 0.960 |
| 0 | 3.83 | 3.83 | 11.6 | 0.820 | 0.820 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

HQ1, HQ5: Jahresreihe 1941-2012
Extremwerte ab 1921
18 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 4981 km²
PNP : NN + 12.39 m
Lage: 212.0 km Lauflänge ab Quelle, rechts

# Q
m³/s

Pegel : Dalum Nr. 3550040
Gewässer : Ems
Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 16.1 | 14.7 | 90.8 | R61.4 | 64.2 | 29.7 | 22.9 | 14.2 | 15.7 | 17.6 | 11.2 | 13.3 | 20.1 | 20.2 |
| 2. | 17.6 | 16.2 | 97.4 | R53.3 | 64.0 | 28.1 | 22.3 | 17.5 | 15.5 | 15.5 | 10.8 | 13.3 | 19.5 | 19.2 |
| 3. | 17.3 | 18.7 | 116 | R42.4 | 60.1 | 26.6 | 21.2 | 17.5 | 14.2 | 15.8 | 9.76 | 13.7 | 19.1 | 20.2 |
| 4. | 16.2 | 22.9 | 134 | R43.1 | 58.2 | 25.7 | 24.0 | 17.3 | 12.8 | 14.7 | 9.74 | 18.8 | 19.2 | 22.8 |
| 5. | 16.7 | 24.9 | 150 | R42.7 | 53.1 | 26.5 | 24.5 | 21.4 | 12.7 | 13.7 | 10.5 | 34.4 | 21.9 | 25.3 |
| 6. | 15.9 | 26.8 | 170 | R40.4 | 59.6 | 26.4 | 21.5 | 25.5 | 12.3 | 15.1 | 9.73 | 50.2 | 25.0 | 27.9 |
| 7. | 15.4 | 31.3 | 165 | R38.4 | 62.8 | 24.2 | 22.5 | 26.0 | 13.4 | 16.0 | 10.6 | 53.4 | 27.8 | 27.4 |
| 8. | 15.3 | 40.8 | 172 | R34.3 | 58.8 | 22.8 | 21.0 | 28.6 | 12.9 | 15.9 | 10.4 | 44.2 | 25.5 | 25.5 |
| 9. | 16.0 | 44.2 | 178 | R34.7 | 64.0 | 23.1 | 20.3 | 26.0 | 18.4 | 14.7 | 9.73 | 33.2 | 24.6 | 23.5 |
| 10. | 15.1 | 42.3 | 178 | R32.8 | 62.3 | 26.5 | 20.9 | 22.3 | 20.7 | 14.6 | 9.90 | 27.3 | 24.5 | 32.8 |
| 11. | 15.1 | 38.4 | 168 | R30.6 | 53.4 | 31.8 | 21.9 | 16.4 | 17.5 | 13.4 | 11.7 | 25.9 | 23.3 | 45.5 |
| 12. | 15.8 | 31.4 | 147 | R29.3 | 48.6 | 29.9 | 31.9 | 16.1 | 17.7 | 13.0 | 10.7 | 23.9 | 22.2 | 48.1 |
| 13. | 15.0 | 33.9 | 122 | R27.7 | 44.7 | 31.6 | 32.2 | 21.6 | 20.9 | 12.3 | 11.9 | 26.1 | 22.3 | 42.3 |
| 14. | 14.1 | 41.0 | 107 | R29.8 | 42.6 | 31.5 | 26.0 | 21.2 | 25.9 | 11.7 | 11.8 | 26.8 | 19.9 | 39.2 |
| 15. | 13.6 | 52.3 | 95.5 | 36.7 | 41.0 | 30.2 | 23.3 | 18.3 | 29.0 | 11.8 | 11.2 | 25.3 | 18.3 | 43.0 |
| 16. | 13.8 | 58.7 | 81.6 | 37.1 | 40.5 | 31.3 | 21.7 | 17.4 | 29.7 | 11.4 | 10.7 | 24.1 | 18.0 | 62.7 |
| 17. | 14.0 | 89.6 | 71.9 | 37.4 | 40.2 | 29.2 | 20.9 | 19.6 | 33.2 | 11.3 | 9.77 | 22.4 | 17.8 | 71.0 |
| 18. | 13.6 | 109 | 65.1 | 38.2 | 37.4 | 27.5 | 20.2 | 22.2 | 40.3 | 11.2 | 11.4 | 20.4 | 17.0 | 73.7 |
| 19. | 13.7 | 104 | 67.8 | 44.9 | 36.0 | 26.6 | 19.8 | 21.3 | 47.7 | 11.3 | 11.9 | 19.4 | 17.8 | 73.0 |
| 20. | 13.8 | 83.6 | 108 | 54.0 | 34.4 | 26.4 | 19.1 | 17.8 | 43.3 | 9.78 | 11.6 | 18.2 | 18.7 | 69.8 |
| 21. | 13.7 | 80.9 | 136 | 51.9 | 33.8 | 25.3 | 16.2 | 15.6 | 38.0 | 9.71 | 10.9 | 17.8 | 18.1 | 69.3 |
| 22. | 14.0 | 91.1 | 158 | 47.6 | 31.1 | 25.7 | 16.2 | 16.1 | 30.9 | 9.16 | 10.6 | 16.7 | 18.5 | 65.9 |
| 23. | 14.4 | 93.8 | 167 | 48.5 | 30.9 | 28.2 | 15.7 | 15.3 | 24.2 | 9.69 | 10.2 | 16.9 | 17.3 | 87.3 |
| 24. | 14.0 | 97.2 | 173 | 55.2 | 31.0 | 29.3 | 15.2 | 15.3 | 22.3 | 10.3 | 13.6 | 15.6 | 17.7 | 126 |
| 25. | 14.1 | 100 | 171 | 66.5 | 29.7 | 28.9 | 14.8 | 14.8 | 19.7 | 9.91 | 19.2 | 15.0 | 18.5 | 136 |
| 26. | 13.9 | 96.6 | 161 | 78.9 | 28.1 | 29.8 | 13.1 | 19.3 | 18.0 | 9.68 | 24.5 | 14.8 | 18.9 | 154 |
| 27. | 14.7 | 84.2 | 138 | 77.5 | 27.5 | 26.1 | 12.5 | 19.1 | 16.2 | 12.7 | 20.3 | 15.7 | 19.6 | 161 |
| 28. | 14.3 | 72.9 | 106 | 68.7 | 27.2 | 26.9 | 12.5 | 16.2 | 20.0 | 13.9 | 19.3 | 14.2 | 20.8 | 164 |
| 29. | 14.3 | 67.3 | 89.5 | 64.7 | 26.2 | 26.9 | 12.3 | 15.1 | 22.6 | 13.1 | 18.8 | 14.5 | 20.9 | 152 |
| 30. | 15.1 | 65.9 | 77.6 | | 26.8 | 26.2 | 12.4 | 14.7 | 22.2 | 11.7 | 17.5 | 14.8 | 20.6 | 145 |
| 31. | | 80.8 | 69.2 | | 28.3 | | 12.7 | | 19.5 | 12.1 | | 17.3 | | 128 |
| Tag | 15.+ | 1. | 18. | 13. | 29. | 8. | 29. | 1. | 6. | 22. | 6.+ | 1.+ | 18. | 2. |
| NQ | 13.6 | 14.7 | 65.1 | 27.7 | 26.2 | 22.8 | 12.3 | 14.2 | 12.3 | 9.16 | 9.73 | 13.3 | 17.0 | 19.2 |
| MQ | 14.9 | 59.9 | 127 | 46.5 | 43.4 | 27.6 | 19.7 | 19.0 | 22.8 | 12.7 | 12.7 | 22.8 | 20.4 | 71.0 |
| HQ | 22.2 | 115 | 180 | 81.6 | 68.8 | 35.9 | 37.4 | 30.2 | 52.4 | 20.0 | 27.7 | 56.5 | 30.9 | 166 |
| Tag | 2. | 18. | 9.+ | 27. | 1.+ | 14.+ | 12.+ | 8. | 19. | 3.+ | 26. | 7. | 7. | 27. |
| $h_N$ mm / $h_A$ mm | 8 | 32 | 68 | 23 | 23 | 14 | 11 | 10 | 12 | 7 | 7 | 12 | 11 | 38 |
| | 1964/2011 | | 1965/2012 48 Jahre | | | | | | | | | | | |
| Jahr | 1971 | 1964 | 1996 | 1996 | 1972 | 1996 | 1971 | 1996 | 1976 | 1973 | 1971 | 1997 | 1971 | 1976 + |
| NQ | 7.20 | 9.10 | 9.31 | 9.43 | 11.3 | 11.0 | 9.12 | 6.03 | 4.02 | 3.00 | 3.60 | 6.47 | 7.20 | 12.0 |
| MNQ | 23.3 | 36.7 | 42.6 | 42.9 | 41.3 | 31.2 | 19.1 | 14.1 | 12.1 | 10.8 | 12.4 | 17.2 | 23.4 | 36.9 |
| MQ | 48.4 | 73.2 | 92.0 | 81.7 | 76.0 | 54.8 | 35.1 | 24.6 | 23.8 | 19.6 | 22.7 | 30.6 | 48.4 | 73.9 |
| MHQ | 101 | 143 | 185 | 163 | 150 | 103 | 72.4 | 55.0 | 54.4 | 45.0 | 50.6 | 67.6 | 101 | 146 |
| HQ | 407 | 320 | 461 | 440 | 410 | 215 | 213 | 245 | 347 | 203 | 158 | 367 | 407 | 320 |
| Jahr | 1998 | 1986 | 1987 | 1970 | 1981 | 1994 | 1965 | 1984 | 1981 | 2010 | 1998 | 1998 | 1998 | 1986 |
| | 1964/2011 | | 1965/2012 48 Jahre | | | | | | | | | | | |
| $Mh_N$ mm / $Mh_A$ mm | 25 | 39 | 49 | 41 | 41 | 29 | 19 | 13 | 13 | 11 | 12 | 16 | 25 | 40 |

## Hauptwerte

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 9.16 | am 22.08.2012 | 13.6 | 9.16 | 9.16 | am 22.08.2012 |
| MQ m³/s | 35.9 | | 53.6 | 18.3 | 37.3 | |
| HQ m³/s | 180 | am 09.01.2012 bei W= 355 cm | 180 | 56.5 | 180 | am 09.01.2012 bei W= 355 cm |
| Nq l/(s km²) | 1.84 | | 2.73 | 1.84 | 1.84 | |
| Mq l/(s km²) | 7.20 | | 10.8 | 3.68 | 7.48 | |
| Hq l/(s km²) | 36.1 | | 36.1 | 11.3 | 36.1 | |
| $h_N$ mm / $h_A$ mm | 227 | | 169 | 58 | 237 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| NQ m³/s | 3.00 | am 22.08.1973 | 7.20 | 3.00 | 3.00 | am 22.08.1973 |
| MNQ m³/s | 8.71 | | 18.8 | 8.95 | 8.91 | |
| MQ m³/s | 48.4 | | 71.1 | 26.1 | 48.5 | |
| MHQ m³/s | 184 | | 180 | 83.7 | 184 | |
| HQ m³/s | 461 | am 03.01.1987 bei W= 462 cm | 461 | 367 | 461 | am 03.01.1987 bei W= 462 cm |
| $HQ_1$ m³/s | 196 | | 190 | 71.5 | 196 | |
| $HQ_5$ m³/s | 314 | | 306 | 153 | 314 | |
| MNq l/(s km²) | 1.75 | | 3.77 | 1.80 | 1.79 | |
| Mq l/(s km²) | 9.72 | | 14.3 | 5.24 | 9.74 | |
| MHq l/(s km²) | 36.9 | | 36.1 | 16.8 | 36.9 | |
| | 1965/2012 (*) 48 Jahre | | | | 1965/2012 | |
| $Mh_N$ mm / $Mh_A$ mm | 306 | | 224 | 83 | 308 | |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 3.00 | 0.602 | 22.08.1973 | 461 | 92.6 | 462 | 03.01.1987 |
| 2 | 3.60 | 0.723 | 18.09.1971 | 450 | 90.3 | 458 | 25.02.1970 |
| 3 | 4.02 | 0.807 | 06.07.1976 | 410 | 82.3 | 454 | 14.03.1981 |
| 4 | 4.48 | 0.899 | 10.08.1992 | 407 | 81.7 | 453 | 02.11.1998 |
| 5 | 5.00 | 1.00 | 14.09.1991 | 400 | 80.3 | 453 | 18.01.1968 |
| 6 | 5.15 | 1.03 | 17.08.1997 | 390 | 78.3 | 450 | 04.01.1994 |
| 7 | 5.27 | 1.06 | 06.08.1996 | 368 | 73.9 | 446 | 23.01.1986 |
| 8 | 5.59 | 1.12 | 22.08.1995 | 367 | 73.7 | 446 | 31.01.1995 |
| 9 | 5.64 | 1.13 | 10.08.1975 | 352 | 70.7 | 452 | 06.01.2003 |
| 10 | 5.66 | 1.14 | 13.08.1969 | 350 | 70.3 | 443 | 20.03.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1965/2012 48 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 179 | 179 | | | |
| 364 | 178 | 178 | 455 | 290 | 120 |
| 363 | 173 | 173 | 439 | 233 | 117 |
| 362 | 172 | 172 | 427 | 219 | 110 |
| 361 | 171 | 171 | 416 | 209 | 109 |
| 360 | 170 | 170 | 386 | 201 | 105 |
| 359 | 168 | 168 | 370 | 195 | 104 |
| 358 | 167 | 167 | 357 | 188 | 87.0 |
| 357 | 165 | 165 | 342 | 181 | 87.0 |
| 356 | 161 | 164 | 341 | 176 | 86.2 |
| 350 | 134 | 150 | 241 | 155 | 73.7 |
| 340 | 97.2 | 116 | 206 | 130 | 65.4 |
| 330 | 81.6 | 78.9 | 187 | 112 | 56.4 |
| 320 | 67.8 | 68.7 | 167 | 97.9 | 44.3 |
| 300 | 53.4 | 53.4 | 139 | 77.6 | 34.3 |
| 270 | 38.0 | 38.0 | 122 | 59.7 | 28.3 |
| 240 | 29.9 | 29.8 | 99.8 | 47.7 | 23.0 |
| 210 | 26.4 | 26.4 | 86.2 | 38.8 | 18.4 |
| 183 | 22.8 | 23.5 | 60.6 | 32.3 | 15.1 |
| 150 | 19.3 | 20.6 | 45.6 | 26.1 | 12.6 |
| 130 | 17.4 | 19.3 | 40.3 | 22.8 | 11.4 |
| 120 | 16.4 | 18.5 | 38.1 | 21.5 | 10.8 |
| 110 | 15.9 | 18.0 | 36.9 | 20.2 | 10.6 |
| 100 | 15.4 | 17.4 | 36.2 | 18.9 | 10.2 |
| 90 | 15.1 | 16.2 | 35.2 | 17.8 | 9.60 |
| 80 | 14.7 | 15.6 | 34.2 | 16.5 | 9.12 |
| 70 | 14.1 | 15.0 | 32.8 | 15.4 | 9.00 |
| 60 | 13.8 | 14.2 | 31.4 | 14.2 | 7.80 |
| 50 | 13.1 | 13.1 | 30.0 | 13.3 | 7.20 |
| 40 | 12.4 | 12.4 | 29.1 | 12.1 | 6.60 |
| 30 | 11.7 | 11.7 | 26.9 | 11.0 | 6.00 |
| 25 | 11.3 | 11.3 | 25.8 | 10.4 | 5.40 |
| 20 | 10.8 | 10.8 | 23.6 | 9.71 | 5.40 |
| 15 | 10.5 | 10.5 | 22.3 | 9.02 | 4.80 |
| 10 | 9.90 | 9.90 | 20.7 | 7.97 | 4.20 |
| 9 | 9.78 | 9.78 | 19.9 | 7.81 | 4.20 |
| 8 | 9.77 | 9.77 | 19.8 | 7.71 | 4.20 |
| 7 | 9.76 | 9.76 | 19.3 | 7.33 | 4.20 |
| 6 | 9.74 | 9.74 | 19.1 | 7.17 | 4.20 |
| 5 | 9.74 | 9.74 | 18.8 | 6.75 | 4.20 |
| 4 | 9.73 | 9.73 | 18.4 | 6.57 | 4.20 |
| 3 | 9.71 | 9.71 | 17.5 | 6.17 | 3.60 |
| 2 | 9.69 | 9.69 | 17.1 | 5.66 | 3.60 |
| 1 | 9.68 | 9.68 | 16.5 | 4.95 | 3.60 |
| 0 | 9.16 | 9.16 | 16.3 | 3.00 | 3.00 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.

Extremwerte ab 1965
HQ1, HQ5 : Jahresreihe 1976/2012
14 Tage Randeis

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 8389 km²
PNP : + 6.71 m
Lage: 234.8 km Lauflänge ab Quelle, rechts

# Q

m³/s

Pegel : Versen-Wehrdurchstich Nr. 3730010
Gewässer : Ems
Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 32.5 | 30.9 | 149 | 105 | 107 | 60.2 | 43.8 | 33.3 | 30.2 | 39.4 | 28.1 | 28.8 | 39.5 | 36.1 |
| 2. | 33.2 | 38.1 | 161 | T 94.8 | 107 | 55.8 | 43.0 | 40.6 | 31.0 | 35.9 | 28.0 | 30.9 | 39.5 | 34.9 |
| 3. | 34.5 | 39.6 | 186 | T 78.2 | 100 | 52.3 | 43.0 | 41.0 | 26.9 | 31.6 | 28.4 | 31.8 | 37.5 | 36.4 |
| 4. | 32.9 | 50.1 | 211 | T 85.2 | 95.7 | 51.5 | 48.5 | 39.9 | 27.6 | 31.0 | 27.7 | 38.4 | 37.1 | 41.0 |
| 5. | 32.0 | 50.2 | 235 | T 104 | 88.5 | 50.6 | 52.3 | 43.9 | 28.3 | 26.8 | 26.9 | 59.8 | 38.2 | 46.5 |
| 6. | 31.8 | 60.5 | 260 | T 127 | 94.2 | 51.1 | 43.1 | 51.5 | 29.8 | 29.8 | 27.2 | 86.9 | 46.9 | 52.4 |
| 7. | 29.7 | 72.0 | 266 | D 114 | 96.9 | 49.4 | 42.7 | 46.8 | 31.9 | 30.7 | 26.7 | 102 | 49.7 | 50.8 |
| 8. | 28.5 | 83.2 | 270 | D 107 | 93.1 | 43.7 | 44.0 | 46.0 | 32.0 | 30.2 | 27.3 | 86.5 | 51.3 | 41.6 |
| 9. | 32.9 | 100 | 276 | D 96.0 | 104 | 45.0 | 44.1 | 49.2 | 41.2 | 31.0 | 23.8 | 68.1 | 42.6 | 39.0 |
| 10. | 33.5 | 106 | 278 | D 85.7 | 105 | 53.1 | 48.3 | 44.2 | 44.1 | 30.5 | 23.6 | 53.1 | 41.7 | 59.9 |
| 11. | 33.4 | 97.0 | 272 | D 77.5 | 98.9 | 69.3 | 47.0 | 36.9 | 40.7 | 27.4 | 27.0 | 53.0 | 38.3 | 83.2 |
| 12. | 34.0 | 77.3 | 256 | D 71.9 | 89.7 | 64.4 | 58.4 | 31.0 | 33.4 | 25.1 | 26.9 | 45.2 | 35.3 | 86.1 |
| 13. | 32.5 | 71.7 | 223 | D 67.2 | 81.9 | 64.0 | 60.1 | 38.6 | 36.5 | 28.2 | 28.7 | 52.9 | 35.2 | 73.4 |
| 14. | 30.6 | 86.2 | 193 | T 61.3 | 77.3 | 64.5 | 48.3 | 42.4 | 47.0 | 25.6 | 30.1 | 54.2 | 32.5 | 65.8 |
| 15. | 29.3 | 109 | 174 | 66.4 | 72.6 | 58.8 | 42.9 | 37.8 | 50.3 | 25.9 | 29.7 | 50.2 | 33.6 | 70.4 |
| 16. | 28.6 | 119 | 148 | 67.8 | 72.6 | 61.0 | 46.7 | 34.3 | 55.0 | 29.6 | 28.1 | 45.7 | 35.0 | 95.8 |
| 17. | 29.3 | 151 | 132 | 71.3 | 75.1 | 56.6 | 42.9 | 38.9 | 56.9 | 27.7 | 27.2 | 42.3 | 34.7 | 109 |
| 18. | 29.3 | 175 | 118 | 72.5 | 80.0 | 50.5 | 40.4 | 45.1 | 67.8 | 26.7 | 28.3 | 43.4 | 32.7 | 107 |
| 19. | 29.4 | 176 | 116 | 77.9 | 70.1 | 54.2 | 37.2 | 46.6 | 79.0 | 28.4 | 26.9 | 42.8 | 34.6 | 108 |
| 20. | 30.7 | 150 | 159 | 96.4 | 64.6 | 51.7 | 36.2 | 40.9 | 73.4 | 27.5 | 31.1 | 37.7 | 37.1 | 102 |
| 21. | 30.7 | 142 | 199 | 94.4 | 60.5 | 48.9 | 31.9 | 32.5 | 65.9 | 27.3 | 27.9 | 36.8 | 36.8 | 98.3 |
| 22. | 30.4 | 150 | 227 | 86.3 | 60.7 | 49.2 | 33.3 | 32.9 | 56.8 | 26.8 | 27.4 | 33.3 | 35.7 | 91.6 |
| 23. | 29.9 | 153 | 248 | 86.4 | 58.3 | 52.9 | 32.5 | 31.6 | 44.9 | 26.4 | 26.4 | 33.3 | 34.4 | 126 |
| 24. | 30.2 | 151 | 261 | 96.8 | 57.1 | 60.1 | 32.0 | 32.0 | 41.4 | 28.5 | 33.6 | 31.5 | 34.8 | 181 |
| 25. | 29.4 | 162 | 263 | 111 | 56.5 | 57.3 | 31.8 | 33.8 | 37.6 | 28.2 | 43.7 | 31.8 | 34.3 | 200 |
| 26. | 29.4 | 156 | 255 | 128 | 50.6 | 56.5 | 29.7 | 43.1 | 31.8 | 27.2 | 50.1 | 31.5 | 36.5 | 218 |
| 27. | 29.4 | 142 | 235 | 127 | 53.3 | 51.2 | 27.4 | 48.2 | 30.7 | 32.7 | 32.6 | 33.1 | 41.7 | 230 |
| 28. | 30.1 | 122 | 194 | 112 | 55.8 | 49.8 | 26.6 | 38.2 | 37.0 | 35.8 | 31.7 | 30.3 | 40.6 | 230 |
| 29. | 29.8 | 114 | 158 | 107 | 53.6 | 47.5 | 26.3 | 36.5 | 43.7 | 34.3 | 30.6 | 30.3 | 39.4 | 215 |
| 30. | 30.1 | 116 | 135 | | 52.3 | 50.4 | 27.1 | 30.8 | 49.1 | 29.6 | 30.9 | 32.6 | 38.8 | 195 |
| 31. | | 135 | 120 | | 59.5 | | 27.2 | | 42.6 | 28.5 | | 35.3 | | 174 |

## Hauptwerte

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 8. | 1. | 19. | 14. | 26. | 8. | 29. | 30. | 3. | 12. | 10. | 1. | 14. | 2. |
| NQ | 28.5 | 30.9 | 116 | 61.3 | 50.6 | 43.7 | 26.3 | 30.8 | 26.9 | 25.1 | 23.6 | 28.8 | 32.5 | 34.9 |
| MQ | 30.9 | 109 | 206 | 92.3 | 77.2 | 54.4 | 40.0 | 39.6 | 43.4 | 29.5 | 29.6 | 45.6 | 38.2 | 106 |
| HQ | 54.0 | 179 | 277 | 134 | 109 | 72.5 | 67.8 | 56.1 | 83.2 | 44.3 | 65.9 | 106 | 53.0 | 231 |
| Tag | 3. | 18.+ | 10. | 26. | 1.+ | 11. | 13. | 6.+ | 19. | 1.+ | 26. | 7. | 8. | 28. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 10 | 35 | 66 | 28 | 25 | 17 | 13 | 12 | 14 | 9 | 9 | 15 | 12 | 34 |

| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1947 | 1959 | 1960 | 1947 | 1947 | 1960 | 1947 | 1960 | 1947 | 1947 | 1947 | 1947 | 1947 | 1959 |
| NQ | 9.00 | 9.52 | 16.4 | 21.4 | 20.2 | 17.4 | 8.70 | 8.50 | 6.50 | 5.20 | 5.20 | 7.50 | 9.00 | 9.52 |
| MNQ | 41.7 | 58.6 | 71.1 | 74.7 | 67.0 | 50.8 | 32.9 | 23.8 | 21.8 | 21.6 | 22.9 | 30.2 | 41.6 | 58.3 |
| MQ | 80.8 | 118 | 145 | 139 | 123 | 88.2 | 55.6 | 40.4 | 42.3 | 39.0 | 40.3 | 53.1 | 80.2 | 118 |
| MHQ | 155 | 215 | 259 | 251 | 227 | 156 | 107 | 84.9 | 88.0 | 79.7 | 83.3 | 105 | 154 | 216 |
| HQ | 643 | 614 | 642 | 1200 | 540 | 369 | 346 | 256 | 401 | 312 | 271 | 555 | 643 | 614 |
| Jahr | 1998 | 1960 | 1987 | 1946 | 1981 | 1994 | 1965 | 1984 | 1956 | 1954 | 1993 | 1998 | 1998 | 1960 |
| | 1940/2011 | | 1941/2012 – 72 Jahre | | | | | | | | | | | |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 25 | 38 | 46 | 41 | 39 | 27 | 18 | 12 | 14 | 12 | 12 | 17 | 25 | 38 |

| | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ m³/s | 23.6 | am 10.09.2012 | 28.5 | 23.6 | 23.6 | am 10.09.2012 |
| MQ m³/s | 66.6 | | 95.6 | 38.0 | 67.0 | |
| HQ m³/s | 277 | am 10.01.2012 bei W = 373 cm | 277 | 106 | 277 | am 10.01.2012 bei W = 373 cm |
| Nq l/(s km²) | 2.81 | | 3.40 | 2.81 | 2.81 | |
| Mq l/(s km²) | 7.94 | | 11.4 | 4.53 | 7.98 | |
| Hq l/(s km²) | 33.0 | | 33.0 | 12.6 | 33.0 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 250 | | 179 | 72 | 252 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| NQ m³/s | 5.20 | am 01.08.1947 | 9.00 | 5.20 | 5.20 | am 01.08.1947 |
| MNQ m³/s | 16.7 | | 33.9 | 17.2 | 16.9 | |
| MQ m³/s | 79.9 | | 115 | 45.2 | 78.6 | |
| MHQ m³/s | 365 | | 354 | 163 | 360 | |
| HQ m³/s | 1200 | am 12.02.1946 bei W = 546 cm | 1200 | 555 | 1200 | am 12.02.1946 bei W = 546 cm |
| $HQ_1$ m³/s | 295 | | 278 | 121 | 295 | |
| $HQ_5$ m³/s | 464 | | 461 | 221 | 464 | |
| MNq l/(s km²) | 1.99 | | 4.04 | 2.05 | 2.01 | |
| Mq l/(s km²) | 9.52 | | 13.7 | 5.39 | 9.37 | |
| MHq l/(s km²) | 43.5 | | 42.2 | 19.4 | 42.9 | |
| | 1941/2012 (*) 71 Jahre | | | | 1941/2012 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 300 | | 216 | 86 | 296 | |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1941/2012 72 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 278 | 278 | | | |
| 364 | 276 | 276 | 1200 | 438 | 122 |
| 363 | 272 | 272 | 960 | 385 | 121 |
| 362 | 270 | 270 | 760 | 360 | 119 |
| 361 | 266 | 266 | 740 | 339 | 113 |
| 360 | 263 | 263 | 640 | 321 | 113 |
| 359 | 261 | 261 | 590 | 305 | 111 |
| 358 | 260 | 260 | 564 | 296 | 110 |
| 357 | 256 | 256 | 526 | 287 | 109 |
| 356 | 255 | 255 | 507 | 278 | 105 |
| 350 | 211 | 227 | 403 | 244 | 99.7 |
| 340 | 159 | 186 | 348 | 203 | 92.7 |
| 330 | 148 | 132 | 325 | 176 | 83.2 |
| 320 | 119 | 111 | 283 | 156 | 73.0 |
| 300 | 100 | 96.0 | 236 | 126 | 57.0 |
| 270 | 75.1 | 72.5 | 173 | 98.5 | 45.2 |
| 240 | 59.5 | 57.3 | 132 | 80.1 | 24.7 |
| 210 | 51.1 | 50.8 | 114 | 65.9 | 18.0 |
| 183 | 45.7 | 45.7 | 104 | 55.8 | 16.4 |
| 150 | 39.9 | 41.0 | 88.2 | 46.2 | 14.5 |
| 130 | 35.3 | 37.7 | 81.4 | 41.3 | 14.0 |
| 120 | 33.4 | 36.8 | 76.2 | 39.0 | 13.6 |
| 110 | 32.7 | 35.3 | 73.3 | 36.9 | 13.2 |
| 100 | 32.0 | 34.3 | 67.8 | 34.6 | 12.6 |
| 90 | 31.6 | 32.9 | 64.4 | 32.5 | 11.8 |
| 80 | 30.8 | 32.0 | 59.6 | 30.6 | 11.4 |
| 70 | 30.3 | 31.6 | 55.6 | 28.8 | 10.8 |
| 60 | 29.8 | 30.8 | 53.4 | 26.7 | 10.5 |
| 50 | 29.4 | 29.8 | 49.7 | 24.6 | 9.40 |
| 40 | 28.4 | 28.4 | 47.5 | 22.5 | 9.40 |
| 30 | 27.7 | 27.7 | 45.3 | 20.1 | 8.30 |
| 25 | 27.4 | 27.4 | 44.2 | 18.7 | 7.50 |
| 20 | 27.3 | 27.3 | 43.5 | 17.5 | 6.80 |
| 15 | 27.0 | 27.0 | 42.9 | 15.9 | 6.50 |
| 10 | 26.8 | 26.8 | 42.1 | 14.0 | 6.00 |
| 9 | 26.7 | 26.7 | 42.1 | 13.9 | 5.95 |
| 8 | 26.6 | 26.6 | 41.8 | 13.3 | 5.70 |
| 7 | 26.6 | 26.6 | 41.7 | 13.0 | 5.70 |
| 6 | 26.4 | 26.4 | 41.6 | 12.5 | 5.70 |
| 5 | 26.3 | 26.3 | 41.3 | 12.1 | 5.40 |
| 4 | 25.9 | 25.9 | 40.8 | 11.5 | 5.40 |
| 3 | 25.6 | 25.6 | 39.6 | 10.6 | 5.40 |
| 2 | 25.1 | 25.1 | 38.8 | 9.96 | 5.40 |
| 1 | 23.8 | 23.8 | 38.4 | 9.00 | 5.40 |
| 0 | 23.6 | 23.6 | 37.1 | 5.20 | 5.20 |

## Extremwerte

| | Niedrigwasser m³/s | l/(s km²) | Datum | Hochwasser m³/s | l/(s km²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 5.20 | 0.620 | 01.08.1947 | 1200 | 143 | | 12.02.1946 |
| 2 | 6.70 | 0.799 | 10.07.1957 | 643 | 76.6 | | 02.11.1998 |
| 3 | 7.15 | 0.852 | 16.08.1949 | 642 | 76.5 | | 04.01.1987 |
| 4 | 7.50 | 0.894 | 10.05.1946 | 614 | 73.2 | | 08.12.1960 |
| 5 | 7.60 | 0.906 | 23.08.1959 | 563 | 67.1 | | 02.02.1995 |
| 6 | 7.80 | 0.930 | 08.08.1938 | 561 | 66.9 | | 05.12.1961 |
| 7 | 8.47 | 1.01 | 10.08.1964 | 560 | 66.8 | | 26.02.1970 |
| 8 | 8.50 | 1.01 | 28.06.1960 | 547 | 65.2 | | 18.01.1948 |
| 9 | 9.00 | 1.07 | 29.08.1950 | 540 | 64.4 | | 05.01.1994 |
| 10 | 9.00 | 1.07 | 29.06.1941 | 540 | 64.4 | | 14.03.1981 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10. Ausfalljahre: KJ 1940; AJ 1941;

HQ1 ,HQ5: Jahresreihe 1941-2012
Extremwerte ab 1936
6 Tage Treibeis
7 Tage Eisdecke

Bundesanstalt für Gewässerkunde Koblenz

$A_{Eo}$ : 204.87 km²
PNP : NHN+ 49.57 m
Lage : 4.30 km oberhalb der Mündung links

# Q
m³/s

Pegel : Milte Nr. 3169000000100
Gewässer : Hessel
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.548 | 0.355 | 2.75 | 2.22 | 3.59 | 1.69 | 1.54 | 0.996 | 0.459 | 0.625 | 1.34 | 0.501 | 0.734 | 0.618 |
| 2. | 0.546 | 0.532 | 5.47 | 2.04 | 3.32 | 1.93 | 1.46 | 0.639 | 0.568 | 0.615 | 1.31 | 0.483 | 0.747 | 0.909 |
| 3. | 0.559 | 0.505 | 4.90 | 1.91 | 2.85 | 1.73 | 1.84 | 0.627 | 0.453 | 0.609 | 1.24 | 0.549 | 0.663 | 0.857 |
| 4. | 0.550 | 0.743 | 5.35 | 1.61 | 2.92 | 2.02 | 1.55 | 1.16 | 0.453 | 0.604 | 1.55 | 2.35 | 1.07 | 0.951 |
| 5. | 0.502 | 1.03 | 10.8 | 1.70 | 3.47 | 1.87 | 1.47 | 1.27 | 0.429 | 0.604 | 1.68 | 1.84 | 1.04 | 1.14 |
| 6. | 0.495 | 1.07 | 8.85 | 1.85 | 3.00 | 1.75 | 1.74 | 0.963 | 0.414 | 0.763 | 1.68 | 2.47 | 0.898 | 1.00 |
| 7. | 0.599 | 1.83 | 6.96 | 1.46 | 2.78 | 1.46 | 1.81 | 0.992 | 0.414 | 0.643 | 1.65 | 2.25 | 1.01 | 0.757 |
| 8. | 0.530 | 2.48 | 7.57 | 1.52 | 3.93 | 1.58 | 1.55 | 0.783 | 0.495 | 0.633 | 1.48 | 1.31 | 1.07 | 0.766 |
| 9. | 0.503 | 2.04 | 6.11 | 1.47 | 3.18 | 1.90 | 1.49 | 0.543 | 0.821 | 0.489 | 1.45 | 1.07 | 0.788 | 1.07 |
| 10. | 0.530 | 1.37 | 5.20 | 1.44 | 2.67 | 1.98 | 1.53 | 0.496 | 0.470 | 0.344 | 1.44 | 0.947 | 1.00 | 2.23 |
| 11. | 0.410 | 1.23 | 4.33 | 1.35 | 2.82 | 1.89 | 3.93 | 0.657 | 0.710 | 0.339 | 0.854 | 0.871 | 0.977 | 1.87 |
| 12. | 0.344 | 1.46 | 4.21 | 1.32 | 2.89 | 1.91 | 1.63 | 0.569 | 0.940 | 0.336 | 0.627 | 0.731 | 0.714 | 1.52 |
| 13. | 0.344 | 1.75 | 5.11 | 1.32 | 2.57 | 1.81 | 1.32 | 0.698 | 1.10 | 0.334 | 0.506 | 0.877 | 0.733 | 1.36 |
| 14. | 0.417 | 2.17 | 3.87 | 1.49 | 2.50 | 1.44 | 1.37 | 0.504 | 1.31 | 0.333 | 0.485 | 1.05 | 0.705 | 1.32 |
| 15. | 0.360 | 1.87 | 3.39 | 1.83 | 2.43 | 1.59 | 1.17 | 0.496 | 1.20 | 0.333 | 0.469 | 0.895 | 0.742 | 3.41 |
| 16. | 0.360 | 3.90 | 3.25 | 1.56 | 2.40 | 1.80 | 1.15 | 0.595 | 1.08 | 0.332 | 0.456 | 0.790 | 0.601 | 2.95 |
| 17. | 0.358 | 5.45 | 2.79 | 2.03 | 2.05 | 1.57 | 1.03 | 0.788 | 3.11 | 0.331 | 0.503 | 0.858 | 0.765 | 4.15 |
| 18. | 0.347 | 3.54 | 2.57 | 1.99 | 2.24 | 1.59 | 0.922 | 0.693 | 2.31 | 0.328 | 0.478 | 0.807 | 0.609 | 3.48 |
| 19. | 0.363 | 3.17 | 6.51 | 2.46 | 2.43 | 1.64 | 0.669 | 0.496 | 1.99 | 0.325 | 0.461 | 0.686 | 0.800 | 3.13 |
| 20. | 0.352 | 3.11 | 8.50 | 2.35 | 2.12 | 1.59 | 0.764 | 0.496 | 3.04 | 0.360 | 0.450 | 0.560 | 0.668 | 2.55 |
| 21. | 0.406 | 4.90 | 7.98 | 1.92 | 2.01 | 1.54 | 0.998 | 0.496 | 1.56 | 0.336 | 0.437 | 0.731 | 0.679 | 2.55 |
| 22. | 0.360 | 3.79 | 9.42 | 2.00 | 1.88 | 2.01 | 0.729 | 0.466 | 1.42 | 0.331 | 0.425 | 0.659 | 0.705 | 2.98 |
| 23. | 0.363 | 4.12 | 9.02 | 2.62 | 1.87 | 2.32 | 0.651 | 0.427 | 1.45 | 0.328 | 0.420 | 0.599 | 0.630 | 7.58 |
| 24. | 0.365 | 4.16 | 6.11 | 3.25 | 1.55 | 1.92 | 0.597 | 0.414 | 1.13 | 0.328 | 0.799 | 0.621 | 0.821 | 8.11 |
| 25. | 0.360 | 4.00 | 4.89 | 4.85 | 1.67 | 2.11 | 0.594 | 0.821 | 1.03 | 0.609 | 0.887 | 0.640 | 0.911 | 5.51 |
| 26. | 0.360 | 3.37 | 4.19 | 4.10 | 1.91 | 1.97 | 0.594 | 0.608 | 0.952 | 0.807 | 0.517 | 0.596 | 0.804 | 5.00 |
| 27. | 0.347 | 2.93 | 3.97 | 3.90 | 1.65 | 1.79 | 0.544 | 0.477 | 0.783 | 0.925 | 0.669 | 0.539 | 0.851 | 6.16 |
| 28. | 0.426 | 2.61 | 3.23 | 3.57 | 1.69 | 1.61 | 0.695 | 0.496 | 0.703 | 0.901 | 0.709 | 0.688 | 0.781 | 5.55 |
| 29. | 0.360 | 2.38 | 3.14 | 3.80 | 1.66 | 1.73 | 0.576 | 0.734 | 0.673 | 0.927 | 0.498 | 0.593 | 0.764 | 4.26 |
| 30. | 0.360 | 2.69 | 3.06 | | 1.90 | 1.82 | 0.544 | 0.797 | 0.906 | 1.29 | 0.583 | 0.994 | 0.656 | 3.62 |
| 31. | | 2.29 | 2.60 | | 1.66 | | 0.633 | | 0.716 | 1.37 | | 0.889 | | 3.30 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 12.+ | 1. | 18. | 13.+ | 24. | 14. | 30.+ | 24. | 6.+ | 19. | 23. | 2. | 16. | 1. |
| NQ | 0.344 | 0.355 | 2.57 | 1.32 | 1.55 | 1.44 | 0.544 | 0.414 | 0.414 | 0.325 | 0.420 | 0.483 | 0.601 | 0.618 |
| MQ | 0.424 | 2.48 | 5.36 | 2.24 | 2.44 | 1.79 | 1.20 | 0.673 | 1.07 | 0.562 | 0.869 | 0.950 | 0.798 | 2.92 |
| HQ | 1.38 | 8.58 | 16.1 | 5.86 | 5.10 | 3.93 | 5.60 | 2.16 | 4.50 | 1.41 | 1.80 | 3.87 | 3.21 | 11.4 |
| Tag | 7. | 16. | 5. | 27. | 5. | 23. | 11. | 4. | 17. | 31. | 30. | 7. | 17. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 32 | 70 | 27 | 32 | 23 | 16 | 9 | 14 | 7 | 11 | 12 | 10 | 38 |

| | 1969/2011 | | 1970/2012 43 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1991 | 2011 | 1996 | 1996 | 1972 | 1996 | 1971 | 1999 | 1999 | 2003 | 1976 | 1997 | 1991 | 2011 |
| NQ | 0.332 | 0.355 | 0.513 | 0.706 | 0.610 | 0.403 | 0.249 | 0.108 | 0.163 | 0.063 | 0.138 | 0.308 | 0.332 | 0.355 |
| MNQ | 0.987 | 1.39 | 1.80 | 1.86 | 1.77 | 1.34 | 0.816 | 0.586 | 0.522 | 0.468 | 0.496 | 0.740 | 0.986 | 1.39 |
| MQ | 2.12 | 3.10 | 3.85 | 3.48 | 3.32 | 2.29 | 1.51 | 1.09 | 1.01 | 0.873 | 1.02 | 1.40 | 2.10 | 3.13 |
| MHQ | 7.09 | 10.8 | 12.5 | 10.1 | 10.2 | 6.15 | 4.54 | 4.25 | 3.81 | 3.07 | 3.42 | 5.09 | 7.08 | 10.9 |
| HQ | 23.9 | 33.6 | 30.8 | 28.3 | 25.2 | 15.4 | 18.8 | 22.7 | 20.0 | 14.9 | 10.0 | 26.2 | 23.9 | 33.6 |
| Jahr | 1998 | 1986 | 1987 | 1970 | 1981+ | 1994 | 1984 | 1981 | 1981 | 2010 | 2007 | 1993 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 27 | 40 | 50 | 41 | 43 | 29 | 20 | 14 | 13 | 11 | 13 | 18 | 27 | 41 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.325 | am 19.08.2012 | 0.344 | 0.325 | 0.325 | am 19.08.2012 |
| MQ | m³/s | 1.68 | | 2.47 | 0.888 | 1.74 | |
| HQ | m³/s | 16.1 | am 05.01.2012 bei W = 140 cm | 16.1 | 5.60 | 16.1 | am 05.01.2012 bei W = 140 cm |
| Nq | l/(skm²) | 1.59 | | 1.68 | 1.59 | 1.59 | |
| Mq | l/(skm²) | 8.18 | | 12.1 | 4.33 | 8.51 | |
| Hq | l/(skm²) | 78.7 | | 78.7 | 27.4 | 78.7 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 259 | | 190 | 69 | 269 | |

| | | 1970/2012 (*) 43 Jahre | | | | 1970/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.063 | am 10.08.2003 | 0.332 | 0.063 | 0.063 | am 10.08.2003 |
| MNQ | m³/s | 0.343 | | 0.800 | 0.354 | 0.354 | |
| MQ | m³/s | 2.08 | | 3.03 | 1.15 | 2.08 | |
| MHQ | m³/s | 18.0 | | 17.6 | 7.98 | 18.3 | |
| HQ | m³/s | 33.6 | am 30.12.1986 bei W = 209 cm | 33.6 | 26.2 | 33.6 | am 30.12.1986 bei W = 209 cm |
| $HQ_1$ | m³/s | 17.6 | | | | | |
| $HQ_5$ | m³/s | 25.5 | | | | | |
| MNq | l/(skm²) | 1.68 | | 3.91 | 1.73 | 1.73 | |
| Mq | l/(skm²) | 10.2 | | 14.8 | 5.63 | 10.2 | |
| MHq | l/(skm²) | 88.0 | | 86.0 | 39.0 | 89.2 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 321 | | 231 | 89 | 321 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.063 | 0.308 | 10.08.2003 | 33.6 | 164 | 209 | 30.12.1986 |
| 2 | 0.106 | 0.518 | 25.08.2001 | 30.8 | 150 | 198 | 06.01.1987 |
| 3 | 0.108 | 0.526 | 27.06.1999 | 30.0 | 147 | 195 | 02.01.1987 |
| 4 | 0.138 | 0.672 | 07.08.1975 | 29.5 | 144 | 193 | 27.01.1995 |
| 5 | 0.138 | 0.672 | 06.09.1976 | 28.6 | 139 | 189 | 29.01.1993 |
| 6 | 0.161 | 0.784 | 13.08.1997 | 28.3 | 138 | 176 | 23.02.1970 |
| 7 | 0.170 | 0.831 | 18.09.2004 | 26.9 | 131 | 182 | 28.01.1994 |
| 8 | 0.181 | 0.882 | 04.09.1983 | 26.4 | 129 | 180 | 19.12.1988 |
| 9 | 0.183 | 0.895 | 29.08.1973 | 26.2 | 128 | 179 | 04.10.1993 |
| 10 | 0.183 | 0.895 | 14.08.1990 | 25.2 | 123 | 183 | 12.03.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1970/2012 43 Kalenderjahre Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| | Unterschrittene Abflüsse m³/s | | | | |
| 364 | 10.8 | 10.8 | 31.4 | 14.6 | 5.57 |
| 363 | 9.42 | 9.42 | 27.1 | 11.9 | 5.49 |
| 362 | 9.02 | 9.02 | 23.6 | 10.5 | 4.98 |
| 361 | 8.85 | 8.85 | 18.4 | 9.68 | 4.80 |
| 360 | 8.50 | 8.50 | 16.0 | 8.99 | 4.60 |
| 359 | 7.98 | 8.11 | 15.3 | 8.54 | 4.53 |
| 358 | 7.57 | 7.98 | 14.3 | 8.13 | 4.28 |
| 357 | 6.96 | 7.58 | 13.4 | 7.79 | 4.01 |
| 356 | 6.51 | 7.57 | 12.3 | 7.45 | 3.87 |
| 350 | 5.20 | 5.55 | 9.93 | 6.17 | 3.05 |
| 340 | 4.12 | 4.33 | 8.53 | 5.05 | 2.74 |
| 330 | 3.79 | 3.87 | 7.34 | 4.40 | 2.26 |
| 320 | 3.23 | 3.30 | 6.33 | 3.93 | 2.02 |
| 300 | 2.61 | 2.67 | 5.10 | 3.24 | 1.71 |
| 270 | 2.00 | 1.99 | 4.20 | 2.54 | 1.31 |
| 240 | 1.74 | 1.70 | 3.57 | 2.05 | 1.07 |
| 210 | 1.53 | 1.49 | 2.89 | 1.69 | 0.846 |
| 183 | 1.31 | 1.27 | 2.45 | 1.44 | 0.641 |
| 150 | 0.887 | 0.922 | 1.98 | 1.18 | 0.522 |
| 130 | 0.731 | 0.804 | 1.85 | 1.04 | 0.481 |
| 120 | 0.686 | 0.766 | 1.80 | 0.980 | 0.458 |
| 110 | 0.633 | 0.733 | 1.76 | 0.917 | 0.441 |
| 100 | 0.604 | 0.703 | 1.70 | 0.862 | 0.417 |
| 90 | 0.583 | 0.668 | 1.65 | 0.803 | 0.402 |
| 80 | 0.544 | 0.633 | 1.58 | 0.749 | 0.374 |
| 70 | 0.504 | 0.609 | 1.53 | 0.699 | 0.356 |
| 60 | 0.496 | 0.594 | 1.48 | 0.646 | 0.331 |
| 50 | 0.469 | 0.543 | 1.42 | 0.593 | 0.312 |
| 40 | 0.427 | 0.496 | 1.36 | 0.543 | 0.295 |
| 30 | 0.365 | 0.470 | 1.30 | 0.494 | 0.274 |
| 25 | 0.360 | 0.456 | 1.27 | 0.466 | 0.261 |
| 20 | 0.360 | 0.429 | 1.20 | 0.432 | 0.237 |
| 15 | 0.347 | 0.414 | 1.10 | 0.400 | 0.195 |
| 10 | 0.336 | 0.336 | 1.00 | 0.357 | 0.183 |
| 9 | 0.336 | 0.336 | 0.998 | 0.349 | 0.172 |
| 8 | 0.334 | 0.334 | 0.953 | 0.342 | 0.165 |
| 7 | 0.333 | 0.333 | 0.943 | 0.334 | 0.160 |
| 6 | 0.333 | 0.333 | 0.902 | 0.326 | 0.147 |
| 5 | 0.332 | 0.332 | 0.884 | 0.313 | 0.131 |
| 4 | 0.331 | 0.331 | 0.855 | 0.292 | 0.125 |
| 3 | 0.331 | 0.331 | 0.851 | 0.266 | 0.110 |
| 2 | 0.328 | 0.328 | 0.822 | 0.249 | 0.097 |
| 1 | 0.328 | 0.328 | 0.795 | 0.207 | 0.090 |
| 0 | 0.325 | 0.325 | 0.756 | 0.063 | 0.063 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

$A_{Eo}$ : 46.62 km²
PNP : NHN+ 73.47 m
Lage : 52.23 km

# Q

m³/s

Pegel : Ahlen Nr. 3211000000300
Gewässer : Werse
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.206 | 0.157 | 2.15 | 0.679 | 0.612 | 0.260 | 0.237 | 0.763 | 0.185 | 0.206 | 0.106 | 0.101 | 0.174 | 0.169 |
| 2. | 0.234 | 0.365 | 3.28 | 0.684 | 0.599 | 0.243 | 0.243 | 0.302 | 0.170 | 0.213 | 0.106 | 0.095 | 0.271 | 0.454 |
| 3. | 0.267 | 0.337 | 2.36 | 0.565 | 0.554 | 0.255 | 0.581 | 0.632 | 0.161 | 0.222 | 0.106 | 0.124 | 0.335 | 0.334 |
| 4. | 0.275 | 0.197 | 2.62 | 0.499 | 0.538 | 0.309 | 0.257 | 0.693 | 0.150 | 0.340 | 0.105 | 1.95 | 0.254 | 0.452 |
| 5. | 0.276 | 0.433 | 4.52 | 0.459 | 0.939 | 0.238 | 0.423 | 0.991 | 0.140 | 0.223 | 0.104 | 1.01 | 0.467 | 0.795 |
| 6. | 0.262 | 0.281 | 3.46 | 0.440 | 0.749 | 0.240 | 0.271 | 0.716 | 0.141 | 0.514 | 0.090 | 0.789 | 0.305 | 0.508 |
| 7. | 0.255 | 0.814 | 2.54 | 0.398 | 0.674 | 0.266 | 0.264 | 0.544 | 0.305 | 0.235 | 0.086 | 0.586 | 0.406 | 0.417 |
| 8. | 0.254 | 0.594 | 2.83 | 0.394 | 0.828 | 0.233 | 0.251 | 0.466 | 0.757 | 0.146 | 0.088 | 0.396 | 0.299 | 0.355 |
| 9. | 0.252 | 0.667 | 2.57 | 0.365 | 0.630 | 0.304 | 0.228 | 0.506 | 0.532 | 0.134 | 0.084 | 0.324 | 0.238 | 0.534 |
| 10. | 0.270 | 0.463 | 1.89 | 0.340 | 0.565 | 0.297 | 0.254 | 0.475 | 0.275 | 0.127 | 0.083 | 0.235 | 0.230 | 0.886 |
| 11. | 0.266 | 0.336 | 1.47 | 0.336 | 0.497 | 0.294 | 1.23 | 0.453 | 0.870 | 0.123 | 0.144 | 0.196 | 0.281 | 0.704 |
| 12. | 0.247 | 0.435 | 1.34 | 0.285 | 0.459 | 0.315 | 0.410 | 0.916 | 0.745 | 0.131 | 0.206 | 0.289 | 0.177 | 0.560 |
| 13. | 0.228 | 0.811 | 1.21 | 0.291 | 0.439 | 0.328 | 0.337 | 0.558 | 0.916 | 0.139 | 0.102 | 0.216 | 0.169 | 0.499 |
| 14. | 0.224 | 1.29 | 1.08 | 0.334 | 0.412 | 0.281 | 0.316 | 0.428 | 0.976 | 0.120 | 0.081 | 0.318 | 0.163 | 0.574 |
| 15. | 0.222 | 1.33 | 0.932 | 0.457 | 0.393 | 0.247 | 0.424 | 0.456 | 1.09 | 0.118 | 0.122 | 0.212 | 0.173 | 2.05 |
| 16. | 0.208 | 3.39 | 0.841 | 0.290 | 0.387 | 0.228 | 0.559 | 0.692 | 1.27 | 0.293 | 0.077 | 0.193 | 0.188 | 1.39 |
| 17. | 0.187 | 3.07 | 0.768 | 0.455 | 0.374 | 0.194 | 0.327 | 0.417 | 1.78 | 0.127 | 0.078 | 0.215 | 0.185 | 1.25 |
| 18. | 0.197 | 1.59 | 0.700 | 0.408 | 0.366 | 0.196 | 0.317 | 0.391 | 1.08 | 0.113 | 0.080 | 0.176 | 0.224 | 1.50 |
| 19. | 0.219 | 1.16 | 2.80 | 0.670 | 0.337 | 0.225 | 0.290 | 0.383 | 0.795 | 0.110 | 0.132 | 0.167 | 0.200 | 1.57 |
| 20. | 0.168 | 1.26 | 3.19 | 0.465 | 0.316 | 0.183 | 0.294 | 0.403 | 0.629 | 0.108 | 0.168 | 0.162 | 0.164 | 1.14 |
| 21. | 0.165 | 1.99 | 2.53 | 0.415 | 0.298 | 0.270 | 0.276 | 0.354 | 0.542 | 0.112 | 0.078 | 0.182 | 0.159 | 1.20 |
| 22. | 0.155 | 1.56 | 2.72 | 0.411 | 0.302 | 0.364 | 0.249 | 0.334 | 0.500 | 0.112 | 0.078 | 0.196 | 0.153 | 1.44 |
| 23. | 0.135 | 1.70 | 2.59 | 0.496 | 0.292 | 0.385 | 0.254 | 0.261 | 0.474 | 0.106 | 0.076 | 0.194 | 0.187 | 5.14 |
| 24. | 0.105 | 1.85 | 2.26 | 0.726 | 0.284 | 0.307 | 0.280 | 0.385 | 0.413 | 0.125 | 0.499 | 0.197 | 0.379 | 5.89 |
| 25. | 0.125 | 1.50 | 1.62 | 1.02 | 0.266 | 0.268 | 0.309 | 0.589 | 0.359 | 0.195 | 0.285 | 0.207 | 0.205 | 2.94 |
| 26. | 0.137 | 1.19 | 1.32 | 0.784 | 0.266 | 0.317 | 0.272 | 0.274 | 0.312 | 0.187 | 0.451 | 0.219 | 0.350 | 2.80 |
| 27. | 0.160 | 1.05 | 1.26 | 0.691 | 0.261 | 0.237 | 0.244 | 0.268 | 0.266 | 0.234 | 0.309 | 0.216 | 0.248 | 2.99 |
| 28. | 0.128 | 0.911 | 1.07 | 0.647 | 0.257 | 0.507 | 0.236 | 0.242 | 0.476 | 0.118 | 0.372 | 0.202 | 0.205 | 3.20 |
| 29. | 0.111 | 0.868 | 0.955 | 0.654 | 0.264 | 0.283 | 0.232 | 0.467 | 0.247 | 0.111 | 0.187 | 0.203 | 0.198 | 2.04 |
| 30. | 0.124 | 3.08 | 0.866 | | 0.373 | 0.248 | 0.224 | 0.330 | 0.308 | 0.109 | 0.124 | 0.424 | 0.180 | 1.70 |
| 31. | | 2.10 | 0.757 | | 0.296 | | 0.580 | | 0.215 | 0.110 | | 0.169 | | 1.43 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 18. | 12. | 28. | 20. | 30. | 28. | 5. | 23. | 23. | 2. | 22. | 1. |
| NQ | 0.105 | 0.157 | 0.700 | 0.285 | 0.257 | 0.183 | 0.224 | 0.242 | 0.140 | 0.106 | 0.076 | 0.095 | 0.153 | 0.169 |
| MQ | 0.202 | 1.19 | 1.95 | 0.505 | 0.446 | 0.277 | 0.344 | 0.490 | 0.551 | 0.170 | 0.154 | 0.328 | 0.239 | 1.51 |
| HQ | 0.330 | 6.32 | 6.71 | 1.18 | 1.22 | 0.797 | 2.68 | 1.57 | 2.10 | 0.871 | 0.909 | 3.31 | 0.761 | 7.22 |
| Tag | 3.+ | 16. | 5. | 24.+ | 5. | 28. | 11. | 1.+ | 17. | 6. | 26. | 4. | 26. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 11 | 68 | 112 | 27 | 26 | 15 | 20 | 27 | 32 | 10 | 9 | 19 | 13 | 87 |

| | 1975/2011 | | 1976/2012 37 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1995 | 1975 | 1996 | 1998 | 2011 | 1976 | 1996 | 1996 | 1996 | 1997 | 1997 | 1997 | 1995 | 1995 |
| NQ | 0.047 | 0.043 | 0.040 | 0.126 | 0.038 | 0.053 | 0.024 | 0.012 | 0.013 | 0.021 | 0.004 | 0.025 | 0.047 | 0.047 |
| MNQ | 0.199 | 0.276 | 0.371 | 0.349 | 0.339 | 0.242 | 0.164 | 0.139 | 0.114 | 0.115 | 0.111 | 0.161 | 0.201 | 0.279 |
| MQ | 0.689 | 0.959 | 1.17 | 0.925 | 0.914 | 0.501 | 0.421 | 0.305 | 0.317 | 0.315 | 0.327 | 0.419 | 0.693 | 0.997 |
| MHQ | 5.19 | 6.05 | 6.04 | 4.19 | 5.21 | 2.29 | 5.70 | 2.71 | 3.22 | 3.54 | 3.06 | 3.59 | 5.20 | 6.24 |
| HQ | 25.6 | 17.3 | 16.9 | 13.0 | 18.0 | 8.82 | 87.2 | 19.6 | 15.6 | 19.8 | 10.5 | 28.8 | 25.6 | 17.3 |
| Jahr | 1998 | 2002 | 1995 | 1984 | 1994 | 1986 | 2001 | 1981 | 1980 | 2007 | 1998 | 1998 | 1998 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 38 | 55 | 67 | 48 | 52 | 28 | 24 | 17 | 18 | 18 | 18 | 24 | 39 | 57 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.076 | am 23.09.2012 | 0.105 | 0.076 | 0.076 | am 23.09.2012 |
| MQ | m³/s | 0.554 | | 0.770 | 0.340 | 0.584 | |
| HQ | m³/s | 6.71 | am 05.01.2012 bei W = 140 cm | 6.71 | 3.31 | 7.22 | am 23.12.2012 bei W = 145 cm |
| Nq | l/(skm²) | 1.64 | | 2.25 | 1.64 | 1.64 | |
| Mq | l/(skm²) | 11.9 | | 16.5 | 7.28 | 12.5 | |
| Hq | l/(skm²) | 144 | | 144 | 71.0 | 155 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 376 | | 260 | 116 | 396 | |

| | | 1976/2012 (*) 37 Jahre | | | | 1976/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.004 | am 17.09.1997 | 0.038 | 0.004 | 0.004 | am 17.09.1997 |
| MNQ | m³/s | 0.076 | | 0.154 | 0.078 | 0.077 | |
| MQ | m³/s | 0.604 | | 0.862 | 0.351 | 0.608 | |
| MHQ | m³/s | 14.0 | | 9.81 | 10.1 | 14.0 | |
| HQ | m³/s | 87.1 | am 03.05.2001 bei W = 364 cm | 25.6 | 87.1 | 87.1 | am 03.05.2001 bei W = 364 cm |
| $HQ_1$ | m³/s | 9.76 | | | | | |
| $HQ_5$ | m³/s | 18.0 | | | | | |
| MNq | l/(skm²) | 1.64 | | 3.30 | 1.66 | 1.66 | |
| Mq | l/(skm²) | 13.0 | | 18.5 | 7.53 | 13.0 | |
| MHq | l/(skm²) | 300 | | 210 | 216 | 300 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 409 | | 289 | 120 | 412 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.004 | 0.085 | 17.09.1997 | 87.1 | 1869 | 364 | 03.05.2001 |
| 2 | 0.012 | 0.260 | 26.06.1996 | 28.8 | 619 | 264 | 28.10.1998 |
| 3 | 0.025 | 0.526 | 20.07.2010 | 27.8 | 596 | 266 | 29.05.1984 |
| 4 | 0.028 | 0.609 | 23.08.1995 | 25.6 | 550 | 254 | 01.11.1998 |
| 5 | 0.033 | 0.697 | 28.09.2009 | 22.7 | 486 | 243 | 13.11.2010 |
| 6 | 0.038 | 0.813 | 01.08.1999 | 19.8 | 425 | 231 | 22.08.2007 |
| 7 | 0.039 | 0.837 | 10.05.1976 | 19.6 | 421 | 238 | 29.06.1981 |
| 8 | 0.040 | 0.858 | 20.09.1978 | 19.0 | 407 | 227 | 10.08.2007 |
| 9 | 0.043 | 0.921 | 31.12.1975 | 18.0 | 386 | 221 | 15.03.1994 |
| 10 | 0.044 | 0.954 | 13.06.2011 | 17.2 | 370 | 218 | 30.12.2002 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1976/2012 37 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 4.52 | 5.89 | 13.9 | 6.30 | 2.82 |
| 363 | 3.46 | 5.14 | 12.0 | 5.14 | 2.13 |
| 362 | 3.39 | 4.52 | 8.17 | 4.35 | 2.06 |
| 361 | 3.28 | 3.46 | 6.80 | 3.79 | 2.02 |
| 360 | 3.19 | 3.28 | 6.08 | 3.48 | 1.90 |
| 359 | 3.08 | 3.20 | 5.57 | 3.27 | 1.81 |
| 358 | 3.07 | 3.19 | 5.43 | 3.09 | 1.75 |
| 357 | 2.83 | 2.99 | 5.25 | 2.96 | 1.67 |
| 356 | 2.80 | 2.94 | 4.77 | 2.84 | 1.62 |
| 350 | 2.53 | 2.59 | 3.59 | 2.30 | 1.13 |
| 340 | 1.70 | 1.89 | 2.85 | 1.74 | 0.898 |
| 330 | 1.27 | 1.34 | 2.26 | 1.38 | 0.736 |
| 320 | 1.08 | 1.08 | 1.84 | 1.17 | 0.592 |
| 300 | 0.789 | 0.784 | 1.50 | 0.898 | 0.383 |
| 270 | 0.580 | 0.565 | 1.14 | 0.655 | 0.255 |
| 240 | 0.453 | 0.457 | 0.952 | 0.506 | 0.183 |
| 210 | 0.366 | 0.385 | 0.815 | 0.402 | 0.139 |
| 183 | 0.309 | 0.317 | 0.713 | 0.334 | 0.124 |
| 150 | 0.270 | 0.281 | 0.627 | 0.271 | 0.108 |
| 130 | 0.254 | 0.257 | 0.558 | 0.238 | 0.102 |
| 120 | 0.244 | 0.247 | 0.537 | 0.222 | 0.096 |
| 110 | 0.235 | 0.237 | 0.509 | 0.207 | 0.095 |
| 100 | 0.224 | 0.225 | 0.488 | 0.190 | 0.091 |
| 90 | 0.213 | 0.213 | 0.462 | 0.176 | 0.086 |
| 80 | 0.197 | 0.198 | 0.425 | 0.164 | 0.080 |
| 70 | 0.187 | 0.187 | 0.408 | 0.151 | 0.071 |
| 60 | 0.167 | 0.174 | 0.379 | 0.138 | 0.065 |
| 50 | 0.141 | 0.162 | 0.330 | 0.126 | 0.060 |
| 40 | 0.127 | 0.134 | 0.294 | 0.113 | 0.050 |
| 30 | 0.118 | 0.120 | 0.226 | 0.100 | 0.044 |
| 25 | 0.111 | 0.112 | 0.218 | 0.094 | 0.037 |
| 20 | 0.106 | 0.108 | 0.209 | 0.087 | 0.031 |
| 15 | 0.105 | 0.105 | 0.202 | 0.079 | 0.025 |
| 10 | 0.090 | 0.090 | 0.189 | 0.069 | 0.015 |
| 9 | 0.088 | 0.088 | 0.186 | 0.066 | 0.015 |
| 8 | 0.086 | 0.086 | 0.185 | 0.064 | 0.015 |
| 7 | 0.084 | 0.084 | 0.184 | 0.060 | 0.015 |
| 6 | 0.083 | 0.083 | 0.182 | 0.057 | 0.014 |
| 5 | 0.081 | 0.081 | 0.181 | 0.053 | 0.013 |
| 4 | 0.080 | 0.080 | 0.180 | 0.049 | 0.012 |
| 3 | 0.078 | 0.078 | 0.179 | 0.044 | 0.012 |
| 2 | 0.078 | 0.078 | 0.172 | 0.038 | 0.008 |
| 1 | 0.078 | 0.078 | 0.160 | 0.029 | 0.008 |
| 0 | 0.076 | 0.076 | 0.148 | 0.004 | 0.004 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung, ohne Extrem-HW vom 03.05.2001

LANUV NRW

$A_{Eo}$ : 321.58 km²
PNP : NHN+ 48.69 m
Lage : 27.47 km

# Q

m³/s

Pegel : Albersloh Nr. 3259000000100
Gewässer : Werse
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.348 | 0.363 | 8.57 | 2.13 | 2.88 | 0.852 | 0.749 | 1.42 | 0.382 | 0.363 | 0.275 | 0.291 | 0.346 | 0.499 |
| 2. | 0.345 | 0.678 | 17.8 | 1.84 | 2.61 | 0.815 | 0.707 | 0.573 | 0.346 | 0.351 | 0.272 | 0.285 | 0.418 | 0.708 |
| 3. | 0.343 | 0.725 | 14.6 | 1.61 | 2.39 | 0.777 | 1.35 | 0.661 | 0.341 | 0.334 | 0.275 | 0.298 | 0.392 | 0.796 |
| 4. | 0.352 | 0.860 | 14.9 | 1.50 | 2.23 | 0.955 | 0.904 | 1.32 | 0.332 | 0.318 | 0.270 | 2.29 | 0.549 | 0.800 |
| 5. | 0.356 | 0.892 | 21.8 | 1.42 | 4.42 | 0.750 | 1.12 | 2.24 | 0.328 | 0.328 | 0.273 | 2.40 | 0.710 | 1.32 |
| 6. | 0.344 | 0.711 | 20.6 | 1.27 | 4.64 | 0.676 | 1.19 | 1.67 | 0.329 | 0.331 | 0.269 | 1.41 | 0.632 | 1.09 |
| 7. | 0.332 | 1.14 | 14.5 | 1.13 | 3.32 | 0.702 | 0.983 | 1.49 | 0.342 | 0.429 | 0.263 | 1.29 | 0.535 | 0.885 |
| 8. | 0.340 | 1.43 | 16.6 | 1.12 | 4.23 | 0.665 | 0.877 | 1.09 | 0.559 | 0.327 | 0.272 | 0.714 | 0.509 | 0.800 |
| 9. | 0.341 | 1.27 | 16.5 | 1.10 | 3.22 | 0.693 | 0.827 | 0.973 | 1.02 | 0.308 | 0.275 | 0.511 | 0.430 | 0.881 |
| 10. | 0.338 | 1.11 | 11.3 | 1.05 | 2.71 | 0.939 | 0.790 | 0.736 | 0.514 | 0.305 | 0.262 | 0.413 | 0.426 | 1.87 |
| 11. | 0.336 | 0.856 | 8.05 | 0.947 | 2.38 | 0.885 | 4.70 | 0.652 | 1.30 | 0.301 | 0.271 | 0.374 | 0.505 | 1.81 |
| 12. | 0.337 | 0.830 | 6.60 | 0.914 | 2.15 | 1.01 | 2.54 | 0.976 | 1.48 | 0.293 | 0.330 | 0.363 | 0.394 | 1.42 |
| 13. | 0.337 | 1.34 | 5.87 | 0.904 | 1.92 | 1.00 | 1.59 | 1.20 | 2.22 | 0.288 | 0.313 | 0.467 | 0.374 | 1.26 |
| 14. | 0.340 | 2.69 | 4.90 | 1.07 | 1.77 | 0.883 | 1.24 | 0.862 | 2.89 | 0.291 | 0.291 | 0.478 | 0.362 | 1.23 |
| 15. | 0.344 | 3.32 | 4.11 | 1.41 | 1.68 | 0.857 | 1.15 | 0.669 | 3.42 | 0.290 | 0.291 | 0.371 | 0.362 | 5.33 |
| 16. | 0.348 | 8.45 | 3.52 | 1.16 | 1.60 | 0.733 | 1.27 | 1.06 | 2.95 | 0.303 | 0.279 | 0.363 | 0.362 | 3.95 |
| 17. | 0.342 | 14.7 | 3.04 | 1.26 | 1.50 | 0.695 | 0.973 | 0.875 | 4.49 | 0.339 | 0.271 | 0.363 | 0.362 | 5.01 |
| 18. | 0.347 | 7.09 | 2.61 | 1.42 | 1.39 | 0.740 | 0.812 | 0.686 | 3.74 | 0.298 | 0.276 | 0.372 | 0.372 | 5.13 |
| 19. | 0.355 | 4.78 | 10.6 | 2.50 | 1.25 | 0.831 | 0.758 | 0.584 | 2.33 | 0.280 | 0.266 | 0.356 | 0.448 | 4.88 |
| 20. | 0.355 | 4.37 | 20.4 | 2.03 | 1.17 | 0.723 | 0.668 | 0.485 | 1.77 | 0.281 | 0.284 | 0.362 | 0.404 | 3.33 |
| 21. | 0.347 | 7.47 | 14.7 | 1.76 | 1.09 | 0.900 | 0.624 | 0.534 | 1.23 | 0.284 | 0.290 | 0.352 | 0.385 | 2.98 |
| 22. | 0.352 | 5.78 | 16.7 | 1.74 | 1.06 | 1.14 | 0.577 | 0.453 | 0.955 | 0.278 | 0.278 | 0.329 | 0.382 | 4.30 |
| 23. | 0.351 | 6.51 | 15.2 | 2.36 | 1.06 | 1.15 | 0.493 | 0.410 | 0.756 | 0.274 | 0.268 | 0.355 | 0.385 | 17.7 |
| 24. | 0.350 | 6.65 | 14.1 | 3.93 | 1.02 | 0.897 | 0.432 | 0.385 | 0.648 | 0.275 | 0.846 | 0.357 | 0.649 | 25.1 |
| 25. | 0.341 | 6.13 | 9.10 | 5.99 | 0.924 | 1.18 | 0.366 | 1.18 | 0.527 | 0.294 | 0.621 | 0.362 | 0.479 | 15.8 |
| 26. | 0.340 | 4.26 | 6.64 | 4.62 | 0.884 | 1.11 | 0.363 | 0.572 | 0.452 | 0.317 | 0.533 | 0.362 | 0.425 | 12.2 |
| 27. | 0.344 | 3.70 | 5.42 | 3.73 | 0.885 | 0.896 | 0.356 | 0.407 | 0.403 | 0.350 | 0.602 | 0.360 | 0.724 | 12.5 |
| 28. | 0.381 | 3.29 | 4.35 | 3.25 | 0.885 | 1.21 | 0.348 | 0.419 | 0.580 | 0.307 | 0.589 | 0.343 | 0.577 | 13.6 |
| 29. | 0.354 | 2.90 | 3.80 | 2.97 | 0.885 | 0.981 | 0.339 | 0.477 | 0.476 | 0.289 | 0.335 | 0.323 | 0.531 | 8.80 |
| 30. | 0.356 | 12.8 | 3.32 | | 1.09 | 0.834 | 0.348 | 0.640 | 0.390 | 0.281 | 0.309 | 0.464 | 0.522 | 6.43 |
| 31. | | 9.36 | 2.76 | | 0.930 | | 0.560 | | 0.414 | 0.274 | | 0.417 | | 4.89 |
| Tag | 7. | 1. | 18. | 13. | 26. | 8. | 29. | 24. | 5. | 23.+ | 10. | 2. | 1. | 1. |
| NQ | 0.332 | 0.363 | 2.61 | 0.904 | 0.884 | 0.665 | 0.339 | 0.385 | 0.328 | 0.274 | 0.262 | 0.285 | 0.346 | 0.499 |
| MQ | 0.347 | 4.08 | 10.4 | 2.00 | 1.94 | 0.883 | 0.968 | 0.857 | 1.22 | 0.309 | 0.342 | 0.574 | 0.465 | 5.40 |
| HQ | 0.415 | 21.5 | 30.4 | 6.73 | 6.23 | 1.65 | 6.98 | 2.62 | 5.31 | 0.471 | 1.54 | 5.09 | 0.885 | 26.3 |
| Tag | 28. | 16.+ | 5. | 25. | 5. | 28. | 11. | 5. | 17. | 7. | 24. | 4. | 5.+ | 23.+ |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 3 | 34 | 87 | 16 | 16 | 7 | 8 | 7 | 10 | 3 | 3 | 5 | 4 | 45 |

## Hauptwerte

| | 1959/2011 | | 1960/2012 53 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1964 | 1959 | 1960 | 1996 | 1960 | 1960 | 1973 | 1960 | 1973 | 1973 | 1973 | 1964 | 1964 | 1995 |
| NQ | 0.074 | 0.121 | 0.154 | 0.213 | 0.300 | 0.250 | 0.173 | 0.114 | 0.123 | 0.073 | 0.068 | 0.074 | 0.074 | 0.173 |
| MNQ | 0.737 | 1.22 | 1.56 | 1.61 | 1.47 | 1.05 | 0.530 | 0.409 | 0.372 | 0.341 | 0.367 | 0.468 | 0.741 | 1.22 |
| MQ | 3.23 | 5.45 | 6.02 | 5.21 | 4.68 | 2.91 | 1.73 | 1.07 | 1.28 | 1.04 | 1.28 | 1.69 | 3.24 | 5.54 |
| MHQ | 18.3 | 28.4 | 27.9 | 21.7 | 22.7 | 11.9 | 10.6 | 6.50 | 8.02 | 6.42 | 7.63 | 9.33 | 18.3 | 28.9 |
| HQ | 87.5 | 109 | 86.6 | 64.0 | 76.6 | 36.3 | 75.5 | 85.1 | 72.9 | 53.6 | 49.0 | 82.0 | 87.5 | 109 |
| Jahr | 1998 | 1960 | 2003 | 1970 | 1994 | 1962 | 1984 | 1981 | 1980 | 2007 | 1968 | 1998 | 1998 | 1960 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 26 | 45 | 50 | 40 | 39 | 23 | 14 | 9 | 11 | 9 | 10 | 14 | 26 | 46 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.262 | am 10.09.2012 | 0.332 | 0.262 | 0.262 | am 10.09.2012 |
| MQ | m³/s | 2.01 | | 3.32 | 0.713 | 2.13 | |
| HQ | m³/s | 30.4 | am 05.01.2012 bei W = 181 cm | 30.4 | 6.98 | 30.4 | am 05.01.2012 bei W = 181 cm |
| Nq | l/(skm²) | 0.813 | | 1.03 | 0.813 | 0.813 | |
| Mq | l/(skm²) | 6.25 | | 10.3 | 2.22 | 6.63 | |
| Hq | l/(skm²) | 94.6 | | 94.6 | 21.7 | 94.6 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 198 | | 162 | 35 | 210 | |

| | | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.068 | am 13.09.1973 | 0.074 | 0.068 | 0.068 | am 13.09.1973 |
| MNQ | m³/s | 0.228 | | 0.516 | 0.243 | 0.241 | |
| MQ | m³/s | 2.96 | | 4.59 | 1.35 | 2.97 | |
| MHQ | m³/s | 48.9 | | 45.1 | 22.8 | 49.0 | |
| HQ | m³/s | 109 | am 05.12.1960 bei W = 399 cm | 109 | 85.1 | 109 | am 05.12.1960 bei W = 399 cm |
| $HQ_1$ | m³/s | 38.1 | | | | | |
| $HQ_5$ | m³/s | 67.0 | | | | | |
| MNq | l/(skm²) | 0.709 | | 1.60 | 0.756 | 0.749 | |
| Mq | l/(skm²) | 9.20 | | 14.3 | 4.20 | 9.22 | |
| MHq | l/(skm²) | 152 | | 140 | 70.8 | 152 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 290 | | 223 | 67 | 291 | |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1960/2012 53 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 21.8 | 25.1 | 96.6 | 36.1 | 9.59 |
| 363 | 20.6 | 21.8 | 58.4 | 29.9 | 6.24 |
| 362 | 20.4 | 20.6 | 57.9 | 25.3 | 5.86 |
| 361 | 17.8 | 20.4 | 46.5 | 23.0 | 5.63 |
| 360 | 16.7 | 17.8 | 41.5 | 21.4 | 4.71 |
| 359 | 16.6 | 17.7 | 38.0 | 19.8 | 4.54 |
| 358 | 16.5 | 16.7 | 31.2 | 18.5 | 4.49 |
| 357 | 15.2 | 16.6 | 30.2 | 17.5 | 4.48 |
| 356 | 14.9 | 16.5 | 26.9 | 16.5 | 4.33 |
| 350 | 12.8 | 14.5 | 22.6 | 13.1 | 4.07 |
| 340 | 6.65 | 8.05 | 16.2 | 9.80 | 3.06 |
| 330 | 4.78 | 4.90 | 12.9 | 7.54 | 2.64 |
| 320 | 4.11 | 4.23 | 11.7 | 6.16 | 2.19 |
| 300 | 2.76 | 2.76 | 9.03 | 4.49 | 1.75 |
| 270 | 1.50 | 1.59 | 6.13 | 2.99 | 1.24 |
| 240 | 1.15 | 1.17 | 4.56 | 2.13 | 0.844 |
| 210 | 0.939 | 0.947 | 3.16 | 1.55 | 0.596 |
| 183 | 0.827 | 0.815 | 2.52 | 1.19 | 0.460 |
| 150 | 0.589 | 0.632 | 2.06 | 0.869 | 0.250 |
| 130 | 0.453 | 0.514 | 1.87 | 0.726 | 0.216 |
| 120 | 0.403 | 0.476 | 1.71 | 0.666 | 0.196 |
| 110 | 0.363 | 0.425 | 1.66 | 0.610 | 0.185 |
| 100 | 0.356 | 0.394 | 1.53 | 0.558 | 0.177 |
| 90 | 0.352 | 0.372 | 1.44 | 0.510 | 0.165 |
| 80 | 0.347 | 0.362 | 1.31 | 0.465 | 0.156 |
| 70 | 0.341 | 0.355 | 1.21 | 0.422 | 0.147 |
| 60 | 0.337 | 0.341 | 1.13 | 0.382 | 0.117 |
| 50 | 0.328 | 0.328 | 1.07 | 0.344 | 0.095 |
| 40 | 0.305 | 0.305 | 1.00 | 0.316 | 0.086 |
| 30 | 0.291 | 0.291 | 0.868 | 0.288 | 0.086 |
| 25 | 0.285 | 0.285 | 0.832 | 0.273 | 0.086 |
| 20 | 0.280 | 0.280 | 0.789 | 0.255 | 0.081 |
| 15 | 0.275 | 0.275 | 0.755 | 0.242 | 0.080 |
| 10 | 0.274 | 0.274 | 0.733 | 0.215 | 0.074 |
| 9 | 0.273 | 0.273 | 0.724 | 0.207 | 0.074 |
| 8 | 0.272 | 0.272 | 0.710 | 0.200 | 0.074 |
| 7 | 0.272 | 0.272 | 0.709 | 0.194 | 0.074 |
| 6 | 0.271 | 0.271 | 0.699 | 0.185 | 0.074 |
| 5 | 0.271 | 0.271 | 0.675 | 0.176 | 0.074 |
| 4 | 0.270 | 0.270 | 0.657 | 0.165 | 0.074 |
| 3 | 0.269 | 0.269 | 0.646 | 0.153 | 0.074 |
| 2 | 0.268 | 0.268 | 0.645 | 0.139 | 0.074 |
| 1 | 0.266 | 0.266 | 0.633 | 0.086 | 0.073 |
| 0 | 0.262 | 0.262 | 0.558 | 0.068 | 0.068 |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.068 | 0.212 | 13.09.1973 | 109 | 338 | 399 | 05.12.1960 |
| 2 | 0.074 | 0.230 | 14.10.1964 | 87.5 | 272 | 309 | 01.11.1998 |
| 3 | 0.114 | 0.354 | 19.06.1960 | 86.6 | 269 | 307 | 03.01.2003 |
| 4 | 0.122 | 0.379 | 06.08.1976 | 85.1 | 265 | 293 | 30.06.1981 |
| 5 | 0.122 | 0.379 | 19.10.1975 | 82.0 | 255 | 297 | 29.10.1998 |
| 6 | 0.136 | 0.422 | 14.09.1991 | 80.2 | 249 | 293 | 30.12.2002 |
| 7 | 0.136 | 0.424 | 20.07.1990 | 76.6 | 238 | 285 | 16.03.1994 |
| 8 | 0.140 | 0.437 | 25.08.1986 | 75.5 | 235 | 280 | 29.05.1984 |
| 9 | 0.141 | 0.438 | 22.07.1996 | 72.9 | 227 | 275 | 21.07.1980 |
| 10 | 0.142 | 0.442 | 18.08.1988 | 69.0 | 214 | 366 | 02.12.1961 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

$A_{Eo}$ : 77.72 km²
PNP : NHN+ 54.99 m
Lage : 11.11 km oberhalb der Mündung rechts

# Q
m³/s

Pegel : Amelsbüren Nr. 3267000000100
Gewässer : Emmerbach
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.040 | 0.059 | 4.59 | 0.537 | 0.725 | 0.172 | 0.125 | 0.052 | 0.023 | 0.020 | 0.022 | 0.056 | 0.098 | 0.101 |
| 2. | 0.047 | 0.080 | 5.90 | 0.468 | 0.688 | 0.156 | 0.120 | 0.248 | 0.023 | 0.020 | 0.022 | 0.056 | 0.099 | 0.095 |
| 3. | 0.054 | 0.137 | 8.38 | 0.419 | 0.631 | 0.155 | 0.269 | 0.070 | 0.020 | 0.020 | 0.023 | 0.047 | 0.099 | 0.133 |
| 4. | 0.055 | 0.193 | 5.94 | 0.371 | 0.567 | 0.188 | 0.215 | 0.169 | 0.018 | 0.016 | 0.024 | 0.106 | 0.099 | 0.134 |
| 5. | 0.055 | 0.173 | 5.30 | 0.324 | 0.946 | 0.181 | 0.160 | 1.34 | 0.015 | 0.015 | 0.024 | 0.341 | 0.125 | 0.155 |
| 6. | 0.055 | 0.166 | 8.43 | 0.284 | 1.15 | 0.151 | 0.233 | 1.77 | 0.014 | 0.015 | 0.025 | 0.370 | 0.157 | 0.165 |
| 7. | 0.055 | 0.169 | 5.36 | 0.233 | 0.869 | 0.149 | 0.187 | 1.54 | 0.014 | 0.015 | 0.025 | 0.325 | 0.157 | 0.152 |
| 8. | 0.055 | 0.279 | 4.56 | 0.217 | 1.00 | 0.148 | 0.161 | 1.14 | 0.016 | 0.015 | 0.026 | 0.256 | 0.158 | 0.134 |
| 9. | 0.055 | 0.256 | 4.53 | 0.217 | 0.917 | 0.147 | 0.148 | 0.609 | 0.018 | 0.015 | 0.027 | 0.187 | 0.159 | 0.134 |
| 10. | 0.055 | 0.289 | 3.66 | 0.212 | 0.781 | 0.207 | 0.129 | 0.201 | 0.065 | 0.015 | 0.026 | 0.148 | 0.129 | 0.345 |
| 11. | 0.056 | 0.247 | 2.34 | 0.181 | 0.675 | 0.214 | 1.59 | 0.067 | 0.164 | 0.015 | 0.025 | 0.123 | 0.129 | 0.447 |
| 12. | 0.056 | 0.189 | 1.58 | 0.177 | 0.589 | 0.199 | 1.50 | 0.036 | 1.25 | 0.013 | 0.029 | 0.108 | 0.120 | 0.379 |
| 13. | 0.056 | 0.157 | 1.31 | 0.177 | 0.523 | 0.259 | 0.648 | 0.382 | 2.49 | 0.012 | 0.036 | 0.110 | 0.103 | 0.321 |
| 14. | 0.056 | 0.306 | 1.38 | 0.187 | 0.484 | 0.205 | 0.321 | 0.680 | 3.80 | 0.012 | 0.041 | 0.111 | 0.104 | 0.280 |
| 15. | 0.056 | 0.718 | 1.23 | 0.265 | 0.432 | 0.234 | 0.206 | 0.273 | 3.72 | 0.012 | 0.041 | 0.113 | 0.099 | Lücke |
| 16. | 0.056 | 0.746 | 0.949 | 0.272 | 0.427 | 0.227 | 0.160 | 0.129 | 3.06 | 0.011 | 0.042 | 0.110 | 0.080 | Lücke |
| 17. | 0.055 | 4.00 | 0.824 | 0.272 | 0.381 | 0.183 | 0.141 | 0.439 | 3.56 | 0.012 | 0.039 | 0.091 | 0.080 | Lücke |
| 18. | 0.042 | 2.98 | 0.713 | 0.308 | 0.380 | 0.166 | 0.124 | 0.505 | 3.90 | 0.013 | 0.032 | 0.092 | 0.080 | Lücke |
| 19. | 0.042 | 1.67 | 0.688 | 0.545 | 0.318 | 0.164 | 0.116 | 0.163 | 3.27 | 0.014 | 0.033 | 0.086 | 0.097 | Lücke |
| 20. | 0.042 | 1.18 | 5.77 | 0.515 | 0.287 | 0.154 | 0.100 | 0.057 | 2.51 | 0.014 | 0.034 | 0.071 | 0.100 | Lücke |
| 21. | 0.042 | 1.52 | 4.26 | 0.451 | 0.286 | 0.148 | 0.083 | 0.032 | 1.65 | 0.015 | 0.034 | 0.072 | 0.088 | Lücke |
| 22. | 0.042 | 1.71 | 5.20 | 0.450 | 0.280 | 0.193 | 0.076 | 0.029 | 0.935 | 0.015 | 0.035 | 0.072 | 0.081 | Lücke |
| 23. | 0.042 | 1.39 | 4.41 | 0.548 | 0.260 | 0.226 | 0.056 | 0.026 | 0.434 | 0.016 | 0.035 | 0.072 | 0.081 | Lücke |
| 24. | 0.042 | 1.40 | 5.33 | 0.824 | 0.251 | 0.224 | 0.040 | 0.023 | 0.147 | 0.017 | 0.036 | 0.072 | 0.085 | Lücke |
| 25. | 0.043 | 1.60 | 3.41 | 1.17 | 0.241 | 0.373 | 0.039 | 0.023 | 0.065 | 0.017 | 0.053 | 0.073 | 0.106 | Lücke |
| 26. | 0.043 | 1.23 | 2.10 | 1.06 | 0.222 | 0.309 | 0.038 | 0.036 | 0.037 | 0.018 | 0.081 | 0.073 | 0.102 | Lücke |
| 27. | 0.043 | 0.965 | 1.52 | 0.895 | 0.199 | 0.238 | 0.030 | 0.069 | 0.031 | 0.019 | 0.068 | 0.073 | 0.095 | Lücke |
| 28. | 0.047 | 1.16 | 1.12 | 0.808 | 0.197 | 0.233 | 0.027 | 0.031 | 0.025 | 0.019 | 0.069 | 0.074 | 0.106 | Lücke |
| 29. | 0.058 | 1.45 | 0.958 | 0.761 | 0.196 | 0.249 | 0.026 | 0.023 | 0.025 | 0.021 | 0.071 | 0.074 | 0.106 | Lücke |
| 30. | 0.058 | 2.53 | 0.850 | | 0.195 | 0.196 | 0.026 | 0.023 | 0.025 | 0.021 | 0.072 | 0.077 | 0.106 | Lücke |
| 31. | | 5.53 | 0.738 | | 0.194 | | 0.025 | | 0.026 | 0.021 | | 0.119 | | Lücke |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 1. | 1. | 19. | 12.+ | 31. | 9. | 31. | 24.+ | 6.+ | 16. | 1.+ | 3. | 16.+ | --- |
| NQ | 0.040 | 0.059 | 0.688 | 0.177 | 0.194 | 0.147 | 0.025 | 0.023 | 0.014 | 0.011 | 0.022 | 0.047 | 0.080 | Lücke |
| MQ | 0.050 | 1.11 | 3.33 | 0.454 | 0.493 | 0.202 | 0.229 | 0.339 | 1.01 | 0.016 | 0.038 | 0.121 | 0.108 | Lücke |
| HQ | 0.059 | 6.08 | 9.58 | 1.19 | 1.36 | 0.431 | 2.30 | 1.97 | 3.95 | 0.027 | 0.086 | 0.425 | 0.159 | Lücke |
| Tag | 30. | 31. | 6. | 25.+ | 5.+ | 25. | 11. | 6. | 18. | 30.+ | 26. | 6. | 10. | --- |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 2 | 38 | 115 | 15 | 17 | 7 | 8 | 11 | 35 | 1 | 1 | 4 | 4 | 3 |

| | 1967/2011 | | 1968/2012 45 Kalenderjahre² | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1995 | 1995 | 1996 | 1996 | 1986 | 1996 | 2012 | 2005 | 2012 | 1989 | 1995 | 1995 | 1995 | 1995 |
| NQ | 0.018 | 0.022 | 0.028 | 0.027 | 0.086 | 0.030 | 0.025 | 0.012 | 0.014 | 0.007 | 0.010 | 0.018 | 0.018 | 0.022 |
| MNQ | 0.167 | 0.262 | 0.376 | 0.393 | 0.396 | 0.250 | 0.102 | 0.061 | 0.062 | 0.059 | 0.071 | 0.102 | 0.164 | 0.258 |
| MQ | 0.863 | 1.24 | 1.58 | 1.32 | 1.20 | 0.692 | 0.443 | 0.267 | 0.329 | 0.356 | 0.349 | 0.469 | 0.850 | 1.22 |
| MHQ | 4.29 | 5.91 | 6.86 | 5.34 | 5.49 | 2.91 | 2.48 | 1.79 | 1.66 | 1.72 | 1.81 | 2.56 | 4.17 | 5.77 |
| HQ | 14.6 | 14.6 | 16.5 | 16.7 | 15.2 | 7.96 | 10.9 | 11.4 | 10.1 | 15.3 | 15.8 | 12.4 | 14.6 | 14.6 |
| Jahr | 1998 | 2002 | 1968 | 1970 | 1994 | 1998 | 1984 | 1981 | 1981 | 1968 | 1968 | 1968 | 1998 | 2002 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 29 | 43 | 55 | 41 | 41 | 23 | 15 | 9 | 11 | 12 | 12 | 16 | 28 | 42 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.011 | am 16.08.2012 | 0.040 | 0.011 | 0.011 | am 16.08.2012 |
| MQ | m³/s | 0.622 | | 0.955 | 0.294 | 0.568 | |
| HQ | m³/s | 9.58 | am 06.01.2012 bei W = 181 cm | 9.58 | 3.95 | 9.58 | am 06.01.2012 bei W = 181 cm |
| Nq | l/(skm²) | 0.135 | | 0.512 | 0.135 | 0.135 | |
| Mq | l/(skm²) | 8.01 | | 12.3 | 3.78 | 7.30 | |
| Hq | l/(skm²) | 123 | | 123 | 50.8 | 123 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 253 | | 193 | 60 | 220 | |

| | | 1968/2012 (*) 45 Jahre² | | | | 1968/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.007 | am 26.08.1989 | 0.018 | 0.007 | 0.007 | am 26.08.1989 |
| MNQ | m³/s | 0.033 | | 0.106 | 0.035 | 0.035 | |
| MQ | m³/s | 0.757 | | 1.15 | 0.369 | 0.753 | |
| MHQ | m³/s | 10.3 | | 10.1 | 5.36 | 10.3 | |
| HQ | m³/s | 16.7 | am 23.02.1970 bei W = 213 cm | 16.7 | 15.8 | 16.7 | am 23.02.1970 bei W = 213 cm |
| $HQ_1$ | m³/s | 10.4 | | | | | |
| $HQ_5$ | m³/s | 13.6 | | | | | |
| MNq | l/(skm²) | 0.430 | | 1.37 | 0.457 | 0.452 | |
| Mq | l/(skm²) | 9.74 | | 14.8 | 4.75 | 9.69 | |
| MHq | l/(skm²) | 133 | | 130 | 68.9 | 133 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 307 | | 232 | 76 | 305 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.007 | 0.090 | 26.08.1989 | 16.7 | 215 | 213 | 23.02.1970 |
| 2 | 0.010 | 0.126 | 06.09.1995 | 16.5 | 213 | 212 | 15.01.1968 |
| 3 | 0.012 | 0.154 | 22.06.2005 | 15.8 | 203 | 229 | 01.09.1968 |
| 4 | 0.012 | 0.154 | 15.09.1991 | 15.3 | 197 | 229 | 03.01.2003 |
| 5 | 0.014 | 0.178 | 06.07.2012 | 15.2 | 195 | 228 | 16.03.1994 |
| 6 | 0.014 | 0.179 | 27.08.1990 | 14.6 | 188 | 224 | 30.12.2002 |
| 7 | 0.014 | 0.181 | 06.08.1999 | 14.6 | 188 | 233 | 02.11.1998 |
| 8 | 0.018 | 0.230 | 17.08.1988 | 13.8 | 178 | 218 | 14.11.2010 |
| 9 | 0.018 | 0.232 | 13.08.2003 | 13.5 | 174 | 216 | 14.03.1992 |
| 10 | 0.018 | 0.232 | 21.08.2001 | 13.5 | 174 | 216 | 31.12.1986 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1968/2012 45 Kalenderjahre² Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 8.43 | 0.000 | 14.9 | 10.5 | 3.83 |
| 363 | 8.38 | 0.000 | 14.5 | 8.43 | 3.61 |
| 362 | 5.94 | 0.000 | 12.3 | 7.29 | 3.58 |
| 361 | 5.90 | 0.000 | 11.2 | 6.54 | 2.92 |
| 360 | 5.77 | 0.000 | 10.6 | 5.98 | 2.15 |
| 359 | 5.53 | 0.000 | 10.4 | 5.61 | 1.91 |
| 358 | 5.36 | 0.000 | 10.4 | 5.28 | 1.80 |
| 357 | 5.33 | 0.000 | 10.4 | 5.02 | 1.76 |
| 356 | 5.30 | 0.000 | 8.33 | 4.77 | 1.50 |
| 350 | 4.26 | 0.000 | 7.37 | 3.60 | 1.18 |
| 340 | 2.98 | 0.000 | 5.44 | 2.59 | 0.926 |
| 330 | 1.60 | 0.000 | 4.32 | 1.95 | 0.774 |
| 320 | 1.38 | 0.000 | 3.78 | 1.58 | 0.524 |
| 300 | 0.895 | 0.000 | 2.50 | 1.17 | 0.338 |
| 270 | 0.451 | 0.000 | 1.79 | 0.779 | 0.214 |
| 240 | 0.269 | 0.000 | 1.28 | 0.543 | 0.173 |
| 210 | 0.199 | 0.000 | 0.955 | 0.380 | 0.100 |
| 183 | 0.161 | 0.000 | 0.768 | 0.275 | 0.072 |
| 150 | 0.091 | 0.000 | 0.598 | 0.181 | 0.050 |
| 130 | 0.069 | 0.000 | 0.500 | 0.143 | 0.041 |
| 120 | 0.056 | 0.000 | 0.443 | 0.124 | 0.041 |
| 110 | 0.055 | 0.000 | 0.414 | 0.116 | 0.035 |
| 100 | 0.047 | 0.000 | 0.378 | 0.100 | 0.029 |
| 90 | 0.042 | 0.000 | 0.355 | 0.088 | 0.028 |
| 80 | 0.038 | 0.000 | 0.317 | 0.081 | 0.028 |
| 70 | 0.033 | 0.000 | 0.271 | 0.071 | 0.028 |
| 60 | 0.026 | 0.000 | 0.236 | 0.061 | 0.028 |
| 50 | 0.025 | 0.000 | 0.178 | 0.056 | 0.028 |
| 40 | 0.023 | 0.000 | 0.144 | 0.049 | 0.023 |
| 30 | 0.020 | 0.000 | 0.130 | 0.041 | 0.018 |
| 25 | 0.018 | 0.000 | 0.129 | 0.040 | 0.018 |
| 20 | 0.016 | 0.000 | 0.111 | 0.037 | 0.018 |
| 15 | 0.015 | 0.000 | 0.106 | 0.031 | 0.014 |
| 10 | 0.015 | 0.000 | 0.100 | 0.028 | 0.012 |
| 9 | 0.014 | 0.000 | 0.100 | 0.028 | 0.012 |
| 8 | 0.014 | 0.000 | 0.100 | 0.026 | 0.012 |
| 7 | 0.014 | 0.000 | 0.100 | 0.026 | 0.012 |
| 6 | 0.014 | 0.000 | 0.100 | 0.025 | 0.012 |
| 5 | 0.013 | 0.000 | 0.100 | 0.023 | 0.012 |
| 4 | 0.013 | 0.000 | 0.100 | 0.021 | 0.012 |
| 3 | 0.012 | 0.000 | 0.100 | 0.018 | 0.012 |
| 2 | 0.012 | 0.000 | 0.100 | 0.018 | 0.012 |
| 1 | 0.012 | 0.000 | 0.091 | 0.015 | 0.010 |
| 0 | 0.011 | 0.000 | 0.081 | 0.007 | 0.007 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
²Vorsicht: 0.1% Lücken im Zeitraum 1968/2012
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

$A_{Eo}$ : 67.85 km²
PNP : NHN+ 62.33 m
Lage : 19.51 km

# Q

m³/s

Pegel : Sendenhorst Nr. 3283000000100
Gewässer : Angel
Gebiet : Obere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.172 | 0.213 | 2.09 | 0.675 | 0.752 | 0.265 | 0.193 | 0.409 | 0.147 | 0.148 | 0.121 | 0.124 | 0.130 | 0.136 |
| 2. | 0.160 | 0.265 | 4.26 | 0.730 | 0.680 | 0.249 | 0.191 | 0.187 | 0.144 | 0.141 | 0.115 | 0.121 | 0.163 | 0.195 |
| 3. | 0.169 | 0.290 | 3.02 | 0.458 | 0.616 | 0.228 | 0.371 | 0.235 | 0.140 | 0.135 | 0.115 | 0.125 | 0.143 | 0.161 |
| 4. | 0.167 | 0.293 | 3.06 | 0.418 | 0.524 | 0.216 | 0.219 | 0.356 | 0.138 | 0.149 | 0.115 | 0.815 | 0.169 | 0.189 |
| 5. | 0.166 | 0.284 | 5.74 | 0.381 | 0.922 | 0.206 | 0.269 | 0.520 | 0.138 | 0.138 | 0.115 | 0.697 | 0.192 | 0.398 |
| 6. | 0.168 | 0.254 | 4.93 | 0.402 | 0.937 | 0.209 | 0.236 | 0.312 | 0.134 | 0.185 | 0.114 | 0.428 | 0.164 | 0.251 |
| 7. | 0.170 | 0.291 | 3.55 | 0.380 | 0.676 | 0.208 | 0.204 | 0.278 | 0.133 | 0.168 | 0.114 | 0.419 | 0.152 | 0.198 |
| 8. | 0.172 | 0.338 | 3.72 | 0.353 | 0.839 | 0.202 | 0.189 | 0.204 | 0.206 | 0.143 | 0.114 | 0.202 | 0.146 | 0.186 |
| 9. | 0.175 | 0.395 | 2.79 | 0.334 | 0.674 | 0.201 | 0.188 | 0.190 | 0.328 | 0.134 | 0.114 | 0.167 | 0.143 | 0.230 |
| 10. | 0.180 | 0.316 | 2.24 | 0.315 | 0.571 | 0.212 | 0.192 | 0.173 | 0.148 | 0.129 | 0.114 | 0.147 | 0.138 | 0.793 |
| 11. | 0.179 | 0.256 | 1.76 | 0.301 | 0.484 | 0.212 | 1.09 | 0.167 | 0.472 | 0.129 | 0.114 | 0.134 | 0.161 | 0.659 |
| 12. | 0.180 | 0.268 | 1.58 | 0.297 | 0.433 | 0.255 | 0.523 | 0.209 | 0.415 | 0.129 | 0.198 | 0.152 | 0.133 | 0.369 |
| 13. | 0.182 | 0.371 | 1.55 | 0.301 | 0.410 | 0.241 | 0.295 | 0.175 | 0.625 | 0.129 | 0.150 | 0.159 | 0.130 | 0.296 |
| 14. | 0.184 | 0.769 | 1.34 | 0.365 | 0.376 | 0.258 | 0.260 | 0.165 | 0.607 | 0.129 | 0.117 | 0.174 | 0.128 | 0.291 |
| 15. | 0.186 | 1.02 | 1.12 | 0.398 | 0.359 | 0.210 | 0.252 | 0.163 | 0.815 | 0.128 | 0.123 | 0.139 | 0.133 | 1.85 |
| 16. | 0.187 | 3.10 | 0.941 | 0.329 | 0.346 | 0.202 | 0.387 | 0.261 | 0.736 | 0.219 | 0.115 | 0.133 | 0.136 | 1.37 |
| 17. | 0.189 | 3.42 | 0.858 | 0.364 | 0.328 | 0.202 | 0.234 | 0.190 | 1.41 | 0.156 | 0.115 | 0.136 | 0.173 | 1.43 |
| 18. | 0.191 | 1.71 | 0.760 | 0.378 | 0.318 | 0.201 | 0.226 | 0.159 | 0.698 | 0.127 | 0.116 | 0.135 | 0.135 | 1.42 |
| 19. | 0.193 | 1.20 | 3.51 | 0.620 | 0.300 | 0.205 | 0.201 | 0.158 | 0.451 | 0.123 | 0.116 | 0.129 | 0.137 | 1.42 |
| 20. | 0.195 | 1.21 | 4.70 | 0.505 | 0.285 | 0.198 | 0.191 | 0.154 | 0.451 | 0.119 | 0.123 | 0.125 | 0.130 | 1.03 |
| 21. | 0.196 | 2.63 | 3.44 | 0.420 | 0.275 | 0.223 | 0.190 | 0.157 | 0.262 | 0.120 | 0.116 | 0.124 | 0.130 | 0.895 |
| 22. | 0.196 | 1.67 | 3.65 | 0.413 | 0.279 | 0.245 | 0.187 | 0.153 | 0.203 | 0.120 | 0.116 | 0.122 | 0.128 | 1.40 |
| 23. | 0.198 | 1.77 | 3.08 | 0.522 | 0.290 | 0.221 | 0.183 | 0.150 | 0.179 | 0.120 | 0.116 | 0.132 | 0.128 | 4.71 |
| 24. | 0.200 | 1.97 | 2.45 | 0.947 | 0.275 | 0.203 | 0.178 | 0.147 | 0.162 | 0.120 | 0.442 | 0.124 | 0.172 | 6.27 |
| 25. | 0.201 | 1.58 | 1.82 | 1.52 | 0.263 | 0.226 | 0.178 | 0.414 | 0.152 | 0.131 | 0.284 | 0.122 | 0.133 | 3.57 |
| 26. | 0.206 | 1.11 | 1.49 | 1.10 | 0.256 | 0.255 | 0.177 | 0.179 | 0.149 | 0.128 | 0.222 | 0.122 | 0.143 | 2.72 |
| 27. | 0.205 | 0.922 | 1.34 | 0.857 | 0.253 | 0.195 | 0.177 | 0.155 | 0.153 | 0.229 | 0.253 | 0.122 | 0.161 | 3.04 |
| 28. | 0.234 | 0.836 | 1.13 | 0.785 | 0.255 | 0.282 | 0.176 | 0.153 | 0.216 | 0.125 | 0.250 | 0.122 | 0.139 | 3.60 |
| 29. | 0.213 | 0.709 | 0.975 | 0.776 | 0.254 | 0.218 | 0.185 | 0.172 | 0.173 | 0.118 | 0.138 | 0.122 | 0.139 | 2.04 |
| 30. | 0.211 | 2.74 | 0.890 | | 0.293 | 0.196 | 0.177 | 0.160 | 0.194 | 0.116 | 0.142 | 0.249 | 0.137 | 1.52 |
| 31. | | 2.26 | 0.785 | | 0.286 | | 0.223 | | 0.171 | 0.117 | | 0.140 | | 1.24 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 2. | 1. | 18. | 12. | 27. | 27. | 28. | 24. | 7. | 30. | 7.+ | 2. | 22.+ | 1. |
| NQ | 0.160 | 0.213 | 0.760 | 0.297 | 0.253 | 0.195 | 0.176 | 0.147 | 0.133 | 0.116 | 0.114 | 0.121 | 0.128 | 0.136 |
| MQ | 0.188 | 1.11 | 2.41 | 0.539 | 0.445 | 0.222 | 0.256 | 0.217 | 0.334 | 0.139 | 0.151 | 0.199 | 0.145 | 1.42 |
| HQ | 0.324 | 6.95 | 8.30 | 1.73 | 1.38 | 0.524 | 1.57 | 0.724 | 1.91 | 0.389 | 0.695 | 1.61 | 0.403 | 7.14 |
| Tag | 28. | 16. | 5. | 25. | 5. | 26. | 11. | 25. | 17. | 27. | 24. | 4. | 17. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 44 | 95 | 20 | 18 | 8 | 10 | 8 | 13 | 5 | 6 | 8 | 6 | 56 |

| | 1959/2011 | | 1960/2012 53 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1960 | 1960 | 1960 | 1960 | 1960 | 1960 | 1960 | 1960 | 1973 | 1973 | 1983 | 1989 |
| NQ | 0.044 | 0.019 | 0.032 | 0.069 | 0.050 | 0.036 | 0.024 | 0.017 | 0.027 | 0.038 | 0.037 | 0.051 | 0.053 | 0.087 |
| MNQ | 0.195 | 0.337 | 0.410 | 0.418 | 0.392 | 0.311 | 0.196 | 0.161 | 0.137 | 0.127 | 0.124 | 0.144 | 0.197 | 0.339 |
| MQ | 0.771 | 1.27 | 1.45 | 1.23 | 1.14 | 0.759 | 0.501 | 0.332 | 0.353 | 0.313 | 0.329 | 0.429 | 0.773 | 1.30 |
| MHQ | 4.79 | 7.00 | 6.85 | 5.35 | 5.66 | 3.20 | 3.45 | 2.17 | 2.59 | 2.73 | 2.62 | 2.71 | 4.79 | 7.13 |
| HQ | 17.3 | 22.5 | 19.7 | 15.8 | 18.0 | 12.8 | 20.9 | 18.4 | 15.0 | 16.0 | 13.3 | 17.4 | 17.3 | 22.5 |
| Jahr | 1998 | 1960 | 2003 | 1970 | 1963 | 1986 | 2001 | 1981 | 1980 | 2007 | 2007 | 1998 | 1998 | 1960 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 29 | 50 | 57 | 44 | 45 | 29 | 20 | 13 | 14 | 12 | 13 | 17 | 30 | 51 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.114 | am 07.09.2012 | 0.160 | 0.114 | 0.114 | am 07.09.2012 |
| MQ | m³/s | 0.521 | | 0.828 | 0.216 | 0.543 | |
| HQ | m³/s | 8.30 | am 05.01.2012 bei W = 199 cm | 8.30 | 1.91 | 8.30 | am 05.01.2012 bei W = 199 cm |
| Nq | l/(skm²) | 1.68 | | 2.36 | 1.68 | 1.68 | |
| Mq | l/(skm²) | 7.67 | | 12.2 | 3.19 | 8.00 | |
| Hq | l/(skm²) | 122 | | 122 | 28.2 | 122 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 243 | | 192 | 51 | 253 | |

| | | 1960/2012 (*) 53 Jahre | | | | 1960/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.017 | am 26.06.1960 | 0.019 | 0.017 | 0.017 | am 26.06.1960 |
| MNQ | m³/s | 0.085 | | 0.161 | 0.091 | 0.089 | |
| MQ | m³/s | 0.738 | | 1.11 | 0.377 | 0.740 | |
| MHQ | m³/s | 12.3 | | 11.0 | 6.82 | 12.2 | |
| HQ | m³/s | 22.5 | am 05.12.1960 bei W = 294 cm | 22.5 | 20.9 | 22.5 | am 05.12.1960 bei W = 294 cm |
| $HQ_1$ | m³/s | 11.0 | | | | | |
| $HQ_5$ | m³/s | 16.3 | | | | | |
| MNq | l/(skm²) | 1.25 | | 2.38 | 1.35 | 1.32 | |
| Mq | l/(skm²) | 10.9 | | 16.3 | 5.55 | 10.9 | |
| MHq | l/(skm²) | 181 | | 161 | 101 | 179 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 343 | | 255 | 88 | 344 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.017 | 0.250 | 26.06.1960 | 22.5 | 332 | 294 | 05.12.1960 |
| 2 | 0.037 | 0.540 | 17.09.1973 | 20.9 | 307 | 301 | 04.05.2001 |
| 3 | 0.042 | 0.613 | 06.09.1983 | 19.8 | 292 | 298 | 29.05.1984 |
| 4 | 0.049 | 0.722 | 16.09.1997 | 19.7 | 291 | 293 | 03.01.2003 |
| 5 | 0.054 | 0.795 | 21.09.1982 | 19.2 | 283 | 289 | 30.12.2002 |
| 6 | 0.055 | 0.815 | 01.10.1967 | 18.4 | 272 | 282 | 30.06.1981 |
| 7 | 0.056 | 0.829 | 22.08.1976 | 18.0 | 266 | 264 | 07.03.1963 |
| 8 | 0.057 | 0.845 | 25.08.1968 | 17.8 | 262 | 262 | 02.12.1961 |
| 9 | 0.058 | 0.855 | 13.08.1971 | 17.4 | 257 | 292 | 28.10.1998 |
| 10 | 0.059 | 0.873 | 15.08.1990 | 17.4 | 256 | 275 | 19.12.1988 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1960/2012 53 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 5.74 | 6.27 | 17.1 | 8.27 | 2.88 |
| 363 | 4.93 | 5.74 | 15.4 | 6.88 | 1.93 |
| 362 | 4.70 | 4.93 | 11.5 | 5.87 | 1.61 |
| 361 | 4.26 | 4.71 | 9.89 | 5.30 | 1.37 |
| 360 | 3.72 | 4.70 | 9.24 | 4.88 | 1.34 |
| 359 | 3.65 | 4.26 | 8.52 | 4.61 | 1.31 |
| 358 | 3.55 | 3.72 | 8.29 | 4.31 | 1.18 |
| 357 | 3.51 | 3.65 | 7.99 | 4.05 | 1.09 |
| 356 | 3.44 | 3.60 | 7.01 | 3.88 | 1.08 |
| 350 | 2.79 | 3.06 | 5.69 | 3.04 | 0.968 |
| 340 | 1.76 | 1.82 | 4.18 | 2.31 | 0.818 |
| 330 | 1.34 | 1.41 | 3.12 | 1.80 | 0.714 |
| 320 | 0.947 | 1.03 | 2.67 | 1.49 | 0.609 |
| 300 | 0.709 | 0.730 | 1.95 | 1.10 | 0.434 |
| 270 | 0.413 | 0.414 | 1.42 | 0.756 | 0.330 |
| 240 | 0.300 | 0.297 | 1.08 | 0.562 | 0.257 |
| 210 | 0.255 | 0.250 | 0.822 | 0.428 | 0.205 |
| 183 | 0.216 | 0.208 | 0.720 | 0.340 | 0.156 |
| 150 | 0.196 | 0.187 | 0.614 | 0.265 | 0.110 |
| 130 | 0.185 | 0.172 | 0.527 | 0.232 | 0.093 |
| 120 | 0.178 | 0.162 | 0.489 | 0.217 | 0.084 |
| 110 | 0.173 | 0.155 | 0.462 | 0.203 | 0.077 |
| 100 | 0.167 | 0.149 | 0.436 | 0.189 | 0.071 |
| 90 | 0.158 | 0.143 | 0.412 | 0.176 | 0.067 |
| 80 | 0.150 | 0.138 | 0.392 | 0.164 | 0.063 |
| 70 | 0.143 | 0.135 | 0.364 | 0.153 | 0.056 |
| 60 | 0.136 | 0.133 | 0.330 | 0.142 | 0.052 |
| 50 | 0.129 | 0.129 | 0.313 | 0.130 | 0.050 |
| 40 | 0.125 | 0.125 | 0.297 | 0.120 | 0.045 |
| 30 | 0.122 | 0.122 | 0.281 | 0.108 | 0.041 |
| 25 | 0.121 | 0.121 | 0.276 | 0.103 | 0.038 |
| 20 | 0.119 | 0.119 | 0.265 | 0.097 | 0.036 |
| 15 | 0.116 | 0.116 | 0.253 | 0.090 | 0.036 |
| 10 | 0.115 | 0.115 | 0.245 | 0.080 | 0.032 |
| 9 | 0.115 | 0.115 | 0.242 | 0.078 | 0.032 |
| 8 | 0.115 | 0.115 | 0.242 | 0.076 | 0.031 |
| 7 | 0.115 | 0.115 | 0.231 | 0.073 | 0.030 |
| 6 | 0.115 | 0.115 | 0.230 | 0.070 | 0.028 |
| 5 | 0.115 | 0.115 | 0.222 | 0.067 | 0.027 |
| 4 | 0.114 | 0.114 | 0.212 | 0.063 | 0.027 |
| 3 | 0.114 | 0.114 | 0.209 | 0.059 | 0.024 |
| 2 | 0.114 | 0.114 | 0.193 | 0.053 | 0.023 |
| 1 | 0.114 | 0.114 | 0.183 | 0.046 | 0.021 |
| 0 | 0.114 | 0.114 | 0.180 | 0.017 | 0.017 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

| | |
|---|---|
| Pegel: | Wolbeck |
| Nr.: | 3289100000100 |
| Gewässer: | Angel |
| Gebiet: | Obere Ems |

Da die vollständige Auswertung des Pegels bei Redaktionschluss
noch nicht vorliegt, wird an dieser Stelle eine Leerseite veröffentlicht

$A_{Eo}$ : 152.80 km²
PNP : NHN+ 37.79 m
Lage : 22.28 km

# Q
m³/s

Pegel : Hopsten Nr. 3445900000100
Gewässer : Hopstener Aa
Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.440 | 0.370 | 1.59 | 1.45 | 1.32 | 0.653 | 0.532 | 0.319 | 0.355 | 0.478 | 0.208 | 0.352 | 0.611 | 0.524 |
| 2. | 0.440 | 0.471 | 3.47 | 1.45 | 1.22 | 0.637 | 0.491 | 0.323 | 0.332 | 0.435 | 0.188 | 0.333 | 0.641 | 0.524 |
| 3. | 0.440 | 0.612 | 2.65 | 1.11 | 1.14 | 0.637 | 0.490 | 0.331 | 0.333 | 0.537 | 0.187 | 0.318 | 0.597 | 0.524 |
| 4. | 0.440 | 0.817 | 3.36 | 1.06 | 1.11 | 0.636 | 0.490 | 0.424 | 0.312 | 0.449 | 0.185 | 0.871 | 0.644 | 0.585 |
| 5. | 0.440 | 0.775 | 6.93 | 0.973 | 1.16 | 0.560 | 0.473 | 0.510 | 0.302 | 0.416 | 0.183 | 1.48 | 0.858 | 0.672 |
| 6. | 0.440 | 0.867 | 4.56 | 0.891 | 1.12 | 0.560 | 0.454 | 0.448 | 0.270 | 0.415 | 0.181 | 2.37 | 0.796 | 0.671 |
| 7. | 0.440 | 1.26 | 3.34 | 0.809 | 0.997 | 0.559 | 0.454 | 0.433 | 0.252 | 0.413 | 0.179 | 1.78 | 0.748 | 0.597 |
| 8. | 0.440 | 1.55 | 3.20 | 0.796 | 1.85 | 0.525 | 0.439 | 0.738 | 0.267 | 0.391 | 0.178 | 1.07 | 0.785 | 0.564 |
| 9. | 0.440 | 1.49 | 2.61 | 0.794 | 1.29 | 0.539 | 0.445 | 0.536 | 0.633 | 0.464 | 0.176 | 0.826 | 0.783 | 0.618 |
| 10. | 0.440 | 1.25 | 2.31 | 0.793 | 1.12 | 0.972 | 0.627 | 0.452 | 0.469 | 0.455 | 0.174 | 0.685 | 0.780 | 2.03 |
| 11. | 0.440 | 1.09 | 1.99 | 0.724 | 1.10 | 0.969 | 0.569 | 0.410 | 0.372 | 0.382 | 0.173 | 0.635 | 0.699 | 1.35 |
| 12. | 0.403 | 0.997 | 2.22 | 0.754 | 1.03 | 0.862 | 0.488 | 0.393 | 0.350 | 0.354 | 0.195 | 0.625 | 0.619 | 1.05 |
| 13. | 0.362 | 1.08 | 3.53 | 0.710 | 0.988 | 0.876 | 0.452 | 0.716 | 0.350 | 0.322 | 0.199 | 0.750 | 0.617 | 1.00 |
| 14. | 0.362 | 1.89 | 2.47 | 0.786 | 0.907 | 0.711 | 0.429 | 0.504 | 0.374 | 0.303 | 0.200 | 0.730 | 0.615 | 0.920 |
| 15. | 0.362 | 1.87 | 1.95 | 0.933 | 0.880 | 0.896 | 0.424 | 0.436 | 0.387 | 0.273 | 0.221 | 0.752 | 0.571 | 1.67 |
| 16. | 0.366 | 3.24 | 1.70 | 0.955 | 0.819 | 0.883 | 0.526 | 0.455 | 0.396 | 0.272 | 0.220 | 0.591 | 0.528 | 1.36 |
| 17. | 0.370 | 4.10 | 1.55 | 0.996 | 0.817 | 0.751 | 0.475 | 0.695 | 1.43 | 0.271 | 0.205 | 0.555 | 0.526 | 1.21 |
| 18. | 0.370 | 2.12 | 1.46 | 1.06 | 0.816 | 0.682 | 0.440 | 0.590 | 1.05 | 0.259 | 0.207 | 0.555 | 0.543 | 1.40 |
| 19. | 0.370 | 1.70 | 3.48 | 2.16 | 0.780 | 0.515 | 0.420 | 0.654 | 1.11 | 0.241 | 0.208 | 0.556 | 0.604 | 1.24 |
| 20. | 0.370 | 1.93 | 4.29 | 1.48 | 0.731 | 0.496 | 0.407 | 0.507 | 1.45 | 0.240 | 0.210 | 0.515 | 0.602 | 1.12 |
| 21. | 0.370 | 2.73 | 4.30 | 1.34 | 0.729 | 0.498 | 0.384 | 0.470 | 0.819 | 0.239 | 0.211 | 0.482 | 0.600 | 1.09 |
| 22. | 0.370 | 1.84 | 4.47 | 1.34 | 0.685 | 0.663 | 0.372 | 0.446 | 0.641 | 0.238 | 0.198 | 0.482 | 0.598 | 1.59 |
| 23. | 0.370 | 1.83 | 4.70 | 1.42 | 0.640 | 0.681 | 0.335 | 0.415 | 0.551 | 0.237 | 0.188 | 0.482 | 0.549 | 4.80 |
| 24. | 0.370 | 2.62 | 3.49 | 1.57 | 0.640 | 0.627 | 0.308 | 0.381 | 0.485 | 0.220 | 0.434 | 0.483 | 0.576 | 3.46 |
| 25. | 0.370 | 2.28 | 2.61 | 2.13 | 0.640 | 0.683 | 0.291 | 0.520 | 0.436 | 0.208 | 0.568 | 0.483 | 0.642 | 2.66 |
| 26. | 0.370 | 1.77 | 2.23 | 1.65 | 0.639 | 0.584 | 0.291 | 0.737 | 0.412 | 0.227 | 0.453 | 0.483 | 0.587 | 3.80 |
| 27. | 0.370 | 1.60 | 2.12 | 1.45 | 0.639 | 0.499 | 0.285 | 0.525 | 0.380 | 0.266 | 0.401 | 0.451 | 0.597 | 3.95 |
| 28. | 0.370 | 1.48 | 1.86 | 1.37 | 0.639 | 0.637 | 0.262 | 0.470 | 0.400 | 0.269 | 0.477 | 0.412 | 0.597 | 2.41 |
| 29. | 0.370 | 1.39 | 1.72 | 1.32 | 0.638 | 0.632 | 0.262 | 0.421 | 0.795 | 0.238 | 0.408 | 0.419 | 0.562 | 1.87 |
| 30. | 0.370 | 1.86 | 1.59 | | 0.666 | 0.552 | 0.263 | 0.375 | 0.616 | 0.221 | 0.396 | 0.659 | 0.524 | 1.80 |
| 31. | | 1.71 | 1.42 | | 0.725 | | 0.264 | | 0.538 | 0.218 | | 0.678 | | 1.88 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13.+ | 1. | 31. | 13. | 29. | 20. | 28.+ | 1. | 7. | 25. | 11. | 3. | 30. | 1.+ |
| NQ | 0.362 | 0.370 | 1.42 | 0.710 | 0.638 | 0.496 | 0.262 | 0.319 | 0.252 | 0.208 | 0.173 | 0.318 | 0.524 | 0.524 |
| MQ | 0.396 | 1.63 | 2.88 | 1.18 | 0.918 | 0.666 | 0.414 | 0.488 | 0.544 | 0.321 | 0.254 | 0.705 | 0.633 | 1.58 |
| HQ | 0.440 | 5.76 | 10.4 | 3.16 | 2.23 | 0.980 | 0.857 | 1.00 | 2.12 | 0.622 | 0.693 | 3.70 | 0.885 | 7.29 |
| Tag | 1.+ | 17. | 5. | 19. | 8. | 10.+ | 10. | 13. | 17. | 3. | 25.+ | 6. | 5. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 7 | 29 | 50 | 19 | 16 | 11 | 7 | 8 | 10 | 6 | 4 | 12 | 11 | 28 |

| | 1972/2011 | | 1973/2012 – 40 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1972 | 1995 | 1996 | 1996 | 1996 | 1996 | 1993 | 1989 | 1976 | 1976 | 1976 | 1976 | 1976 | 1995 |
| NQ | 0.055 | 0.245 | 0.283 | 0.438 | 0.378 | 0.190 | 0.167 | 0.129 | 0.013 | 0.013 | 0.026 | 0.067 | 0.159 | 0.245 |
| MNQ | 0.613 | 0.791 | 1.08 | 1.09 | 1.06 | 0.767 | 0.472 | 0.328 | 0.251 | 0.245 | 0.284 | 0.414 | 0.624 | 0.793 |
| MQ | 1.38 | 1.89 | 2.45 | 2.10 | 2.08 | 1.38 | 0.869 | 0.649 | 0.663 | 0.624 | 0.635 | 0.876 | 1.36 | 1.91 |
| MHQ | 4.84 | 6.80 | 8.17 | 6.70 | 6.97 | 3.60 | 2.49 | 2.72 | 3.39 | 2.66 | 2.40 | 3.90 | 4.75 | 6.94 |
| HQ | 14.1 | 16.7 | 16.5 | 13.7 | 16.0 | 12.7 | 6.69 | 24.2 | 25.3 | 19.1 | 9.74 | 22.2 | 14.1 | 16.7 |
| Jahr | 1990 | 1986 | 1987 | 1984 | 1981 | 1994 | 2001 | 1981 | 1981 | 2010 | 1993 | 1998 | 1990 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 23 | 33 | 43 | 34 | 36 | 23 | 15 | 11 | 12 | 11 | 11 | 15 | 23 | 34 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.173 | am 11.09.2012 | 0.362 | 0.173 | 0.173 | am 11.09.2012 |
| MQ | m³/s | 0.869 | | 1.29 | 0.455 | 0.884 | |
| HQ | m³/s | 10.4 | am 05.01.2012 bei W = 106 cm | 10.4 | 3.70 | 10.4 | am 05.01.2012 bei W = 106 cm |
| Nq | l/(skm²) | 1.13 | | 2.37 | 1.13 | 1.13 | |
| Mq | l/(skm²) | 5.69 | | 8.43 | 2.98 | 5.79 | |
| Hq | l/(skm²) | 68.1 | | 68.1 | 24.2 | 68.1 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 180 | | 133 | 47 | 183 | |

| | | 1973/2012 (*) 40 Jahre | | | | 1973/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.013 | am 09.07.1976 | 0.055 | 0.013 | 0.013 | am 09.07.1976 |
| MNQ | m³/s | 0.169 | | 0.485 | 0.170 | 0.170 | |
| MQ | m³/s | 1.30 | | 1.88 | 0.720 | 1.30 | |
| MHQ | m³/s | 11.9 | | 11.0 | 6.71 | 11.8 | |
| HQ | m³/s | 25.3 | am 01.07.1981 bei W = 178 cm | 16.7 | 25.3 | 25.3 | am 01.07.1981 bei W = 178 cm |
| $HQ_1$ | m³/s | 11.2 | | | | | |
| $HQ_5$ | m³/s | 15.0 | | | | | |
| MNq | l/(skm²) | 1.10 | | 3.17 | 1.11 | 1.11 | |
| Mq | l/(skm²) | 8.49 | | 12.3 | 4.71 | 8.49 | |
| MHq | l/(skm²) | 77.6 | | 71.7 | 43.9 | 77.5 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 268 | | 193 | 75 | 268 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.013 | 0.085 | 09.07.1976 | 25.3 | 166 | 178 | 01.07.1981 |
| 2 | 0.026 | 0.170 | 18.08.1973 | 22.2 | 145 | 170 | 29.10.1998 |
| 3 | 0.055 | 0.359 | 01.11.1972 | 19.1 | 125 | 161 | 28.08.2010 |
| 4 | 0.066 | 0.433 | 14.09.1991 | 16.7 | 109 | 148 | 31.12.1986 |
| 5 | 0.074 | 0.487 | 20.08.1995 | 16.3 | 107 | 146 | 28.01.1994 |
| 6 | 0.079 | 0.516 | 30.08.1983 | 16.0 | 104 | 146 | 12.03.1981 |
| 7 | 0.091 | 0.599 | 12.08.1994 | 15.5 | 101 | 141 | 31.12.1993 |
| 8 | 0.094 | 0.615 | 06.08.1996 | 15.0 | 98.3 | 144 | 04.10.1993 |
| 9 | 0.094 | 0.615 | 05.08.1982 | 14.3 | 93.5 | 134 | 19.03.1994 |
| 10 | 0.097 | 0.634 | 22.08.2001 | 14.1 | 92.4 | 133 | 17.11.1990 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1973/2012 40 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 6.93 | 6.93 | 22.0 | 9.20 | 4.11 |
| 363 | 4.70 | 4.80 | 19.8 | 7.75 | 3.89 |
| 362 | 4.56 | 4.70 | 15.0 | 7.10 | 3.48 |
| 361 | 4.47 | 4.56 | 12.6 | 6.59 | 2.93 |
| 360 | 4.30 | 4.47 | 10.7 | 6.11 | 2.88 |
| 359 | 4.29 | 4.30 | 9.66 | 5.76 | 2.79 |
| 358 | 4.10 | 4.29 | 9.19 | 5.51 | 2.53 |
| 357 | 3.53 | 3.95 | 8.99 | 5.23 | 2.38 |
| 356 | 3.49 | 3.80 | 8.82 | 5.03 | 2.33 |
| 350 | 3.20 | 3.36 | 7.46 | 4.16 | 1.96 |
| 340 | 2.24 | 2.31 | 6.48 | 3.37 | 1.65 |
| 330 | 1.87 | 1.87 | 5.62 | 2.92 | 1.47 |
| 320 | 1.70 | 1.59 | 4.65 | 2.54 | 1.27 |
| 300 | 1.42 | 1.32 | 3.71 | 2.05 | 0.964 |
| 270 | 0.973 | 0.933 | 2.85 | 1.55 | 0.714 |
| 240 | 0.751 | 0.750 | 2.33 | 1.26 | 0.530 |
| 210 | 0.639 | 0.641 | 1.88 | 1.03 | 0.380 |
| 183 | 0.539 | 0.598 | 1.55 | 0.873 | 0.336 |
| 150 | 0.470 | 0.526 | 1.35 | 0.692 | 0.248 |
| 130 | 0.440 | 0.485 | 1.22 | 0.595 | 0.189 |
| 120 | 0.436 | 0.473 | 1.16 | 0.546 | 0.180 |
| 110 | 0.416 | 0.452 | 1.15 | 0.509 | 0.138 |
| 100 | 0.401 | 0.436 | 1.09 | 0.478 | 0.136 |
| 90 | 0.380 | 0.416 | 1.02 | 0.440 | 0.117 |
| 80 | 0.370 | 0.400 | 0.969 | 0.412 | 0.097 |
| 70 | 0.366 | 0.375 | 0.910 | 0.370 | 0.097 |
| 60 | 0.333 | 0.333 | 0.910 | 0.349 | 0.079 |
| 50 | 0.303 | 0.303 | 0.817 | 0.304 | 0.067 |
| 40 | 0.267 | 0.267 | 0.777 | 0.273 | 0.067 |
| 30 | 0.239 | 0.239 | 0.692 | 0.228 | 0.056 |
| 25 | 0.221 | 0.221 | 0.595 | 0.217 | 0.045 |
| 20 | 0.211 | 0.211 | 0.595 | 0.182 | 0.043 |
| 15 | 0.207 | 0.207 | 0.556 | 0.169 | 0.032 |
| 10 | 0.195 | 0.195 | 0.522 | 0.136 | 0.026 |
| 9 | 0.188 | 0.188 | 0.522 | 0.130 | 0.026 |
| 8 | 0.188 | 0.188 | 0.500 | 0.130 | 0.026 |
| 7 | 0.187 | 0.187 | 0.484 | 0.130 | 0.026 |
| 6 | 0.185 | 0.185 | 0.473 | 0.129 | 0.024 |
| 5 | 0.183 | 0.183 | 0.443 | 0.114 | 0.022 |
| 4 | 0.181 | 0.181 | 0.441 | 0.097 | 0.020 |
| 3 | 0.179 | 0.179 | 0.440 | 0.086 | 0.013 |
| 2 | 0.178 | 0.178 | 0.430 | 0.067 | 0.013 |
| 1 | 0.176 | 0.176 | 0.412 | 0.043 | 0.013 |
| 0 | 0.173 | 0.173 | 0.408 | 0.013 | 0.013 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

| | |
|---|---|
| Pegel: | Lehen II |
| Nr.: | 3448310000600 |
| Gewässer: | Ibbenbürener Aa |
| Gebiet: | Mittelere Ems |

Da die vollständige Auswertung des Pegels bei Redaktionschluss
noch nicht vorliegt, wird an dieser Stelle eine Leerseite veröffentlicht

$A_{Eo}$ : 88.66 km²
PNP : NHN+ 40.04 m
Lage : 10.54 km

# Q

m³/s

Pegel : Hoerstel Nr. 3448390000200
Gewässer : Hörsteler Aa
Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.810 | 0.751 | 1.66 | 1.44 | 1.61 | 1.06 | 1.20 | 0.990 | 0.896 | 0.915 | 0.771 | 0.773 | 0.828 | 0.807 |
| 2. | 0.856 | 1.04 | 2.69 | 1.41 | 1.53 | 1.04 | 1.22 | 0.896 | 0.836 | 1.13 | 0.721 | 0.770 | 0.818 | 0.849 |
| 3. | 0.854 | 1.14 | 2.21 | 1.31 | 1.46 | 1.09 | 1.19 | 1.04 | 0.818 | 1.02 | 0.721 | 0.858 | 0.876 | 0.821 |
| 4. | 0.847 | 0.960 | 2.23 | 1.25 | 1.39 | 1.06 | 1.18 | 1.22 | 0.856 | 0.911 | 0.721 | 1.85 | 0.951 | 0.983 |
| 5. | 0.855 | 1.12 | 4.19 | 1.18 | 1.63 | 1.04 | 1.16 | 1.22 | 0.834 | 0.934 | 0.719 | 1.86 | 1.03 | 1.07 |
| 6. | 0.828 | 1.15 | 3.06 | 1.18 | 1.51 | 1.02 | 1.10 | 1.08 | 0.826 | 0.959 | 0.721 | 2.25 | 0.889 | 0.914 |
| 7. | 0.825 | 1.52 | 2.66 | 1.10 | 1.50 | 1.03 | 1.09 | 1.14 | 0.832 | 0.855 | 0.721 | 1.61 | 1.06 | 0.896 |
| 8. | 0.807 | 1.40 | 2.63 | 1.09 | 1.92 | 1.00 | 1.09 | 1.54 | 1.31 | 0.818 | 0.721 | 1.16 | 0.922 | 0.838 |
| 9. | 0.807 | 1.41 | 2.20 | 1.13 | 1.63 | 1.29 | 1.26 | 1.19 | 1.35 | 0.833 | 0.721 | 1.01 | 0.896 | 1.17 |
| 10. | 0.819 | 1.18 | 2.00 | 1.13 | 1.52 | 1.57 | 1.24 | 1.09 | 0.913 | 0.807 | 0.721 | 0.905 | 0.896 | 2.10 |
| 11. | 0.888 | 1.06 | 1.84 | 1.09 | 1.40 | 1.39 | 1.24 | 1.11 | 0.819 | 0.807 | 0.749 | 0.881 | 0.883 | 1.64 |
| 12. | 0.830 | 1.13 | 2.04 | 1.09 | 1.39 | 1.46 | 1.06 | 1.46 | 0.842 | 0.807 | 0.757 | 1.01 | 0.820 | 1.38 |
| 13. | 0.807 | 1.22 | 2.23 | 1.10 | 1.31 | 1.34 | 0.989 | 1.63 | 0.966 | 0.807 | 0.721 | 0.941 | 0.807 | 1.20 |
| 14. | 0.853 | 1.73 | 1.85 | 1.15 | 1.29 | 1.19 | 0.980 | 1.12 | 0.951 | 0.807 | 0.817 | 0.896 | 0.807 | 1.25 |
| 15. | 0.848 | 1.51 | 1.75 | 1.35 | 1.19 | 1.46 | 0.959 | 0.989 | 1.18 | 0.807 | 0.829 | 0.863 | 0.819 | 1.88 |
| 16. | 0.832 | 2.60 | 1.62 | 1.26 | 1.18 | 1.23 | 1.03 | 1.22 | 1.30 | 0.833 | 0.721 | 0.887 | 0.807 | 1.61 |
| 17. | 0.806 | 2.64 | 1.53 | 1.39 | 1.18 | 1.18 | 0.956 | 1.26 | 2.16 | 0.807 | 0.694 | 0.846 | 0.808 | 1.57 |
| 18. | 0.807 | 1.83 | 1.52 | 1.40 | 1.18 | 1.18 | 0.897 | 1.37 | 1.47 | 0.807 | 0.701 | 0.814 | 0.908 | 1.70 |
| 19. | 0.807 | 1.61 | 2.93 | 2.04 | 1.10 | 1.18 | 0.896 | 1.20 | 2.04 | 0.761 | 0.721 | 0.807 | 0.869 | 1.58 |
| 20. | 0.783 | 1.94 | 3.31 | 1.65 | 1.09 | 1.18 | 0.896 | 1.10 | 1.58 | 0.769 | 0.727 | 0.807 | 0.810 | 1.45 |
| 21. | 0.766 | 2.40 | 3.27 | 1.49 | 1.09 | 1.21 | 0.896 | 1.06 | 1.12 | 0.770 | 0.683 | 0.807 | 0.807 | 1.60 |
| 22. | 0.827 | 1.91 | 3.47 | 1.40 | 1.09 | 1.38 | 0.822 | 1.04 | 0.998 | 0.776 | 0.689 | 0.807 | 0.807 | 1.80 |
| 23. | 0.754 | 1.83 | 3.41 | 1.46 | 1.03 | 1.31 | 0.807 | 1.11 | 0.964 | 0.755 | 0.694 | 0.807 | 0.824 | 3.83 |
| 24. | 0.787 | 2.34 | 2.50 | 1.57 | 1.08 | 1.23 | 0.791 | 1.14 | 0.896 | 0.756 | 1.28 | 0.807 | 0.824 | 2.74 |
| 25. | 0.744 | 1.89 | 2.13 | 1.84 | 1.00 | 1.40 | 0.725 | 1.34 | 0.896 | 0.807 | 0.904 | 0.807 | 0.859 | 2.39 |
| 26. | 0.784 | 1.70 | 1.96 | 1.64 | 1.02 | 1.30 | 0.709 | 1.22 | 0.843 | 0.843 | 0.901 | 0.807 | 0.869 | 2.48 |
| 27. | 0.762 | 1.61 | 1.91 | 1.55 | 1.04 | 1.25 | 0.721 | 1.04 | 0.807 | 0.824 | 1.01 | 0.807 | 0.851 | 2.54 |
| 28. | 0.767 | 1.53 | 1.83 | 1.48 | 1.07 | 1.43 | 0.721 | 1.00 | 1.21 | 0.807 | 0.906 | 0.731 | 0.807 | 1.97 |
| 29. | 0.766 | 1.43 | 1.73 | 1.54 | 1.04 | 1.29 | 0.721 | 0.918 | 1.70 | 0.769 | 0.903 | 0.783 | 0.807 | 1.75 |
| 30. | 0.766 | 1.77 | 1.62 | | 1.21 | 1.24 | 0.721 | 0.896 | 1.13 | 0.727 | 0.807 | 1.12 | 0.807 | 1.82 |
| 31. | | 1.65 | 1.56 | | 1.15 | | 0.802 | | 1.04 | 0.757 | | 0.890 | | 1.89 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 25. | 1. | 18. | 8.+ | 25. | 8. | 26. | 2.+ | 27. | 30. | 21. | 28. | 13.+ | 1. |
| NQ | 0.744 | 0.751 | 1.52 | 1.09 | 1.00 | 1.00 | 0.709 | 0.896 | 0.807 | 0.727 | 0.683 | 0.731 | 0.807 | 0.807 |
| MQ | 0.810 | 1.58 | 2.31 | 1.37 | 1.28 | 1.24 | 0.970 | 1.15 | 1.11 | 0.832 | 0.782 | 1.00 | 0.859 | 1.63 |
| HQ | 1.18 | 3.67 | 5.88 | 2.57 | 2.44 | 1.95 | 1.83 | 2.83 | 3.52 | 2.07 | 1.83 | 3.24 | 1.61 | 4.88 |
| Tag | 11. | 16. | 5. | 19. | 7.+ | 9.+ | 9.+ | 12. | 16.+ | 2. | 27. | 6. | 4. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 24 | 48 | 70 | 39 | 39 | 36 | 29 | 34 | 34 | 25 | 23 | 30 | 25 | 49 |

| | 1979/2011 | | 1980/2012 33 Kalenderjahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1997 | 1996 | 1996 | 1986 | 1996 | 2012 | 1996 | 1996 | 1991 | 1991 | 1982+ | 1983 | 1997 |
| NQ | 0.638 | 0.730 | 0.775 | 0.676 | 0.989 | 0.550 | 0.709 | 0.561 | 0.577 | 0.568 | 0.561 | 0.638 | 0.638 | 0.730 |
| MNQ | 1.06 | 1.18 | 1.44 | 1.46 | 1.51 | 1.31 | 1.06 | 0.929 | 0.861 | 0.802 | 0.833 | 0.917 | 1.06 | 1.17 |
| MQ | 1.55 | 1.88 | 2.20 | 2.05 | 2.07 | 1.69 | 1.37 | 1.23 | 1.14 | 1.11 | 1.12 | 1.30 | 1.54 | 1.87 |
| MHQ | 3.91 | 5.58 | 5.86 | 4.60 | 5.15 | 3.09 | 2.80 | 3.77 | 3.44 | 3.84 | 3.02 | 4.22 | 3.87 | 5.59 |
| HQ | 11.3 | 18.3 | 11.8 | 11.7 | 12.5 | 9.23 | 8.34 | 27.2 | 9.56 | 29.1 | 11.7 | 22.7 | 11.3 | 18.3 |
| Jahr | 1998 | 1986 | 1994 | 1983 | 1981+ | 1980 | 1984 | 1981 | 2005 | 2010 | 1993 | 1993 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 45 | 57 | 66 | 56 | 62 | 49 | 41 | 36 | 35 | 33 | 33 | 39 | 45 | 57 |

| | | Abflussjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.683 | am 21.09.2012 | 0.744 | 0.683 | 0.683 | am 21.09.2012 |
| MQ | m³/s | 1.20 | | 1.44 | 0.975 | 1.21 | |
| HQ | m³/s | 5.88 | am 05.01.2012 bei W = 56.0 cm | 5.88 | 3.52 | 5.88 | am 05.01.2012 bei W = 56.0 cm |
| Nq | l/(skm²) | 7.71 | | 8.39 | 7.71 | 7.71 | |
| Mq | l/(skm²) | 13.6 | | 16.2 | 11.0 | 13.7 | |
| Hq | l/(skm²) | 66.3 | | 66.3 | 39.7 | 66.3 | |
| $h_N$ | mm | | | | | | |
| $h_A$ | mm | 430 | | 255 | 175 | 432 | |

| | | 1980/2012 (*) 33 Jahre | | | | 1980/2012 | |
|---|---|---|---|---|---|---|---|
| NQ | m³/s | 0.550 | am 14.04.1996 | 0.550 | 0.561 | 0.550 | am 14.04.1996 |
| MNQ | m³/s | 0.734 | | 0.985 | 0.750 | 0.745 | |
| MQ | m³/s | 1.56 | | 1.91 | 1.21 | 1.55 | |
| MHQ | m³/s | 10.4 | | 8.31 | 7.27 | 10.3 | |
| HQ | m³/s | 29.1 | am 27.08.2010 bei W = 212 cm | 18.3 | 29.1 | 29.1 | am 27.08.2010 bei W = 212 cm |
| $HQ_1$ | m³/s | 7.55 | | | | | |
| $HQ_5$ | m³/s | 13.9 | | | | | |
| MNq | l/(skm²) | 8.28 | | 11.1 | 8.46 | 8.41 | |
| Mq | l/(skm²) | 17.6 | | 21.5 | 13.7 | 17.5 | |
| MHq | l/(skm²) | 117 | | 93.8 | 81.9 | 116 | |
| $Mh_N$ | mm | | | | | | |
| $Mh_A$ | mm | 554 | | 337 | 217 | 553 | |

## Extremwerte

| | Niedrigwasser (n) m³/s | l/(skm²) | Datum | Hochwasser m³/s | l/(skm²) | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.550 | 6.21 | 14.04.1996 | 29.1 | 328 | 212 | 27.08.2010 |
| 2 | 0.561 | 6.33 | 15.09.1991 | 27.2 | 307 | 200 | 29.06.1981 |
| 3 | 0.594 | 6.70 | 05.06.2009 | 22.6 | 255 | 171 | 04.10.1993 |
| 4 | 0.596 | 6.72 | 13.08.2003 | 18.3 | 207 | 141 | 30.12.1986 |
| 5 | 0.600 | 6.76 | 15.09.1982 | 17.6 | 199 | 136 | 28.10.1998 |
| 6 | 0.638 | 7.20 | 08.08.2004 | 14.0 | 157 | 108 | 31.12.1993 |
| 7 | 0.638 | 7.20 | 11.08.1992 | 12.5 | 141 | 96.0 | 13.03.1992 |
| 8 | 0.638 | 7.20 | 17.09.1983 | 12.5 | 141 | 96.0 | 11.03.1981 |
| 9 | 0.648 | 7.30 | 05.10.1997 | 12.0 | 135 | 92.0 | 19.03.1994 |
| 10 | 0.656 | 7.40 | 09.10.2005 | 11.8 | 134 | 91.0 | 28.01.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2012 | Kalenderjahr 2012 | 1980/2012 33 Kalenderjahre: Obere Hüllkurve | Mittlere Werte | Untere Hüllkurve |
|---|---|---|---|---|---|
| 364 | 4.19 | 4.19 | 22.8 | 5.84 | 3.16 |
| 363 | 3.47 | 3.83 | 12.5 | 5.20 | 2.85 |
| 362 | 3.41 | 3.47 | 10.2 | 4.82 | 2.78 |
| 361 | 3.31 | 3.41 | 8.98 | 4.48 | 2.69 |
| 360 | 3.27 | 3.31 | 6.35 | 4.18 | 2.62 |
| 359 | 3.06 | 3.27 | 6.19 | 3.99 | 2.54 |
| 358 | 2.93 | 3.06 | 5.66 | 3.85 | 2.50 |
| 357 | 2.69 | 2.93 | 5.60 | 3.74 | 2.45 |
| 356 | 2.66 | 2.74 | 5.50 | 3.65 | 2.43 |
| 350 | 2.34 | 2.48 | 4.96 | 3.17 | 2.17 |
| 340 | 2.04 | 2.04 | 4.38 | 2.78 | 1.93 |
| 330 | 1.85 | 1.86 | 3.90 | 2.50 | 1.81 |
| 320 | 1.70 | 1.73 | 3.67 | 2.31 | 1.68 |
| 300 | 1.54 | 1.57 | 3.02 | 2.04 | 1.51 |
| 270 | 1.39 | 1.39 | 2.68 | 1.77 | 1.39 |
| 240 | 1.22 | 1.22 | 2.22 | 1.61 | 1.21 |
| 210 | 1.15 | 1.14 | 1.98 | 1.45 | 1.10 |
| 183 | 1.09 | 1.08 | 1.75 | 1.35 | 1.03 |
| 150 | 0.990 | 0.983 | 1.61 | 1.23 | 0.921 |
| 130 | 0.903 | 0.904 | 1.54 | 1.18 | 0.883 |
| 120 | 0.896 | 0.896 | 1.50 | 1.13 | 0.872 |
| 110 | 0.855 | 0.881 | 1.47 | 1.09 | 0.852 |
| 100 | 0.836 | 0.849 | 1.44 | 1.07 | 0.825 |
| 90 | 0.826 | 0.832 | 1.42 | 1.04 | 0.807 |
| 80 | 0.810 | 0.819 | 1.39 | 0.992 | 0.796 |
| 70 | 0.807 | 0.807 | 1.39 | 0.968 | 0.764 |
| 60 | 0.807 | 0.807 | 1.37 | 0.920 | 0.737 |
| 50 | 0.791 | 0.807 | 1.34 | 0.896 | 0.721 |
| 40 | 0.769 | 0.802 | 1.29 | 0.857 | 0.667 |
| 30 | 0.756 | 0.761 | 1.24 | 0.815 | 0.638 |
| 25 | 0.744 | 0.749 | 1.20 | 0.807 | 0.638 |
| 20 | 0.721 | 0.721 | 1.15 | 0.802 | 0.638 |
| 15 | 0.721 | 0.721 | 1.12 | 0.764 | 0.605 |
| 10 | 0.721 | 0.721 | 1.09 | 0.721 | 0.585 |
| 9 | 0.721 | 0.721 | 1.09 | 0.721 | 0.584 |
| 8 | 0.721 | 0.721 | 1.07 | 0.721 | 0.582 |
| 7 | 0.721 | 0.721 | 1.06 | 0.721 | 0.581 |
| 6 | 0.721 | 0.721 | 1.05 | 0.705 | 0.580 |
| 5 | 0.719 | 0.719 | 1.05 | 0.679 | 0.578 |
| 4 | 0.709 | 0.709 | 1.05 | 0.655 | 0.577 |
| 3 | 0.701 | 0.701 | 1.04 | 0.638 | 0.571 |
| 2 | 0.694 | 0.694 | 1.03 | 0.638 | 0.571 |
| 1 | 0.694 | 0.694 | 1.03 | 0.618 | 0.568 |
| 0 | 0.683 | 0.683 | 0.990 | 0.550 | 0.550 |

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
HQ1: DGJ, 4.3.3; HQ5: Pearson-Verteilung

LANUV NRW

$A_{Eo}$ : 682 $km^2$

PNP : NN + 41.64 m

Lage: 114.5 km oberhalb der Mündung links

Q

$m^3/s$

Pegel : Bramsche Nr. 3633101

Gewässer : Hase

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.69 | 2.15 | 9.02 | 6.87 | 7.55 | 3.92 | 3.31 | 4.41 | 1.89 | 2.31 | 1.85 | 1.81 | 2.41 | 2.28 |
| 2. | 2.59 | 4.16 | 18.2 | 6.37 | 7.04 | 3.91 | 3.21 | 2.92 | 1.86 | 2.76 | 1.67 | 1.78 | 3.03 | 2.66 |
| 3. | 2.48 | 4.73 | 14.9 | 6.05 | 6.57 | 3.83 | 3.20 | 2.90 | 1.92 | 2.98 | 1.72 | 1.92 | 2.56 | 2.80 |
| 4. | 2.55 | 5.37 | 16.9 | 5.81 | 6.22 | 4.15 | 3.00 | 4.01 | 1.94 | 2.39 | 1.73 | 5.80 | 2.98 | 3.07 |
| 5. | 2.37 | 4.66 | 33.4 | 5.49 | 6.62 | 3.95 | 3.16 | 4.78 | 1.90 | 2.55 | 1.67 | 6.84 | 3.79 | 4.02 |
| 6. | 2.28 | 5.53 | 31.0 | 5.24 | 6.24 | 3.77 | 3.23 | 3.06 | 1.87 | 2.73 | 1.73 | 9.83 | 3.20 | 3.14 |
| 7. | 2.26 | 7.57 | 21.5 | 4.93 | 5.80 | 3.78 | 3.24 | 3.73 | 1.85 | 2.40 | 1.68 | 6.99 | 3.64 | 2.67 |
| 8. | 2.32 | 9.50 | 21.8 | 4.90 | 9.52 | 3.52 | 3.10 | 3.41 | 3.09 | 2.42 | 1.58 | 3.54 | 3.42 | 2.45 |
| 9. | 2.42 | 8.57 | 16.8 | 4.85 | 7.02 | 3.94 | 3.11 | 3.22 | 5.59 | 3.50 | 1.72 | 2.92 | 3.39 | 3.14 |
| 10. | 2.41 | 6.20 | 14.1 | 4.76 | 6.21 | 6.13 | 3.34 | 2.56 | 2.43 | 2.38 | 1.50 | 2.61 | 3.06 | 9.19 |
| 11. | 2.35 | 4.80 | 12.0 | 4.50 | 6.00 | 4.88 | 3.57 | 2.37 | 2.28 | 2.27 | 2.08 | 2.53 | 3.00 | 6.11 |
| 12. | 2.24 | 4.86 | 12.3 | 4.40 | 5.75 | 4.67 | 3.12 | 2.57 | 2.32 | 2.06 | 3.29 | 2.39 | 2.76 | 4.40 |
| 13. | 2.18 | 6.61 | 17.2 | 4.44 | 5.51 | 4.50 | 2.73 | 3.05 | 3.02 | 2.09 | 2.06 | 2.56 | 2.59 | 4.05 |
| 14. | 2.25 | 8.42 | 12.9 | 5.14 | 5.36 | 4.13 | 2.79 | 2.41 | 3.08 | 2.48 | 1.69 | 2.56 | 2.49 | 3.68 |
| 15. | 2.19 | 8.15 | 10.6 | 6.22 | 5.24 | 3.99 | 2.83 | 2.29 | 4.45 | 2.05 | 2.52 | 2.35 | 2.39 | 8.32 |
| 16. | 2.18 | 14.0 | 9.49 | 5.59 | 5.15 | 3.98 | 3.22 | 2.84 | 3.00 | 2.25 | 1.84 | 2.25 | 2.19 | 6.74 |
| 17. | 2.11 | 22.8 | 8.58 | 6.10 | 5.02 | 3.62 | 3.02 | 3.66 | 8.54 | 1.75 | 1.70 | 2.30 | 2.23 | 5.86 |
| 18. | 2.21 | 12.1 | 8.04 | 6.33 | 4.85 | 3.63 | 2.68 | 2.67 | 6.00 | 1.96 | 1.69 | 2.22 | 2.42 | 6.94 |
| 19. | 2.28 | 9.51 | 17.5 | 10.8 | 4.72 | 3.58 | 2.50 | 2.45 | 7.65 | 1.91 | 1.65 | 2.26 | 3.10 | 5.86 |
| 20. | 2.09 | 10.0 | 24.1 | 8.25 | 4.54 | 3.52 | 2.94 | 2.27 | 7.60 | 1.90 | 1.66 | 1.81 | 2.58 | 4.98 |
| 21. | 2.10 | 13.8 | 20.7 | 6.69 | 4.40 | 4.00 | 2.90 | 2.22 | 3.80 | 1.88 | 1.67 | 1.81 | 2.37 | 5.28 |
| 22. | 2.19 | 10.3 | 24.8 | 6.51 | 4.37 | 4.46 | 2.55 | 2.22 | 2.97 | 1.85 | 1.65 | 1.79 | 2.26 | 6.90 |
| 23. | 2.15 | 10.3 | 28.6 | 7.45 | 4.26 | 4.72 | 2.59 | 2.17 | 2.78 | 1.84 | 1.92 | 1.83 | 2.11 | 21.0 |
| 24. | 2.15 | 13.8 | 19.8 | 8.45 | 4.13 | 3.97 | 2.51 | 2.16 | 2.65 | 1.86 | 3.93 | 1.79 | 2.86 | 19.4 |
| 25. | 1.98 | 13.2 | 14.4 | 11.2 | 4.02 | 4.92 | 2.38 | 3.89 | 2.49 | 2.40 | 4.12 | 1.87 | 2.86 | 11.8 |
| 26. | 1.90 | 9.68 | 12.1 | 8.88 | 3.93 | 4.24 | 2.36 | 3.56 | 2.40 | 2.17 | 2.56 | 1.72 | 2.72 | 14.0 |
| 27. | 2.01 | 8.91 | 11.8 | 7.88 | 3.96 | 3.73 | 2.27 | 2.28 | 2.30 | 2.39 | 2.56 | 1.79 | 3.22 | 15.1 |
| 28. | 2.22 | 7.88 | 10.4 | 7.45 | 3.86 | 4.16 | 2.22 | 2.19 | 2.64 | 2.07 | 2.62 | 1.52 | 2.73 | 10.9 |
| 29. | 2.17 | 7.27 | 9.51 | 7.86 | 3.80 | 3.83 | 2.25 | 1.98 | 2.72 | 1.86 | 2.12 | 1.85 | 2.54 | 8.12 |
| 30. | 2.10 | 11.9 | 8.80 | | 4.64 | 3.48 | 2.28 | 2.15 | 2.40 | 1.87 | 2.17 | 3.68 | 2.42 | 8.22 |
| 31. | | 9.96 | 7.89 | | 4.35 | | 2.38 | | 2.62 | 1.82 | | 3.02 | | 8.17 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 26. | 1. | 31. | 12. | 29. | 30. | 28. | 29. | 7. | 17. | 10. | 28. | 23. | 1. |
| NQ | 1.90 | 2.15 | 7.89 | 4.40 | 3.80 | 3.48 | 2.22 | 1.98 | 1.85 | 1.75 | 1.50 | 1.52 | 2.11 | 2.28 |
| MQ | 2.25 | 8.93 | 16.1 | 6.53 | 5.38 | 4.10 | 2.84 | 2.88 | 3.29 | 2.23 | 2.08 | 2.90 | 2.78 | 7.13 |
| HQ | 2.97 | 29.5 | 45.2 | 13.3 | 10.9 | 7.66 | 4.05 | 6.24 | 11.9 | 4.94 | 6.65 | 14.1 | 4.38 | 32.2 |
| Tag | 1. | 17. | 5. | 19. | 8. | 10. | 11. | 5. | 19. | 2. | 25. | 6. | 5. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 35 | 63 | 24 | 21 | 16 | 11 | 11 | 13 | 9 | 8 | 11 | 11 | 28 |

| | 1958/2011 | | 1959/2012 – 54 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1960 | 1960 | 1960 | 1960 | 1971 | 1960 | 1960 | 1973 | 1971 | 1976 | 1959 | 1959 |
| NQ | 1.04 | 0.830 | 1.23 | 0.760 | 1.31 | 0.810 | 0.427 | 0.570 | 0.510 | 0.690 | 0.481 | 1.04 | 1.04 | 0.830 |
| MNQ | 3.59 | 4.70 | 6.16 | 6.36 | 6.00 | 4.90 | 3.56 | 2.80 | 2.43 | 2.25 | 2.41 | 2.81 | 3.57 | 4.70 |
| MQ | 7.03 | 10.3 | 12.4 | 11.2 | 10.6 | 8.16 | 5.77 | 4.58 | 4.20 | 3.96 | 4.08 | 4.85 | 6.96 | 10.2 |
| MHQ | 21.4 | 32.2 | 35.4 | 30.0 | 29.9 | 20.0 | 15.9 | 16.1 | 15.6 | 14.9 | 13.5 | 16.4 | 21.2 | 32.5 |
| HQ | 49.3 | 110 | 93.8 | 70.5 | 97.3 | 49.1 | 44.3 | 113 | 108 | 128 | 39.8 | 91.1 | 49.3 | 110 |
| Jahr | 1998 | 1986 | 1987 | 1962 | 1981 | 1998 | 1965 | 1981 | 1981 | 2010 | 1993 | 1998 | 1998 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 27 | 40 | 49 | 41 | 42 | 31 | 23 | 17 | 16 | 16 | 16 | 19 | 26 | 40 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 1.50 | am 10.09.2012 | 1.90 | 1.50 | 1.50 | am 10.09.2012 |
| MQ $m^3/s$ | 4.97 | | 7.26 | 2.71 | 4.86 | |
| HQ $m^3/s$ | 45.2 | am 05.01.2012 bei W= 312 cm | 45.2 | 14.1 | 45.2 | am 05.01.2012 bei W= 312 cm |
| Nq $l/(s km^2)$ | 2.20 | | 2.79 | 2.20 | 2.20 | |
| Mq $l/(s km^2)$ | 7.29 | | 10.6 | 3.97 | 7.13 | |
| Hq $l/(s km^2)$ | 66.2 | | 66.2 | 20.7 | 66.2 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 230 | | 167 | 63 | 225 | |
| | 1959/2012 (*) 54 Jahre | | | | 1959/2012 | |
| NQ $m^3/s$ | 0.427 | am 21.05.1971 | 0.760 | 0.427 | 0.427 | am 21.05.1971 |
| MNQ $m^3/s$ | 1.89 | | 3.14 | 1.96 | 1.95 | |
| MQ $m^3/s$ | 7.24 | | 9.95 | 4.58 | 7.24 | |
| MHQ $m^3/s$ | 52.5 | | 49.1 | 29.2 | 53.9 | |
| HQ $m^3/s$ | 128 | am 28.08.2010 bei W= 451 cm | 110 | 128 | 128 | am 28.08.2010 bei W= 451 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.77 | | 4.60 | 2.87 | 2.86 | |
| Mq $l/(s km^2)$ | 10.6 | | 14.6 | 6.72 | 10.6 | |
| MHq $l/(s km^2)$ | 77.0 | | 72.0 | 42.8 | 79.0 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 336 | | 229 | 107 | 336 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.427 | 0.626 | 21.05.1971 | 128 | 188 | 451 | 28.08.2010 |
| 2 | 0.490 | 0.718 | 13.09.1959 | 113 | 166 | 464 | 30.06.1981 |
| 3 | 0.510 | 0.748 | 18.07.1960 | 110 | 161 | 448 | 31.12.1986 |
| 4 | 0.690 | 1.01 | 22.08.1973 | 97.3 | 143 | 440 | 12.03.1981 |
| 5 | 1.04 | 1.52 | 19.07.1976 | 91.1 | 134 | 426 | 29.10.1998 |
| 6 | 1.17 | 1.72 | 09.07.1964 | 86.0 | 126 | 282 | 05.12.1960 |
| 7 | 1.24 | 1.82 | 07.09.1970 | 81.7 | 120 | 278 | 16.01.1968 |
| 8 | 1.33 | 1.95 | 14.08.1989 | 78.3 | 115 | 402 | 05.03.1979 |
| 9 | 1.50 | 2.20 | 22.07.1990 | 77.2 | 113 | 406 | 01.01.1994 |
| 10 | 1.50 | 2.21 | 10.09.2012 | 70.5 | 103 | 268 | 14.02.1962 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1959/2012 54 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 33.4 | 33.4 | | | |
| 364 | 31.0 | 31.0 | 113 | 45.8 | 15.0 |
| 363 | 28.6 | 28.6 | 80.6 | 40.1 | 14.2 |
| 362 | 24.8 | 24.8 | 69.1 | 35.7 | 12.8 |
| 361 | 24.1 | 24.1 | 60.4 | 33.2 | 12.4 |
| 360 | 22.8 | 21.8 | 59.8 | 31.2 | 11.7 |
| 359 | 21.8 | 21.5 | 56.1 | 29.5 | 11.7 |
| 358 | 21.5 | 21.0 | 49.2 | 27.9 | 11.7 |
| 357 | 20.7 | 20.7 | 45.5 | 26.6 | 11.5 |
| 356 | 19.8 | 19.8 | 45.4 | 25.7 | 11.3 |
| 350 | 14.9 | 16.8 | 40.8 | 20.9 | 9.57 |
| 340 | 12.3 | 12.0 | 30.3 | 17.0 | 8.70 |
| 330 | 10.0 | 9.49 | 24.5 | 14.6 | 7.83 |
| 320 | 8.91 | 8.22 | 22.9 | 13.0 | 7.01 |
| 300 | 7.55 | 6.69 | 19.1 | 10.8 | 5.54 |
| 270 | 5.53 | 5.15 | 14.9 | 8.53 | 4.43 |
| 240 | 4.45 | 4.16 | 11.9 | 7.06 | 2.64 |
| 210 | 3.86 | 3.77 | 10.6 | 5.88 | 2.19 |
| 183 | 3.23 | 3.21 | 9.53 | 5.10 | 2.02 |
| 150 | 2.67 | 2.83 | 8.05 | 4.29 | 1.86 |
| 130 | 2.50 | 2.61 | 7.54 | 3.91 | 1.79 |
| 120 | 2.41 | 2.56 | 7.04 | 3.73 | 1.73 |
| 110 | 2.38 | 2.48 | 6.59 | 3.55 | 1.68 |
| 100 | 2.29 | 2.41 | 6.28 | 3.39 | 1.61 |
| 90 | 2.27 | 2.38 | 5.90 | 3.23 | 1.52 |
| 80 | 2.24 | 2.29 | 5.54 | 3.08 | 1.44 |
| 70 | 2.18 | 2.23 | 5.14 | 2.93 | 1.39 |
| 60 | 2.10 | 2.16 | 4.81 | 2.76 | 1.28 |
| 50 | 1.96 | 1.98 | 4.62 | 2.61 | 1.24 |
| 40 | 1.88 | 1.88 | 4.46 | 2.46 | 1.18 |
| 30 | 1.86 | 1.86 | 4.31 | 2.29 | 1.14 |
| 25 | 1.82 | 1.82 | 4.26 | 2.20 | 1.11 |
| 20 | 1.81 | 1.81 | 4.20 | 2.11 | 1.05 |
| 15 | 1.73 | 1.73 | 4.08 | 1.98 | 0.836 |
| 10 | 1.70 | 1.70 | 3.91 | 1.82 | 0.694 |
| 9 | 1.68 | 1.68 | 3.85 | 1.76 | 0.666 |
| 8 | 1.68 | 1.68 | 3.81 | 1.71 | 0.665 |
| 7 | 1.68 | 1.68 | 3.79 | 1.66 | 0.602 |
| 6 | 1.68 | 1.68 | 3.74 | 1.57 | 0.593 |
| 5 | 1.66 | 1.66 | 3.71 | 1.48 | 0.581 |
| 4 | 1.66 | 1.66 | 3.70 | 1.40 | 0.560 |
| 3 | 1.66 | 1.66 | 3.67 | 1.30 | 0.528 |
| 2 | 1.58 | 1.58 | 3.64 | 1.18 | 0.515 |
| 1 | 1.52 | 1.52 | 3.61 | 1.04 | 0.481 |
| 0 | 1.50 | 1.50 | 3.50 | 0.427 | 0.427 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

übergreifendes Gewässer Hase

NLWKN

$A_{Eo}$ : 1778 $km^2$

PNP : NN + 17.37 m

Lage: 66.2 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Bunnen Nr. 3655101

Gewässer : Hase

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 6.16 | 5.05 | 30.3 | 17.6 | 20.5 | 10.2 | 7.43 | 7.44 | 5.22 | 6.09 | 4.12 | 4.35 | 6.10 | 5.90 |
| 2. | 6.14 | 5.45 | 36.7 | 16.2 | 19.9 | 9.67 | 7.03 | 7.07 | 4.71 | 5.61 | 4.31 | 4.00 | 6.18 | 5.96 |
| 3. | 6.19 | 8.87 | 48.5 | 16.5 | 18.9 | 10.3 | 7.74 | 6.24 | 4.55 | 5.22 | 3.89 | 6.33 | 6.13 | 6.05 |
| 4. | 6.12 | 9.85 | 49.5 | 15.3 | 17.5 | 9.44 | 9.78 | 6.45 | 4.52 | 5.06 | 3.73 | 5.08 | 6.06 | 7.57 |
| 5. | 6.02 | 9.46 | 57.8 | 14.3 | 16.9 | 9.71 | 7.92 | 6.92 | 4.44 | 5.02 | 3.60 | 12.1 | 6.27 | 7.32 |
| 6. | 5.71 | 12.7 | 68.1 | 13.1 | 15.0 | 9.30 | 7.31 | 6.84 | 4.47 | 5.00 | 3.46 | 15.9 | 7.65 | 9.16 |
| 7. | 5.51 | 15.6 | 60.7 | 12.4 | 13.3 | 9.17 | 7.25 | 6.70 | 4.35 | 4.99 | 3.31 | 21.5 | 6.94 | 6.72 |
| 8. | 5.49 | 22.0 | 64.1 | 11.4 | 16.9 | 8.77 | 7.25 | 8.48 | 3.90 | 5.04 | 3.26 | 14.2 | 7.05 | 6.50 |
| 9. | 5.57 | 24.9 | 63.8 | 12.4 | 17.8 | 8.62 | 7.32 | 9.36 | 4.91 | 5.10 | 3.18 | 9.82 | 7.96 | 7.32 |
| 10. | 5.52 | 27.9 | 58.2 | 11.5 | 26.3 | 12.7 | 7.67 | 8.85 | 7.76 | 5.15 | 2.94 | 8.00 | 7.01 | 12.9 |
| 11. | 5.64 | 21.4 | 52.0 | 11.3 | 20.2 | 13.2 | 9.72 | 7.00 | 4.67 | 5.14 | 3.18 | 7.49 | 6.93 | 18.0 |
| 12. | 6.17 | 17.2 | 40.9 | 11.2 | 14.6 | 11.4 | 8.07 | 6.41 | 4.43 | 4.98 | 3.24 | 7.16 | 6.67 | 13.0 |
| 13. | 5.69 | 17.5 | 39.4 | 10.8 | 12.3 | 11.4 | 7.46 | 6.90 | 4.50 | 4.71 | 3.23 | 7.11 | 6.01 | 11.6 |
| 14. | 5.11 | 21.4 | 39.6 | 11.6 | 12.0 | 11.1 | 7.03 | 7.51 | 6.44 | 4.34 | 3.20 | 7.25 | 5.25 | 10.6 |
| 15. | 5.14 | 28.3 | 32.3 | 13.7 | 11.9 | 10.8 | 6.81 | 6.02 | 5.95 | 3.56 | 3.69 | 6.99 | 5.85 | 13.1 |
| 16. | 5.17 | 27.7 | 27.5 | 14.0 | 12.5 | 9.85 | 6.84 | 5.85 | 8.32 | 3.36 | 4.39 | 7.12 | 6.20 | 19.0 |
| 17. | 5.08 | 46.7 | 24.9 | 13.5 | 19.0 | 9.31 | 6.82 | 6.17 | 7.29 | 3.67 | 3.29 | 6.43 | 4.90 | 16.5 |
| 18. | 5.55 | 45.5 | 22.7 | 14.2 | 12.7 | 9.47 | 6.43 | 7.75 | 14.1 | 3.41 | 3.14 | 5.97 | 5.60 | 16.7 |
| 19. | 5.54 | 33.3 | 25.8 | 19.3 | 12.9 | 8.89 | 6.53 | 5.96 | 12.5 | 3.24 | 3.26 | 6.04 | 6.60 | 17.3 |
| 20. | 5.40 | 29.8 | 43.1 | 22.7 | 10.7 | 8.38 | 6.60 | 5.86 | 16.2 | 3.32 | 2.96 | 5.70 | 6.58 | 15.8 |
| 21. | 5.18 | 32.5 | 49.3 | 17.3 | 11.6 | 8.99 | 7.13 | 5.40 | 12.7 | 3.19 | 2.91 | 5.39 | 6.59 | 13.7 |
| 22. | 5.17 | 31.3 | 57.0 | 16.3 | 10.5 | 8.79 | 7.32 | 5.18 | 8.74 | 3.09 | 2.91 | 5.45 | 5.87 | 14.0 |
| 23. | 5.19 | 29.6 | 63.4 | 17.1 | 10.4 | 11.3 | 6.69 | 5.08 | 6.99 | 2.99 | 2.90 | 5.46 | 5.77 | 27.3 |
| 24. | 5.07 | 29.9 | 59.4 | 20.8 | 10.3 | 9.99 | 7.40 | 5.21 | 6.02 | 3.13 | 3.48 | 5.08 | 5.66 | 45.1 |
| 25. | 5.00 | 36.6 | 53.3 | 26.5 | 10.1 | 9.28 | 5.87 | 6.03 | 5.66 | 3.10 | 7.43 | 5.19 | 6.16 | 42.7 |
| 26. | 5.03 | 30.7 | 46.9 | 26.4 | 9.91 | 10.1 | 5.87 | 9.35 | 5.44 | 3.14 | 6.78 | 5.38 | 7.53 | 45.0 |
| 27. | 4.96 | 25.8 | 41.2 | 22.6 | 9.45 | 8.13 | 5.77 | 7.78 | 5.17 | 3.44 | 5.44 | 4.73 | 6.41 | 38.8 |
| 28. | 4.94 | 23.1 | 32.5 | 21.3 | 9.43 | 8.78 | 5.60 | 6.56 | 5.08 | 3.46 | 4.84 | 4.93 | 6.40 | 35.8 |
| 29. | 4.96 | 21.4 | 27.7 | 21.1 | 9.32 | 8.86 | 5.50 | 5.59 | 5.86 | 3.38 | 5.70 | 4.80 | 7.16 | 26.6 |
| 30. | 6.04 | 26.5 | 24.6 | | 9.82 | 8.52 | 5.44 | 5.20 | 6.99 | 3.33 | 4.57 | 5.17 | 6.05 | 23.0 |
| 31. | | 36.2 | 21.4 | | 10.2 | | 5.82 | | 6.34 | 3.28 | | 7.38 | | 22.4 |
| Tag | 28. | 1. | 31. | 13. | 29. | 27. | 30. | 23. | 8. | 23. | 23. | 2. | 17. | 1. |
| NQ | 4.94 | 5.05 | 21.4 | 10.8 | 9.32 | 8.13 | 5.44 | 5.08 | 3.90 | 2.99 | 2.90 | 4.00 | 4.90 | 5.90 |
| MQ | 5.48 | 24.3 | 44.0 | 16.3 | 14.0 | 9.81 | 7.01 | 6.71 | 6.72 | 4.11 | 3.88 | 7.34 | 6.38 | 18.1 |
| HQ | 6.92 | 51.5 | 70.3 | 28.2 | 26.9 | 15.6 | 10.6 | 10.2 | 19.2 | 6.20 | 9.53 | 22,6 | 9.17 | 46.6 |
| Tag | 3. | 17. | 6. | 25. | 10. | 10. | 11. | 26. | 20. | 1. | 25. | 7. | 26. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 8 | 37 | 66 | 23 | 21 | 14 | 11 | 10 | 10 | 6 | 6 | 11 | 9 | 27 |
| | 1954/2011 | | 1955/2012 58 Jahre | | | | | | | | | | | |
| Jahr | 1959 | 1959 | 1960 | 1960 | 1960 | 1960 | 1960 | 1960 | 1960 | 1959 | 1959 | 1959 | 1959 | 1959 |
| NQ | 1.33 | 1.22 | 3.65 | 4.53 | 3.88 | 2.19 | 0.940 | 0.750 | 0.490 | 0.640 | 0.380 | 0.380 | 1.33 | 1.22 |
| MNQ | 8.25 | 11.3 | 14.5 | 15.1 | 14.2 | 10.8 | 7.33 | 4.92 | 4.14 | 4.02 | 4.44 | 5.75 | 7.99 | 11.1 |
| MQ | 16.4 | 24.0 | 29.3 | 27.1 | 25.5 | 18.6 | 12.3 | 8.96 | 8.62 | 7.71 | 8.42 | 10.6 | 16.0 | 23.7 |
| MHQ | 36.1 | 49.8 | 57.1 | 52.1 | 52.5 | 35.3 | 25.7 | 22.9 | 21.6 | 18.8 | 20.6 | 25.6 | 35.3 | 49.4 |
| HQ | 118 | 111 | 118 | 124 | 130 | 101 | 78.2 | 79.7 | 82.3 | 58.6 | 67.8 | 115 | 118 | 111 |
| Jahr | 1998 | 1961+ | 1987 | 1970 | 1981 | 1994 | 1965 | 1981 | 1956 | 2010 | 1993 | 1998 | 1998 | 1961+ |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 24 | 36 | 44 | 38 | 38 | 27 | 19 | 13 | 13 | 12 | 12 | 16 | 23 | 36 |

## Hauptwerte

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 2.90 | am 23.09.2012 | 4.94 | 2.90 | 2.90 | am 23.09.2012 |
| MQ $m^3/s$ | 12.5 | | 19.1 | 5.97 | 12.1 | |
| HQ $m^3/s$ | 70.3 | am 06.01.2012 bei W= 372 cm | 70.3 | 22.6 | 70.3 | am 06.01.2012 bei W= 372 cm |
| Nq $l/(s km^2)$ | 1.63 | | 2.78 | 1.63 | 1.63 | |
| Mq $l/(s km^2)$ | 7.03 | | 10.7 | 3.36 | 6.81 | |
| Hq $l/(s km^2)$ | 39.5 | | 39.5 | 12.7 | 39.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 222 | | 169 | 53 | 215 | |
| | 1955/2012 (*) 58 Jahre | | | | 1955/2012 | |
| NQ $m^3/s$ | 0.380 | am 16.09.1959 | 1.22 | 0.380 | 0.380 | am 16.09.1959 |
| MNQ $m^3/s$ | 3.02 | | 6.90 | 3.05 | 3.05 | |
| MQ $m^3/s$ | 16.4 | | 23.5 | 9.45 | 16.4 | |
| MHQ $m^3/s$ | 78.4 | | 76.0 | 40.3 | 78.7 | |
| HQ $m^3/s$ | 130 | am 15.03.1981 bei W= 491 cm | 130 | 115 | 130 | am 15.03.1981 bei W= 491 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.70 | | 3.88 | 1.72 | 1.72 | |
| Mq $l/(s km^2)$ | 9.22 | | 13.2 | 5.31 | 9.22 | |
| MHq $l/(s km^2)$ | 44.1 | | 42.7 | 22.7 | 44.3 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 292 | | 208 | 84 | 292 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.380 | 0.214 | 16.09.1959 | 130 | 73.1 | 491 | 15.03.1981 |
| 2 | 0.490 | 0.276 | 30.07.1960 | 124 | 69.7 | 456 | 24.02.1970 |
| 3 | 0.740 | 0.416 | 30.08.1976 | 118 | 66.4 | 503 | 02.11.1998 |
| 4 | 0.870 | 0.489 | 02.07.1957 | 118 | 66.4 | 490 | 03.01.1987 |
| 5 | 1.15 | 0.647 | 28.07.1964 | 116 | 65.2 | 467 | 17.01.1968 |
| 6 | 1.32 | 0.742 | 03.08.1963 | 111 | 62.4 | 459 | 05.12.1961 |
| 7 | 1.36 | 0.765 | 12.09.1973 | 110 | 61.9 | 470 | 19.03.1994 |
| 8 | 1.36 | 0.765 | 28.07.1955 | 107 | 60.2 | 474 | 05.03.1979 |
| 9 | 1.70 | 0.958 | 09.08.2006 | 103 | 57.9 | 454 | 08.12.1960 |
| 10 | 1.78 | 1.00 | 26.07.1982 | 101 | 56.8 | 455 | 05.04.1994 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1955/2012 58 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 68.1 | 68.1 | | | |
| 364 | 64.1 | 64.1 | 130 | 89.5 | 29.2 |
| 363 | 63.8 | 63.8 | 125 | 81.2 | 28.3 |
| 362 | 63.4 | 63.4 | 118 | 76.0 | 28.0 |
| 361 | 60.7 | 60.7 | 115 | 70.9 | 25.3 |
| 360 | 59.4 | 59.4 | 115 | 68.8 | 24.6 |
| 359 | 58.2 | 58.2 | 111 | 65.6 | 24.5 |
| 358 | 57.8 | 57.8 | 109 | 63.1 | 23.8 |
| 357 | 57.0 | 57.0 | 101 | 60.9 | 23.3 |
| 356 | 53.3 | 53.3 | 94.6 | 58.9 | 23.1 |
| 350 | 46.7 | 45.1 | 83.6 | 50.8 | 22.5 |
| 340 | 33.3 | 35.8 | 77.5 | 41.4 | 19.4 |
| 330 | 28.3 | 26.3 | 66.0 | 35.5 | 17.1 |
| 320 | 26.3 | 21.4 | 60.7 | 31.4 | 14.8 |
| 300 | 19.3 | 16.7 | 50.0 | 25.5 | 11.2 |
| 270 | 13.1 | 12.7 | 33.9 | 20.0 | 8.91 |
| 240 | 10.4 | 10.2 | 26.2 | 16.3 | 4.61 |
| 210 | 8.86 | 8.62 | 21.6 | 13.7 | 2.33 |
| 183 | 7.38 | 7.38 | 19.3 | 11.8 | 2.02 |
| 150 | 6.44 | 6.69 | 17.0 | 9.60 | 1.77 |
| 130 | 5.96 | 6.20 | 15.7 | 8.59 | 1.49 |
| 120 | 5.71 | 6.04 | 15.3 | 8.05 | 1.35 |
| 110 | 5.54 | 5.90 | 14.8 | 7.50 | 1.32 |
| 100 | 5.45 | 5.77 | 14.5 | 7.01 | 1.21 |
| 90 | 5.20 | 5.45 | 13.6 | 6.58 | 1.16 |
| 80 | 5.11 | 5.21 | 12.7 | 6.15 | 1.16 |
| 70 | 5.04 | 5.10 | 11.7 | 5.77 | 1.05 |
| 60 | 4.93 | 4.91 | 11.3 | 5.34 | 1.00 |
| 50 | 4.52 | 4.52 | 11.0 | 4.96 | 0.790 |
| 40 | 4.12 | 4.12 | 10.6 | 4.52 | 0.740 |
| 30 | 3.48 | 3.48 | 10.4 | 4.02 | 0.690 |
| 25 | 3.36 | 3.36 | 10.3 | 3.77 | 0.690 |
| 20 | 3.28 | 3.28 | 9.97 | 3.47 | 0.640 |
| 15 | 3.23 | 3.23 | 9.25 | 3.12 | 0.580 |
| 10 | 3.18 | 3.18 | 8.94 | 2.46 | 0.580 |
| 9 | 3.18 | 3.18 | 8.84 | 2.31 | 0.580 |
| 8 | 3.13 | 3.13 | 8.75 | 2.16 | 0.580 |
| 7 | 3.10 | 3.10 | 8.66 | 2.01 | 0.480 |
| 6 | 3.09 | 3.09 | 8.55 | 1.83 | 0.480 |
| 5 | 2.99 | 2.99 | 8.34 | 1.71 | 0.480 |
| 4 | 2.96 | 2.96 | 8.23 | 1.49 | 0.430 |
| 3 | 2.94 | 2.94 | 8.17 | 1.33 | 0.430 |
| 2 | 2.94 | 2.94 | 7.81 | 1.12 | 0.430 |
| 1 | 2.94 | 2.94 | 7.51 | 0.750 | 0.430 |
| 0 | 2.90 | 2.90 | 7.09 | 0.380 | 0.380 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Hase
RB Alfhausen-Rieste seit 1987

NLWKN

$A_{Eo}$ : 2246 $km^2$

PNP : NN + 13.50 m

Lage: 43.9 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Herzlake Nr. 3671101

Gewässer : Hase

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 10.1 | 8.44 | 39.9 | 23.3 | 28.5 | 16.0 | 12.2 | 10.0 | 7.63 | 8.68 | 6.02 | 5.33 | 10.8 | 9.37 |
| 2. | 10.0 | 8.72 | 48.4 | 21.6 | 27.6 | 15.2 | 11.6 | 10.5 | 7.19 | 8.12 | 7.06 | 4.98 | 10.6 | 9.38 |
| 3. | 9.98 | 10.8 | 59.1 | 23.9 | 26.1 | 15.6 | 11.7 | 9.54 | 6.69 | 7.50 | 6.59 | 5.92 | 10.8 | 9.44 |
| 4. | 9.66 | 12.7 | 66.0 | 21.3 | 24.3 | 14.6 | 14.4 | 9.50 | 6.49 | 7.10 | 6.13 | 7.07 | 10.8 | 10.7 |
| 5. | 9.71 | 13.6 | 75.1 | 18.8 | 23.4 | 14.2 | 12.7 | 10.1 | 6.33 | 6.87 | 5.89 | 12.2 | 10.9 | 11.4 |
| 6. | 9.33 | 15.7 | 85.8 | 16.6 | 21.5 | 14.3 | 11.6 | 10.2 | 6.25 | 6.83 | 5.66 | 21.5 | 12.4 | 12.5 |
| 7. | 9.03 | 22.0 | 78.8 | 16.4 | 18.9 | 14.1 | 11.3 | 9.94 | 6.32 | 6.92 | 5.45 | 29.7 | 12.2 | 10.8 |
| 8. | 8.93 | 27.3 | 80.2 | 16.4 | 23.6 | 13.6 | 11.2 | 10.8 | 6.28 | 7.08 | 5.33 | 20.8 | 11.8 | 10.0 |
| 9. | 8.93 | 35.5 | 80.6 | 15.4 | 25.3 | 13.4 | 11.4 | 13.1 | 6.96 | 7.34 | 5.19 | 12.6 | 13.1 | 10.9 |
| 10. | 8.93 | 38.6 | 74.6 | 13.8 | 31.3 | 17.1 | 11.8 | 12.6 | 9.41 | 7.31 | 5.13 | 10.0 | 12.1 | 17.2 |
| 11. | 9.06 | 31.6 | 68.8 | 13.6 | 30.2 | 20.6 | 13.6 | 11.0 | 7.90 | 7.21 | 5.08 | 9.23 | 11.8 | 24.6 |
| 12. | 9.25 | 23.7 | 60.9 | 13.2 | 21.7 | 18.3 | 13.0 | 9.83 | 6.74 | 7.06 | 5.00 | 8.88 | 11.4 | 19.0 |
| 13. | 9.33 | 21.9 | 54.5 | 13.0 | 19.2 | 18.5 | 11.4 | 10.0 | 6.69 | 6.80 | 5.74 | 9.59 | 10.8 | 16.5 |
| 14. | 8.65 | 27.7 | 53.6 | 13.8 | 18.0 | 17.8 | 11.1 | 11.3 | 7.99 | 6.51 | 5.13 | 9.95 | 9.62 | 15.3 |
| 15. | 8.59 | 37.7 | 46.1 | 15.9 | 17.8 | 17.1 | 10.6 | 9.52 | 9.11 | 5.92 | 5.41 | 9.54 | 9.75 | 17.9 |
| 16. | 8.65 | 38.0 | 37.6 | 17.3 | 18.0 | 16.4 | 10.7 | 8.52 | 10.0 | 5.57 | 5.90 | 9.42 | 10.6 | 25.6 |
| 17. | 8.74 | 56.2 | 32.5 | 16.8 | 23.7 | 15.1 | 10.6 | 8.96 | 10.5 | 5.55 | 5.47 | 9.04 | 9.27 | 23.7 |
| 18. | 8.77 | 59.6 | 29.2 | 17.4 | 21.0 | 15.1 | 10.2 | 10.9 | 15.8 | 5.57 | 4.35 | 8.47 | 9.50 | 24.4 |
| 19. | 9.00 | 49.0 | 31.6 | 23.5 | 18.1 | 14.7 | 9.86 | 9.84 | 17.1 | 5.30 | 5.12 | 8.62 | 10.5 | 24.5 |
| 20. | 8.81 | 41.8 | 49.8 | 29.1 | 16.0 | 13.6 | 10.0 | 9.12 | 19.8 | 5.24 | 5.09 | 8.26 | 10.8 | 22.4 |
| 21. | 8.60 | 42.4 | 60.2 | 23.5 | 16.8 | 13.8 | 10.0 | 8.37 | 19.3 | 5.27 | 4.62 | 7.96 | 10.4 | 19.2 |
| 22. | 8.55 | 41.5 | 69.8 | 21.2 | 16.0 | 13.7 | 10.5 | 8.30 | 13.3 | 5.21 | 4.20 | 8.10 | 10.1 | 19.0 |
| 23. | 8.55 | 38.3 | 78.8 | 22.6 | 15.8 | 16.3 | 9.65 | 7.91 | 10.6 | 5.24 | 4.28 | 8.02 | 9.68 | 36.3 |
| 24. | 8.44 | 39.0 | 76.0 | 26.8 | 15.8 | 15.9 | 10.8 | 7.97 | 9.25 | 5.17 | 4.97 | 7.99 | 9.50 | 58.4 |
| 25. | 8.37 | 44.7 | 70.5 | 33.9 | 15.5 | 14.7 | 9.18 | 9.21 | 8.32 | 5.31 | 8.22 | 8.21 | 9.78 | 59.6 |
| 26. | 8.36 | 41.6 | 64.1 | 35.6 | 15.2 | 14.9 | 8.82 | 11.6 | 7.76 | 5.47 | 9.72 | 8.26 | 11.4 | 62.7 |
| 27. | 8.28 | 33.9 | 58.4 | 31.6 | 14.7 | 13.6 | 8.53 | 12.0 | 7.36 | 5.83 | 7.48 | 8.03 | 10.3 | 57.4 |
| 28. | 8.22 | 29.0 | 48.7 | 29.6 | 14.6 | 13.1 | 8.25 | 10.1 | 7.76 | 5.96 | 6.58 | 8.17 | 10.2 | 51.4 |
| 29. | 8.21 | 26.3 | 39.6 | 29.0 | 14.6 | 13.8 | 8.01 | 8.93 | 8.63 | 5.89 | 6.63 | 8.24 | 10.7 | 41.7 |
| 30. | 8.82 | 32.1 | 33.4 | | 15.1 | 13.3 | 7.95 | 7.98 | 9.79 | 5.69 | 6.12 | 8.76 | 9.82 | 34.0 |
| 31. | | 43.5 | 28.5 | | 16.2 | | 8.27 | | 9.44 | 5.66 | | 10.4 | | 31.3 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 13. | 29. | 28. | 30. | 23. | 6. | 24. | 22. | 2. | 17. | 1. |
| NQ | 8.21 | 8.44 | 28.5 | 13.0 | 14.6 | 13.1 | 7.95 | 7.91 | 6.25 | 5.17 | 4.20 | 4.98 | 9.27 | 9.37 |
| MQ | 8.93 | 32.0 | 57.5 | 21.2 | 20.1 | 15.3 | 10.7 | 9.92 | 9.44 | 6.30 | 5.78 | 10.1 | 10.7 | 25.7 |
| HQ | 10.3 | 61.7 | 87.9 | 36.3 | 33.6 | 21.6 | 14.9 | 13.3 | 22.5 | 8.87 | 10.8 | 30.9 | 13.4 | 64.2 |
| Tag | 3. | 18. | 6. | 26. | 11. | 11. | 4. | 9. | 20. | 1. | 26. | 7. | 9. | 25. |
| $h_N$ mm / $h_A$ mm | 10 | 38 | 69 | 24 | 24 | 18 | 13 | 11 | 11 | 8 | 7 | 12 | 12 | 31 |

| | 1937/2011 | | 1938/2012 75 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1937 | 1959 | 1940 | 1940 | 1947 | 1938 | 1939 | 1959 | 1976 | 1959 | 1959 | 1959 | 1943 | 1959 |
| NQ | 2.51 | 2.22 | 3.00 | 3.50 | 4.50 | 4.50 | 2.43 | 2.22 | 1.70 | 1.55 | 1.22 | 1.42 | 3.80 | 2.22 |
| MNQ | 10.9 | 14.6 | 18.7 | 19.5 | 17.7 | 13.7 | 9.18 | 6.94 | 6.05 | 5.82 | 6.52 | 8.21 | 11.0 | 14.7 |
| MQ | 21.4 | 30.9 | 38.0 | 35.7 | 33.0 | 23.6 | 15.2 | 11.3 | 11.6 | 10.7 | 11.1 | 14.2 | 21.5 | 31.1 |
| MHQ | 42.9 | 58.7 | 68.9 | 62.6 | 63.5 | 42.7 | 29.2 | 24.2 | 25.0 | 22.4 | 22.9 | 29.5 | 43.0 | 59.3 |
| HQ | 152 | 127 | 147 | 126 | 142 | 124 | 91.6 | 96.4 | 97.8 | 84.5 | 91.8 | 149 | 152 | 127 |
| Jahr | 1998 | 1986 | 1987 | 1946 | 1981 | 1994 | 1965 | 1981 | 1981 | 1954 | 1993 | 1998 | 1998 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 25 | 37 | 45 | 40 | 39 | 27 | 18 | 13 | 14 | 13 | 13 | 17 | 25 | 37 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 4.20 | am 22.09.2012 | 8.21 | 4.20 | 4.20 | am 22.09.2012 |
| MQ $m^3/s$ | 17.3 | | 26.0 | 8.71 | 16.9 | |
| HQ $m^3/s$ | 87.9 | am 06.01.2012 bei W= 482 cm | 87.9 | 30.9 | 87.9 | am 06.01.2012 bei W= 482 cm |
| Nq $l/(s km^2)$ | 1.87 | | 3.66 | 1.87 | 1.87 | |
| Mq $l/(s km^2)$ | 7.70 | | 11.6 | 3.88 | 7.52 | |
| Hq $l/(s km^2)$ | 39.1 | | 39.1 | 13.8 | 39.1 | |
| $h_N$ mm / $h_A$ mm | 244 | | 182 | 62 | 238 | |
| | 1938/2012 (*) 75 Jahre | | | | 1938/2012 | |
| NQ $m^3/s$ | 1.22 | am 17.09.1959 | 2.22 | 1.22 | 1.22 | am 17.09.1959 |
| MNQ $m^3/s$ | 4.79 | | 9.04 | 4.84 | 4.84 | |
| MQ $m^3/s$ | 21.3 | | 30.5 | 12.4 | 21.4 | |
| MHQ $m^3/s$ | 93.9 | | 91.0 | 47.4 | 94.4 | |
| HQ $m^3/s$ | 152 | am 02.11.1998 bei W= 579 cm | 152 | 149 | 152 | am 02.11.1998 bei W= 579 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.13 | | 4.02 | 2.15 | 2.15 | |
| Mq $l/(s km^2)$ | 9.48 | | 13.6 | 5.52 | 9.53 | |
| MHq $l/(s km^2)$ | 41.8 | | 40.5 | 21.1 | 42.0 | |
| $Mh_N$ mm / $Mh_A$ mm | 300 | | 214 | 88 | 301 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 1.22 | 0.543 | 17.09.1959 | 152 | 67.7 | 579 | 02.11.1998 |
| 2 | 1.70 | 0.757 | 10.07.1976 | 147 | 65.4 | 570 | 06.01.1987 |
| 3 | 1.80 | 0.801 | 03.08.1964 | 142 | 63.2 | 569 | 17.03.1981 |
| 4 | 1.87 | 0.833 | 30.07.1960 | 142 | 63.2 | 556 | 16.01.1968 |
| 5 | 2.12 | 0.944 | 12.08.1938 | 139 | 61.9 | 548 | 19.03.1994 |
| 6 | 2.29 | 1.02 | 04.06.1939 | 138 | 61.3 | 549 | 22.01.2008 |
| 7 | 2.30 | 1.02 | 25.07.1943 | 131 | 58.3 | 543 | 03.01.2003 |
| 8 | 2.30 | 1.02 | 25.06.1941 | 126 | 56.1 | 567 | 15.02.1946 |
| 9 | 2.40 | 1.07 | 24.08.1944 | 125 | 55.7 | 537 | 27.02.2002 |
| 10 | 2.50 | 1.11 | 24.10.1962 | 125 | 55.7 | 542 | 19.03.1987 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1938/2012 75 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 85.8 | 85.8 | | | |
| 364 | 80.6 | 80.6 | 150 | 107 | 41.2 |
| 363 | 80.2 | 80.2 | 149 | 101 | 36.7 |
| 362 | 80.2 | 80.2 | 149 | 94.7 | 35.3 |
| 361 | 80.2 | 80.2 | 149 | 90.7 | 34.0 |
| 360 | 76.0 | 76.0 | 149 | 86.9 | 33.1 |
| 359 | 75.1 | 75.1 | 143 | 84.3 | 33.1 |
| 358 | 74.6 | 74.6 | 136 | 81.7 | 33.1 |
| 357 | 70.5 | 70.5 | 132 | 79.2 | 32.1 |
| 356 | 69.8 | 69.8 | 126 | 77.0 | 31.5 |
| 350 | 59.6 | 60.2 | 108 | 66.8 | 29.6 |
| 340 | 46.1 | 48.7 | 93.6 | 55.6 | 25.7 |
| 330 | 38.6 | 33.9 | 84.1 | 47.4 | 22.6 |
| 320 | 32.5 | 29.2 | 75.7 | 41.5 | 20.4 |
| 300 | 26.1 | 23.4 | 65.6 | 33.2 | 18.4 |
| 270 | 18.1 | 17.3 | 45.2 | 25.9 | 13.9 |
| 240 | 15.4 | 15.2 | 36.8 | 21.2 | 9.61 |
| 210 | 13.2 | 13.1 | 31.0 | 17.7 | 5.48 |
| 183 | 10.9 | 11.0 | 27.0 | 15.0 | 5.08 |
| 150 | 9.59 | 10.1 | 23.4 | 12.5 | 4.48 |
| 130 | 8.96 | 9.59 | 20.6 | 11.1 | 4.13 |
| 120 | 8.76 | 9.41 | 19.5 | 10.5 | 3.63 |
| 110 | 8.59 | 9.04 | 19.0 | 9.81 | 3.16 |
| 100 | 8.32 | 8.52 | 18.5 | 9.25 | 2.88 |
| 90 | 8.22 | 8.22 | 17.1 | 8.71 | 2.47 |
| 80 | 7.98 | 7.98 | 15.7 | 8.27 | 2.34 |
| 70 | 7.48 | 7.48 | 15.1 | 7.79 | 2.14 |
| 60 | 7.07 | 7.07 | 14.5 | 7.28 | 1.92 |
| 50 | 6.59 | 6.59 | 13.9 | 6.78 | 1.85 |
| 40 | 6.02 | 6.02 | 13.3 | 6.21 | 1.77 |
| 30 | 5.69 | 5.69 | 12.7 | 5.59 | 1.70 |
| 25 | 5.55 | 5.55 | 12.5 | 5.25 | 1.63 |
| 20 | 5.41 | 5.41 | 11.8 | 4.91 | 1.55 |
| 15 | 5.27 | 5.27 | 11.6 | 4.51 | 1.55 |
| 10 | 5.17 | 5.17 | 11.1 | 3.91 | 1.42 |
| 9 | 5.12 | 5.12 | 11.1 | 3.79 | 1.42 |
| 8 | 5.09 | 5.09 | 10.8 | 3.51 | 1.42 |
| 7 | 5.08 | 5.08 | 10.7 | 3.35 | 1.42 |
| 6 | 5.00 | 5.00 | 10.6 | 3.23 | 1.42 |
| 5 | 4.98 | 4.98 | 10.6 | 3.02 | 1.35 |
| 4 | 4.97 | 4.97 | 10.6 | 2.88 | 1.35 |
| 3 | 4.62 | 4.62 | 10.5 | 2.61 | 1.35 |
| 2 | 4.35 | 4.35 | 10.5 | 2.35 | 1.35 |
| 1 | 4.28 | 4.28 | 9.91 | 2.00 | 1.35 |
| 0 | 4.20 | 4.20 | 9.65 | 1.22 | 1.22 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Hase
RB Alfhausen-Rieste seit 1987

Berechnung der Gebietsniederschläge und Abflußhöhen für die Reihe 1951 bis 2012

NLWKN

$A_{Eo}$ : 228 $km^2$

PNP : NN + 51.19 m

Lage: 1.5 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Wersen Nr. 3629101

Gewässer : Düte

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.905 | 0.788 | 3.35 | 2.49 | 2.74 | 1.50 | 1.25 | 1.38 | 0.714 | 0.745 | 0.578 | 0.591 | 0.869 | 0.906 |
| 2. | 0.886 | 1.48 | 7.92 | 2.34 | 2.60 | 1.49 | 1.23 | 0.913 | 0.760 | 0.805 | 0.493 | 0.577 | 1.08 | 1.15 |
| 3. | 0.830 | 1.66 | 4.99 | 2.21 | 2.46 | 1.47 | 1.23 | 1.22 | 0.735 | 0.825 | 0.491 | 0.657 | 0.916 | 1.09 |
| 4. | 0.830 | 1.62 | 5.83 | 2.16 | 2.37 | 1.54 | 1.19 | 1.44 | 0.713 | 0.778 | 0.463 | 2.42 | 1.06 | 1.38 |
| 5. | 0.796 | 1.58 | 15.3 | 2.10 | 2.66 | 1.42 | 1.23 | 1.73 | 0.688 | 0.909 | 0.479 | 2.68 | 1.35 | 1.58 |
| 6. | 0.795 | 1.64 | 9.07 | 2.01 | 2.42 | 1.40 | 1.22 | 1.16 | 0.700 | 0.870 | 0.476 | 4.47 | 1.03 | 1.22 |
| 7. | 0.788 | 3.02 | 6.85 | 1.96 | 2.33 | 1.42 | 1.21 | 1.28 | 0.698 | 0.720 | 0.477 | 2.10 | 1.36 | 1.12 |
| 8. | 0.792 | 2.81 | 6.14 | 1.91 | 3.92 | 1.34 | 1.15 | 1.24 | 1.93 | 0.845 | 0.481 | 1.16 | 1.16 | 1.03 |
| 9. | 0.793 | 2.61 | 4.66 | 1.92 | 2.72 | 1.68 | 1.25 | 1.16 | 1.96 | 0.746 | 0.469 | 0.987 | 1.05 | 1.68 |
| 10. | 0.803 | 1.80 | 4.10 | 1.88 | 2.52 | 2.34 | 1.24 | 0.888 | 0.929 | 0.665 | 0.497 | 0.899 | 0.978 | 5.37 |
| 11. | 0.792 | 1.52 | 3.60 | 1.82 | 2.44 | 1.79 | 1.42 | 0.859 | 0.936 | 0.648 | 0.777 | 0.902 | 1.01 | 2.51 |
| 12. | 0.775 | 1.72 | 4.39 | 1.80 | 2.32 | 1.69 | 1.08 | 1.10 | 1.07 | 0.607 | 1.03 | 0.859 | 0.909 | 1.80 |
| 13. | 0.770 | 2.08 | 6.09 | 1.86 | 2.15 | 1.63 | 1.01 | 1.33 | 1.30 | 0.588 | 0.570 | 0.899 | 0.873 | 1.62 |
| 14. | 0.783 | 2.66 | 4.10 | 2.02 | 2.07 | 1.50 | 1.02 | 0.902 | 1.22 | 0.586 | 0.575 | 0.977 | 0.873 | 1.54 |
| 15. | 0.791 | 2.43 | 3.46 | 2.44 | 2.00 | 1.43 | 1.06 | 0.862 | 1.82 | 0.559 | 0.785 | 0.831 | 0.850 | 4.15 |
| 16. | 0.804 | 5.80 | 3.14 | 2.19 | 1.98 | 1.39 | 1.28 | 1.50 | 1.11 | 0.704 | 0.533 | 0.809 | 0.840 | 2.80 |
| 17. | 0.805 | 7.02 | 2.91 | 2.59 | 1.91 | 1.33 | 1.06 | 1.52 | 4.18 | 0.554 | 0.502 | 0.845 | 0.837 | 2.39 |
| 18. | 0.775 | 3.64 | 2.78 | 2.47 | 1.88 | 1.34 | 0.988 | 1.04 | 1.76 | 0.538 | 0.506 | 0.884 | 0.951 | 2.96 |
| 19. | 0.792 | 3.03 | 7.78 | 4.38 | 1.80 | 1.33 | 0.957 | 0.940 | 2.78 | 0.519 | 0.508 | 0.764 | 1.06 | 2.33 |
| 20. | 0.767 | 3.44 | 8.25 | 2.83 | 1.72 | 1.27 | 0.941 | 0.794 | 2.13 | 0.505 | 0.543 | 0.709 | 0.920 | 1.98 |
| 21. | 0.764 | 5.13 | 9.15 | 2.48 | 1.74 | 1.58 | 0.952 | 0.804 | 1.24 | 0.520 | 0.511 | 0.699 | 0.906 | 2.14 |
| 22. | 0.774 | 3.39 | 9.64 | 2.47 | 1.71 | 1.69 | 0.874 | 0.802 | 1.05 | 0.521 | 0.526 | 0.704 | 0.855 | 2.78 |
| 23. | 0.766 | 3.24 | 10.1 | 2.93 | 1.66 | 1.69 | 0.886 | 0.811 | 0.960 | 0.508 | 0.516 | 0.699 | 0.871 | 9.70 |
| 24. | 0.747 | 5.78 | 5.82 | 3.17 | 1.60 | 1.42 | 0.905 | 0.986 | 0.886 | 0.551 | 1.60 | 0.750 | 1.11 | 6.32 |
| 25. | 0.761 | 4.19 | 4.53 | 4.00 | 1.56 | 1.79 | 0.848 | 1.76 | 0.831 | 0.749 | 1.24 | 0.757 | 1.08 | 4.55 |
| 26. | 0.782 | 3.40 | 3.84 | 3.11 | 1.56 | 1.56 | 0.828 | 1.28 | 0.766 | 0.618 | 0.930 | 0.756 | 1.03 | 5.43 |
| 27. | 0.780 | 3.21 | 3.84 | 2.82 | 1.54 | 1.34 | 0.813 | 0.876 | 0.758 | 0.678 | 0.955 | 0.733 | 1.19 | 6.01 |
| 28. | 0.866 | 2.83 | 3.39 | 2.76 | 1.52 | 1.57 | 0.823 | 0.879 | 0.979 | 0.562 | 0.847 | 0.699 | 1.00 | 3.66 |
| 29. | 0.793 | 2.67 | 3.16 | 2.86 | 1.50 | 1.36 | 0.817 | 0.803 | 0.887 | 0.529 | 0.685 | 0.723 | 0.969 | 3.03 |
| 30. | 0.802 | 4.55 | 2.95 | | 1.78 | 1.31 | 0.812 | 0.925 | 0.848 | 0.520 | 0.667 | 1.60 | 0.938 | 3.12 |
| 31. | | 3.23 | 2.72 | | 1.61 | | 0.860 | | 0.910 | 0.524 | | 0.981 | | 3.02 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 24. | 1. | 31. | 12. | 29. | 20. | 30. | 20. | 5. | 20. | 4. | 2. | 17. | 1. |
| NQ | 0.747 | 0.788 | 2.72 | 1.80 | 1.50 | 1.27 | 0.812 | 0.794 | 0.688 | 0.505 | 0.463 | 0.577 | 0.837 | 0.906 |
| MQ | 0.797 | 3.03 | 5.60 | 2.48 | 2.09 | 1.52 | 1.05 | 1.11 | 1.23 | 0.645 | 0.657 | 1.10 | 0.997 | 2.91 |
| HQ | 1.09 | 11.7 | 22.8 | 6.58 | 5.12 | 3.29 | 1.98 | 2.75 | 6.79 | 1.38 | 2.49 | 7.26 | 1.83 | 14.6 |
| Tag | 28. | 16. | 5. | 19. | 8. | 10. | 11. | 5. | 17. | 5. | 24. | 6. | 5. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 9 | 36 | 66 | 27 | 25 | 17 | 12 | 13 | 14 | 8 | 7 | 13 | 11 | 34 |

| | 1957/2011 | | 1958/2012 – 55 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1959 | 1959 | 1963 | 1963 | 1963 | 1960 | 1960 | 1960 | 1964 | 1959 | 1964 | 1959 | 1959 | 1959 |
| NQ | 0.329 | 0.388 | 0.440 | 0.509 | 0.523 | 0.512 | 0.333 | 0.196 | 0.110 | 0.211 | 0.250 | 0.249 | 0.329 | 0.388 |
| MNQ | 1.18 | 1.65 | 2.08 | 2.13 | 2.01 | 1.68 | 1.19 | 0.904 | 0.769 | 0.697 | 0.771 | 0.922 | 1.18 | 1.64 |
| MQ | 2.48 | 3.76 | 4.47 | 3.92 | 3.65 | 2.73 | 1.91 | 1.51 | 1.38 | 1.29 | 1.32 | 1.72 | 2.47 | 3.74 |
| MHQ | 12.4 | 17.0 | 18.2 | 14.9 | 14.7 | 8.89 | 7.79 | 8.80 | 8.02 | 8.37 | 7.47 | 9.47 | 12.3 | 16.9 |
| HQ | 36.9 | 50.9 | 41.6 | 38.3 | 40.4 | 28.5 | 30.9 | 73.1 | 39.2 | 71.2 | 33.9 | 47.8 | 36.9 | 50.9 |
| Jahr | 1990 | 1986 | 1985+ | 2002 | 1992 | 1994 | 2001 | 1981 | 1981 | 2010 | 1993 | 1998 | 1990 | 1986 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 28 | 44 | 53 | 43 | 43 | 31 | 22 | 17 | 16 | 15 | 15 | 20 | 28 | 44 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.463 | am 04.09.2012 | 0.747 | 0.463 | 0.463 | am 04.09.2012 |
| MQ $m^3/s$ | 1.78 | | 2.60 | 0.966 | 1.79 | |
| HQ $m^3/s$ | 22.8 | am 05.01.2012 bei W= 256 cm | 22.8 | 7.26 | 22.8 | am 05.01.2012 bei W= 256 cm |
| Nq $l/(s km^2)$ | 2.03 | | 3.28 | 2.03 | 2.03 | |
| Mq $l/(s km^2)$ | 7.81 | | 11.4 | 4.24 | 7.85 | |
| Hq $l/(s km^2)$ | 99.9 | | 99.9 | 31.9 | 99.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 247 | | 179 | 67 | 248 | |

| | 1958/2012 (*) 55 Jahre | | | | 1958/2012 | |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.110 | am 21.07.1964 | 0.329 | 0.110 | 0.110 | am 21.07.1964 |
| MNQ $m^3/s$ | 0.571 | | 1.03 | 0.595 | 0.589 | |
| MQ $m^3/s$ | 2.51 | | 3.51 | 1.52 | 2.50 | |
| MHQ $m^3/s$ | 28.1 | | 25.5 | 16.6 | 28.3 | |
| HQ $m^3/s$ | 73.1 | am 30.06.1981 bei W= 341 cm | 50.9 | 73.1 | 73.1 | am 30.06.1981 bei W= 341 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 2.50 | | 4.52 | 2.61 | 2.58 | |
| Mq $l/(s km^2)$ | 11.0 | | 15.4 | 6.67 | 11.0 | |
| MHq $l/(s km^2)$ | 123 | | 112 | 72.8 | 124 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 348 | | 242 | 106 | 347 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.110 | 0.482 | 21.07.1964 | 73.1 | 321 | 341 | 30.06.1981 |
| 2 | 0.127 | 0.557 | 17.07.1960 | 71.2 | 312 | 367 | 27.08.2010 |
| 3 | 0.211 | 0.925 | 15.08.1959 | 50.9 | 223 | 300 | 31.12.1986 |
| 4 | 0.322 | 1.41 | 01.08.1963 | 47.8 | 210 | 294 | 28.10.1998 |
| 5 | 0.325 | 1.43 | 24.08.1976 | 44.9 | 197 | 292 | 04.10.1993 |
| 6 | 0.342 | 1.50 | 09.08.1973 | 41.6 | 182 | 281 | 03.01.2003 |
| 7 | 0.349 | 1.53 | 11.11.1971 | 41.6 | 182 | 280 | 30.01.1985 |
| 8 | 0.351 | 1.54 | 01.10.1962 | 40.5 | 178 | 278 | 28.01.1994 |
| 9 | 0.383 | 1.68 | 05.08.1996 | 40.4 | 177 | 279 | 13.03.1992 |
| 10 | 0.396 | 1.74 | 22.08.2010 | 40.2 | 176 | 277 | 31.12.1993 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1958/2012 55 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 15.3 | 15.3 | | | |
| 364 | 10.1 | 10.1 | 59.2 | 20.1 | 4.94 |
| 363 | 9.64 | 9.70 | 42.8 | 16.8 | 4.94 |
| 362 | 9.15 | 9.64 | 34.3 | 14.7 | 3.64 |
| 361 | 9.07 | 9.15 | 26.2 | 13.1 | 3.51 |
| 360 | 8.25 | 9.07 | 24.1 | 12.1 | 3.49 |
| 359 | 7.92 | 8.25 | 22.5 | 11.3 | 3.46 |
| 358 | 7.78 | 7.92 | 22.1 | 10.7 | 3.17 |
| 357 | 7.02 | 7.78 | 21.7 | 10.2 | 3.05 |
| 356 | 6.85 | 6.85 | 20.4 | 9.68 | 3.04 |
| 350 | 5.78 | 5.82 | 14.1 | 7.72 | 2.76 |
| 340 | 4.18 | 4.18 | 11.6 | 6.02 | 2.37 |
| 330 | 3.44 | 3.46 | 9.87 | 5.06 | 2.06 |
| 320 | 3.14 | 2.96 | 8.31 | 4.41 | 1.86 |
| 300 | 2.67 | 2.51 | 6.51 | 3.59 | 1.53 |
| 270 | 2.02 | 2.00 | 4.83 | 2.85 | 1.27 |
| 240 | 1.71 | 1.63 | 4.03 | 2.36 | 0.977 |
| 210 | 1.43 | 1.39 | 3.19 | 1.99 | 0.760 |
| 183 | 1.24 | 1.23 | 2.87 | 1.72 | 0.678 |
| 150 | 0.941 | 1.02 | 2.30 | 1.45 | 0.575 |
| 130 | 0.884 | 0.936 | 2.20 | 1.29 | 0.540 |
| 120 | 0.859 | 0.909 | 2.15 | 1.21 | 0.520 |
| 110 | 0.825 | 0.887 | 2.12 | 1.14 | 0.495 |
| 100 | 0.805 | 0.862 | 2.04 | 1.08 | 0.475 |
| 90 | 0.793 | 0.847 | 1.93 | 1.01 | 0.462 |
| 80 | 0.778 | 0.812 | 1.92 | 0.948 | 0.440 |
| 70 | 0.766 | 0.777 | 1.80 | 0.894 | 0.427 |
| 60 | 0.745 | 0.745 | 1.78 | 0.840 | 0.412 |
| 50 | 0.700 | 0.700 | 1.72 | 0.787 | 0.393 |
| 40 | 0.657 | 0.657 | 1.63 | 0.735 | 0.307 |
| 30 | 0.570 | 0.570 | 1.56 | 0.676 | 0.272 |
| 25 | 0.543 | 0.543 | 1.53 | 0.645 | 0.263 |
| 20 | 0.524 | 0.524 | 1.39 | 0.607 | 0.239 |
| 15 | 0.516 | 0.516 | 1.29 | 0.556 | 0.226 |
| 10 | 0.505 | 0.505 | 1.20 | 0.505 | 0.179 |
| 9 | 0.502 | 0.502 | 1.14 | 0.493 | 0.177 |
| 8 | 0.497 | 0.497 | 1.14 | 0.482 | 0.176 |
| 7 | 0.493 | 0.493 | 1.13 | 0.468 | 0.165 |
| 6 | 0.491 | 0.491 | 1.13 | 0.449 | 0.155 |
| 5 | 0.481 | 0.481 | 1.11 | 0.430 | 0.154 |
| 4 | 0.479 | 0.479 | 1.09 | 0.409 | 0.149 |
| 3 | 0.477 | 0.477 | 1.09 | 0.384 | 0.140 |
| 2 | 0.476 | 0.476 | 1.09 | 0.348 | 0.132 |
| 1 | 0.469 | 0.469 | 1.05 | 0.269 | 0.124 |
| 0 | 0.463 | 0.463 | 1.04 | 0.110 | 0.110 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.
übergreifendes Gewässer Düte
hoher Anteil versiegelter Flächen

NLWKN

$A_{Eo}$ : 506 $km^2$

PNP : NN + 19.00 m

Lage: 7.4 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Uptloh Nr. 3647101

Gewässer : Lager Hase

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 2.35 | 2.34 | 10.2 | 6.16 | 6.55 | 3.39 | 2.43 | 2.94 | 1.91 | 2.22 | 1.06 | 1.63 | 2.16 | 2.29 |
| 2. | 2.36 | 2.68 | 15.2 | 7.11 | 6.17 | 3.29 | 2.48 | 2.57 | 1.76 | 1.89 | 1.13 | 1.58 | 2.22 | 2.29 |
| 3. | 2.34 | 2.96 | 18.9 | 6.12 | 5.76 | 3.29 | 3.29 | 2.27 | 1.68 | 1.66 | 1.18 | 1.63 | 2.17 | 2.33 |
| 4. | 2.31 | 3.34 | 20.9 | 4.74 | 5.44 | 3.20 | 4.08 | 2.35 | 1.61 | 1.54 | 1.16 | 2.07 | 2.14 | 2.59 |
| 5. | 2.26 | 3.49 | 24.9 | 4.33 | 5.45 | 3.08 | 3.06 | 2.57 | 1.56 | 1.46 | 1.10 | 3.30 | 2.22 | 3.12 |
| 6. | 2.21 | 4.69 | 27.2 | 4.08 | 5.16 | 3.05 | 2.69 | 2.44 | 1.53 | 1.42 | 1.05 | 4.24 | 2.33 | 2.94 |
| 7. | 2.14 | 5.59 | 23.1 | 4.42 | 4.80 | 3.15 | 2.59 | 2.39 | 1.50 | 1.46 | 1.03 | 5.20 | 2.37 | 2.68 |
| 8. | 2.14 | 7.16 | 26.0 | 3.82 | 7.14 | 2.97 | 2.50 | 3.30 | 1.47 | 1.51 | 1.01 | 3.64 | 2.45 | 2.53 |
| 9. | 2.13 | 9.25 | 24.7 | 3.74 | 6.40 | 3.06 | 2.52 | 3.58 | 1.55 | 1.62 | 0.995 | 2.90 | 2.52 | 2.69 |
| 10. | 2.12 | 11.0 | 20.5 | 3.53 | 6.22 | 4.59 | 2.78 | 3.04 | 1.76 | 1.73 | 0.993 | 2.56 | 2.48 | 5.26 |
| 11. | 2.09 | 8.56 | 15.8 | 3.38 | 5.51 | 4.04 | 3.25 | 2.61 | 1.74 | 1.73 | 1.01 | 2.40 | 2.41 | 5.23 |
| 12. | 2.07 | 6.68 | 12.0 | 3.33 | 4.81 | 3.66 | 2.87 | 2.42 | 1.65 | 1.58 | 1.04 | 2.34 | 2.28 | 4.26 |
| 13. | 2.01 | 6.44 | 12.8 | 3.41 | 4.53 | 3.59 | 2.51 | 2.41 | 1.58 | 1.40 | 1.10 | 2.63 | 2.17 | 4.07 |
| 14. | 1.99 | 8.01 | 11.5 | 3.77 | 4.36 | 3.47 | 2.37 | 2.32 | 1.65 | 1.29 | 1.16 | 2.68 | 2.12 | 3.79 |
| 15. | 2.05 | 9.99 | 9.07 | 4.38 | 4.27 | 3.31 | 2.35 | 2.14 | 1.94 | 1.19 | 1.20 | 2.53 | 2.11 | 5.31 |
| 16. | 2.02 | 10.4 | 7.74 | 4.06 | 4.23 | 3.17 | 2.56 | 2.10 | 2.14 | 1.10 | 1.22 | 2.36 | 2.09 | 6.08 |
| 17. | 2.03 | 19.0 | 7.07 | 4.13 | 4.47 | 3.05 | 2.41 | 2.17 | 2.38 | 1.06 | 1.21 | 2.22 | 2.08 | 5.57 |
| 18. | 2.06 | 15.7 | 6.63 | 4.41 | 4.10 | 3.04 | 2.21 | 2.20 | 3.00 | 1.08 | 1.18 | 2.16 | 2.12 | 6.01 |
| 19. | 2.07 | 10.9 | 8.27 | 6.39 | 3.89 | 2.97 | 2.12 | 2.17 | 3.26 | 1.05 | 1.14 | 2.14 | 2.33 | 5.87 |
| 20. | 2.07 | 9.96 | 14.9 | 6.02 | 3.64 | 2.84 | 2.14 | 2.06 | 3.56 | 0.976 | 1.13 | 2.06 | 2.28 | 5.32 |
| 21. | 2.08 | 10.2 | 20.6 | 4.93 | 3.64 | 2.78 | 2.72 | 1.96 | 3.12 | 0.919 | 1.13 | 2.00 | 2.22 | 4.72 |
| 22. | 2.15 | 9.10 | 25.0 | 4.88 | 3.55 | 2.83 | 2.55 | 1.90 | 2.52 | 0.868 | 1.16 | 1.99 | 2.17 | 4.62 |
| 23. | 2.16 | 9.41 | 27.4 | 5.43 | 3.52 | 3.48 | 2.18 | 1.84 | 2.09 | 0.855 | 1.13 | 1.96 | 2.13 | 10.4 |
| 24. | 2.15 | 9.93 | 23.7 | 6.66 | 3.44 | 3.06 | 2.11 | 1.82 | 1.83 | 0.880 | 1.21 | 1.95 | 2.19 | 16.7 |
| 25. | 2.19 | 11.0 | 19.0 | 8.62 | 3.34 | 3.12 | 1.95 | 2.58 | 1.62 | 0.909 | 1.82 | 1.99 | 2.40 | 14.9 |
| 26. | 2.23 | 8.80 | 14.0 | 7.86 | 3.22 | 2.90 | 1.86 | 2.98 | 1.47 | 0.936 | 1.97 | 1.99 | 2.47 | 16.4 |
| 27. | 2.26 | 7.46 | 11.6 | 6.99 | 3.22 | 2.63 | 1.81 | 2.62 | 1.37 | 0.995 | 1.80 | 1.95 | 2.65 | 12.6 |
| 28. | 2.25 | 6.66 | 9.68 | 6.86 | 3.22 | 2.71 | 1.78 | 2.38 | 1.36 | 1.06 | 1.73 | 1.88 | 2.55 | 10.3 |
| 29. | 2.27 | 6.24 | 8.33 | 6.80 | 3.23 | 2.74 | 1.76 | 2.24 | 2.25 | 1.08 | 1.70 | 1.85 | 2.48 | 7.92 |
| 30. | 2.32 | 9.72 | 7.34 | | 3.59 | 2.54 | 1.76 | 2.07 | 3.04 | 1.06 | 1.68 | 1.95 | 2.38 | 7.17 |
| 31. | | 13.4 | 6.35 | | 3.60 | | 2.04 | | 2.67 | 1.03 | | 2.10 | | 6.53 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 14. | 1. | 31. | 12. | 28. | 30. | 29. | 24. | 28. | 23. | 10. | 2. | 17. | 1.+ |
| NQ | 1.99 | 2.34 | 6.35 | 3.33 | 3.22 | 2.54 | 1.76 | 1.82 | 1.36 | 0.855 | 0.993 | 1.58 | 2.08 | 2.29 |
| MQ | 2.16 | 8.39 | 15.8 | 5.18 | 4.53 | 3.17 | 2.44 | 2.41 | 2.02 | 1.28 | 1.25 | 2.38 | 2.29 | 6.21 |
| HQ | 2.36 | 19.8 | 29.3 | 8.84 | 7.67 | 6.60 | 4.99 | 3.88 | 3.61 | 2.43 | 2.11 | 5.66 | 2.70 | 18.2 |
| Tag | 3. | 17. | 5. | 25. | 8. | 10. | 3. | 8. | 20. | 1. | 26. | 7. | 27. | 24. |
| $h_N$ mm / $h_A$ mm | 11 | 44 | 84 | 26 | 24 | 16 | 13 | 12 | 11 | 7 | 6 | 13 | 12 | 33 |

| | 1962/2011 | | 1963/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 50 Jahre | | | | | | | | | | | |
| Jahr | 1971 | 1975 | 1970 | 1972 | 1972 | 1996 | 1971 | 1963 | 1964 | 1964 | 1964 | 1964 | 1971 | 1975 |
| NQ | 0.875 | 1.24 | 1.29 | 1.30 | 1.50 | 1.57 | 0.856 | 0.550 | 0.125 | 0.118 | 0.098 | 0.251 | 0.875 | 1.24 |
| MNQ | 2.05 | 2.70 | 3.57 | 3.72 | 3.77 | 2.95 | 1.93 | 1.47 | 1.19 | 1.08 | 1.20 | 1.65 | 2.06 | 2.72 |
| MQ | 4.36 | 6.65 | 8.37 | 7.51 | 7.46 | 5.25 | 3.34 | 2.38 | 2.28 | 1.94 | 2.31 | 3.03 | 4.37 | 6.70 |
| MHQ | 11.7 | 16.6 | 19.8 | 17.7 | 18.8 | 11.4 | 8.18 | 7.10 | 6.48 | 4.78 | 5.85 | 7.54 | 11.7 | 16.6 |
| HQ | 45.5 | 35.6 | 41.3 | 54.5 | 56.9 | 33.0 | 34.1 | 37.1 | 28.2 | 15.8 | 32.1 | 50.3 | 45.5 | 35.6 |
| Jahr | 1998 | 1986 | 1968 | 1970 | 1981 | 1970 | 1975 | 1981 | 1981 | 2010 | 1993 | 1998 | 1998 | 1986 |
| $Mh_N$ mm / $Mh_A$ mm | 22 | 35 | 44 | 37 | 39 | 27 | 18 | 12 | 12 | 10 | 12 | 16 | 22 | 35 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.855 | am 23.08.2012 | 1.99 | 0.855 | 0.855 | am 23.08.2012 |
| MQ $m^3/s$ | 4.27 | | 6.60 | 1.97 | 4.10 | |
| HQ $m^3/s$ | 29.3 | am 05.01.2012 bei W= 422 cm | 29.3 | 5.66 | 29.3 | am 05.01.2012 bei W= 422 cm |
| Nq $l/(s km^2)$ | 1.69 | | 3.93 | 1.69 | 1.69 | |
| Mq $l/(s km^2)$ | 8.44 | | 13.0 | 3.89 | 8.10 | |
| Hq $l/(s km^2)$ | 57.8 | | 57.8 | 11.2 | 57.8 | |
| $h_N$ mm / $h_A$ mm | 267 | | 205 | 62 | 256 | |
| | 1963/2012 (*) 50 Jahre | | | | 1963/2012 | |
| NQ $m^3/s$ | 0.098 | am 15.09.1964 | 0.875 | 0.098 | 0.098 | am 15.09.1964 |
| MNQ $m^3/s$ | 0.876 | | 1.82 | 0.888 | 0.888 | |
| MQ $m^3/s$ | 4.56 | | 6.61 | 2.55 | 4.57 | |
| MHQ $m^3/s$ | 30.3 | | 28.6 | 14.8 | 30.0 | |
| HQ $m^3/s$ | 56.9 | am 13.03.1981 bei W= 508 cm | 56.9 | 50.3 | 56.9 | am 13.03.1981 bei W= 508 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 1.73 | | 3.60 | 1.75 | 1.75 | |
| Mq $l/(s km^2)$ | 9.01 | | 13.1 | 5.04 | 9.03 | |
| MHq $l/(s km^2)$ | 59.9 | | 56.5 | 29.2 | 59.3 | |
| $Mh_N$ mm / $Mh_A$ mm | 285 | | 205 | 80 | 286 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.098 | 0.194 | 15.09.1964 | 56.9 | 112 | 508 | 13.03.1981 |
| 2 | 0.212 | 0.419 | 13.07.1971 | 54.5 | 108 | 469 | 23.02.1970 |
| 3 | 0.376 | 0.743 | 27.08.1982 | 50.3 | 99.4 | 512 | 29.10.1998 |
| 4 | 0.486 | 0.960 | 02.09.1975 | 48.6 | 96.0 | 481 | 05.03.1979 |
| 5 | 0.542 | 1.07 | 25.08.1976 | 41.3 | 81.6 | 469 | 16.01.1968 |
| 6 | 0.550 | 1.09 | 06.08.1989 | 39.6 | 78.3 | 467 | 03.01.2003 |
| 7 | 0.550 | 1.09 | 14.06.1963 | 39.2 | 77.5 | 470 | 18.03.1987 |
| 8 | 0.558 | 1.10 | 10.08.2006 | 38.1 | 75.2 | 484 | 22.01.2008 |
| 9 | 0.577 | 1.14 | 13.09.1973 | 37.3 | 73.7 | 472 | 19.03.1994 |
| 10 | 0.580 | 1.15 | 12.08.2003 | 37.1 | 73.3 | 477 | 30.06.1981 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1963/2012 50 Kalenderjahre: Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 27.4 | 27.4 | | | |
| 364 | 27.2 | 27.2 | 53.9 | 30.5 | 10.7 |
| 363 | 26.0 | 26.0 | 51.5 | 27.4 | 9.90 |
| 362 | 25.0 | 25.0 | 47.9 | 25.9 | 9.40 |
| 361 | 24.9 | 24.9 | 45.4 | 24.6 | 9.35 |
| 360 | 24.7 | 24.7 | 44.8 | 23.1 | 9.17 |
| 359 | 23.7 | 23.7 | 40.7 | 21.7 | 8.97 |
| 358 | 23.1 | 23.1 | 37.8 | 20.7 | 8.76 |
| 357 | 20.9 | 20.9 | 35.2 | 20.0 | 8.09 |
| 356 | 20.6 | 20.6 | 31.2 | 19.4 | 7.98 |
| 350 | 15.7 | 15.8 | 26.2 | 15.8 | 6.91 |
| 340 | 11.5 | 10.4 | 21.7 | 12.2 | 5.62 |
| 330 | 9.41 | 7.74 | 19.6 | 10.2 | 4.42 |
| 320 | 7.86 | 6.63 | 16.1 | 8.62 | 4.30 |
| 300 | 6.24 | 5.32 | 11.9 | 6.79 | 3.51 |
| 270 | 4.23 | 4.06 | 8.76 | 5.13 | 2.62 |
| 240 | 3.38 | 3.30 | 6.87 | 4.13 | 2.06 |
| 210 | 2.98 | 2.94 | 5.34 | 3.45 | 1.81 |
| 183 | 2.57 | 2.56 | 4.66 | 2.95 | 1.37 |
| 150 | 2.27 | 2.34 | 4.06 | 2.44 | 1.14 |
| 130 | 2.15 | 2.18 | 3.82 | 2.19 | 0.974 |
| 120 | 2.11 | 2.16 | 3.71 | 2.08 | 0.936 |
| 110 | 2.07 | 2.10 | 3.57 | 1.97 | 0.821 |
| 100 | 2.00 | 2.00 | 3.42 | 1.86 | 0.637 |
| 90 | 1.91 | 1.91 | 3.31 | 1.76 | 0.535 |
| 80 | 1.81 | 1.81 | 3.00 | 1.66 | 0.422 |
| 70 | 1.74 | 1.74 | 2.76 | 1.57 | 0.280 |
| 60 | 1.63 | 1.63 | 2.69 | 1.48 | 0.231 |
| 50 | 1.50 | 1.50 | 2.53 | 1.37 | 0.187 |
| 40 | 1.22 | 1.22 | 2.33 | 1.27 | 0.169 |
| 30 | 1.14 | 1.14 | 2.18 | 1.14 | 0.143 |
| 25 | 1.13 | 1.13 | 2.09 | 1.07 | 0.133 |
| 20 | 1.08 | 1.08 | 1.96 | 1.01 | 0.131 |
| 15 | 1.06 | 1.06 | 1.87 | 0.935 | 0.128 |
| 10 | 1.03 | 1.03 | 1.78 | 0.826 | 0.127 |
| 9 | 1.01 | 1.01 | 1.74 | 0.802 | 0.125 |
| 8 | 1.01 | 1.01 | 1.73 | 0.776 | 0.125 |
| 7 | 0.993 | 0.993 | 1.71 | 0.751 | 0.124 |
| 6 | 0.976 | 0.976 | 1.70 | 0.721 | 0.124 |
| 5 | 0.936 | 0.936 | 1.70 | 0.678 | 0.121 |
| 4 | 0.919 | 0.919 | 1.67 | 0.626 | 0.118 |
| 3 | 0.909 | 0.909 | 1.66 | 0.545 | 0.116 |
| 2 | 0.880 | 0.880 | 1.64 | 0.424 | 0.108 |
| 1 | 0.868 | 0.868 | 1.63 | 0.187 | 0.100 |
| 0 | 0.855 | 0.855 | 1.62 | 0.098 | 0.098 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Carumer Geest

NLWKN

$A_{Eo}$ : 81.7 $km^2$

PNP : NN + 22.10 m

Lage: 17.5 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Augustenfeld Nr. 3672106

Gewässer : Südradde

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.397 | 0.347 | 1.36 | 0.756 | 0.909 | 0.621 | 0.559 | 0.437 | 0.386 | 0.629 | 0.377 | 0.454 | 0.483 | 0.469 |
| 2. | 0.396 | 0.412 | 3.84 | 0.703 | 0.849 | 0.624 | 0.546 | 0.411 | 0.375 | 0.578 | 0.383 | 0.460 | 0.511 | 0.495 |
| 3. | 0.396 | 0.444 | 2.73 | 0.692 | 0.815 | 0.607 | 0.593 | 0.423 | 0.382 | 0.535 | 0.383 | 0.476 | 0.502 | 0.483 |
| 4. | 0.395 | 0.445 | 2.53 | 0.646 | 0.810 | 0.601 | 0.615 | 0.436 | 0.373 | 0.500 | 0.364 | 0.749 | 0.511 | 0.544 |
| 5. | 0.394 | 0.545 | 4.77 | 0.642 | 0.818 | 0.602 | 0.589 | 0.436 | 0.374 | 0.493 | 0.368 | 1.17 | 0.511 | 0.577 |
| 6. | 0.383 | 0.990 | 2.77 | 0.603 | 0.786 | 0.603 | 0.555 | 0.426 | 0.350 | 0.496 | 0.354 | 2.23 | 0.513 | 0.532 |
| 7. | 0.377 | 0.800 | 2.75 | 0.582 | 0.810 | 0.610 | 0.552 | 0.429 | 0.329 | 0.516 | 0.357 | 1.11 | 0.594 | 0.501 |
| 8. | 0.377 | 1.04 | 4.18 | 0.590 | 1.00 | 0.589 | 0.551 | 0.437 | 0.662 | 0.623 | 0.358 | 0.731 | 0.570 | 0.469 |
| 9. | 0.377 | 1.62 | 2.50 | 0.591 | 0.838 | 0.626 | 0.555 | 0.422 | 0.686 | 0.754 | 0.343 | 0.641 | 0.596 | 0.753 |
| 10. | 0.377 | 1.34 | 1.90 | 0.585 | 0.814 | 0.690 | 0.589 | 0.407 | 0.512 | 0.608 | 0.328 | 0.578 | 0.582 | 1.31 |
| 11. | 0.376 | 0.787 | 1.53 | 0.559 | 0.782 | 0.751 | 0.619 | 0.403 | 0.442 | 0.520 | 0.337 | 0.544 | 0.569 | 0.748 |
| 12. | 0.375 | 0.715 | 1.46 | 0.561 | 0.771 | 0.848 | 0.581 | 0.411 | 0.480 | 0.477 | 0.334 | 0.578 | 0.543 | 0.665 |
| 13. | 0.374 | 0.854 | 1.92 | 0.583 | 0.743 | 0.846 | 0.543 | 0.393 | 0.497 | 0.430 | 0.340 | 0.696 | 0.512 | 0.673 |
| 14. | 0.370 | 1.51 | 1.41 | 0.606 | 0.715 | 0.788 | 0.533 | 0.382 | 0.606 | 0.392 | 0.349 | 0.704 | 0.512 | 0.667 |
| 15. | 0.362 | 1.16 | 1.19 | 0.675 | 0.702 | 0.738 | 0.560 | 0.393 | 0.894 | 0.377 | 0.352 | 0.616 | 0.513 | 1.50 |
| 16. | 0.359 | 1.94 | 1.06 | 0.639 | 0.692 | 0.714 | 0.586 | 0.390 | 0.713 | 0.370 | 0.359 | 0.580 | 0.485 | 1.09 |
| 17. | 0.359 | 1.78 | 0.997 | 0.684 | 0.661 | 0.692 | 0.562 | 0.379 | 0.996 | 0.363 | 0.349 | 0.569 | 0.476 | 0.958 |
| 18. | 0.358 | 1.15 | 0.958 | 0.701 | 0.668 | 0.665 | 0.533 | 0.386 | 1.31 | 0.354 | 0.349 | 0.549 | 0.496 | 1.25 |
| 19. | 0.358 | 1.07 | 1.56 | 0.979 | 0.652 | 0.652 | 0.510 | 0.385 | 1.21 | 0.342 | 0.350 | 0.535 | 0.510 | 0.918 |
| 20. | 0.348 | 1.23 | 1.98 | 0.766 | 0.626 | 0.629 | 0.505 | 0.374 | 1.12 | 0.319 | 0.354 | 0.510 | 0.509 | 0.782 |
| 21. | 0.334 | 1.15 | 2.43 | 0.749 | 0.626 | 0.610 | 0.493 | 0.362 | 0.786 | 0.435 | 0.360 | 0.510 | 0.496 | 0.723 |
| 22. | 0.330 | 1.06 | 2.70 | 0.747 | 0.628 | 0.609 | 0.477 | 0.351 | 0.656 | 0.493 | 0.366 | 0.510 | 0.480 | 0.764 |
| 23. | 0.327 | 1.04 | 2.53 | 0.928 | 0.628 | 0.607 | 0.470 | 0.340 | 0.587 | 0.373 | 0.372 | 0.504 | 0.474 | 3.11 |
| 24. | 0.328 | 1.69 | 1.82 | 1.04 | 0.629 | 0.606 | 0.512 | 0.452 | 0.534 | 0.358 | 0.507 | 0.510 | 0.477 | 1.69 |
| 25. | 0.331 | 1.24 | 1.40 | 1.16 | 0.620 | 0.599 | 0.462 | 0.920 | 0.504 | 0.375 | 0.586 | 0.510 | 0.507 | 2.76 |
| 26. | 0.332 | 1.03 | 1.22 | 0.976 | 0.592 | 0.579 | 0.442 | 0.576 | 0.476 | 0.411 | 0.594 | 0.488 | 0.506 | 1.76 |
| 27. | 0.342 | 0.946 | 1.35 | 0.921 | 0.596 | 0.563 | 0.437 | 0.445 | 0.452 | 0.412 | 0.582 | 0.475 | 0.506 | 1.60 |
| 28. | 0.338 | 0.884 | 1.13 | 0.952 | 0.594 | 0.577 | 0.427 | 0.427 | 0.799 | 0.390 | 0.564 | 0.476 | 0.501 | 1.10 |
| 29. | 0.340 | 0.907 | 1.02 | 0.954 | 0.606 | 0.576 | 0.418 | 0.413 | 1.08 | 0.387 | 0.493 | 0.476 | 0.490 | 1.00 |
| 30. | 0.339 | 2.04 | 0.917 | | 0.639 | 0.560 | 0.424 | 0.399 | 0.845 | 0.394 | 0.467 | 0.508 | 0.469 | 0.938 |
| 31. | | 1.44 | 0.817 | | 0.637 | | 0.427 | | 0.711 | 0.400 | | 0.499 | | 0.889 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 23. | 1. | 31. | 11. | 26. | 30. | 29. | 23. | 7. | 20. | 10. | 1. | 30. | 1.+ |
| NQ | 0.327 | 0.347 | 0.817 | 0.559 | 0.592 | 0.560 | 0.418 | 0.340 | 0.329 | 0.319 | 0.328 | 0.454 | 0.469 | 0.469 |
| MQ | 0.362 | 1.08 | 1.96 | 0.744 | 0.718 | 0.646 | 0.523 | 0.428 | 0.649 | 0.455 | 0.399 | 0.644 | 0.513 | 1.02 |
| HQ | 0.397 | 3.12 | 6.57 | 1.37 | 1.08 | 1.03 | 0.674 | 1.13 | 1.60 | 0.832 | 0.699 | 3.72 | 0.705 | 4.40 |
| Tag | 1. | 16. | 5. | 25. | 8. | 12. | 3. | 24. | 8. | 21. | 25. | 6. | 7. | 23. |
| $h_N$ mm / $h_A$ mm | 11 | 35 | 64 | 23 | 24 | 20 | 17 | 14 | 21 | 15 | 13 | 21 | 16 | 33 |
| | 1958/2011 | | 1959/2012 | | | | | | 54 Jahre | | | | | |
| Jahr | 1960 | 1959 | 1960 | 1959 | 1960 | 1960 | 2005 | 1960 | 1960 | 1959 | 1959 | 1959 | 1960 | 1959 |
| NQ | 0.050 | 0.200 | 0.170 | 0.250 | 0.210 | 0.170 | 0.064 | 0.080 | 0.070 | 0.080 | 0.060 | 0.060 | 0.050 | 0.200 |
| MNQ | 0.585 | 0.718 | 0.821 | 0.824 | 0.809 | 0.720 | 0.587 | 0.501 | 0.445 | 0.414 | 0.447 | 0.497 | 0.585 | 0.717 |
| MQ | 0.856 | 1.13 | 1.30 | 1.18 | 1.17 | 0.947 | 0.770 | 0.697 | 0.696 | 0.605 | 0.600 | 0.685 | 0.854 | 1.13 |
| MHQ | 2.16 | 3.10 | 3.79 | 2.99 | 3.17 | 1.76 | 1.41 | 1.49 | 1.96 | 1.61 | 1.37 | 1.72 | 2.16 | 3.14 |
| HQ | 8.20 | 12.2 | 12.3 | 9.20 | 10.2 | 8.87 | 7.36 | 8.40 | 10.3 | 13.8 | 9.47 | 14.1 | 8.20 | 12.2 |
| Jahr | 1963 | 1960 | 1968 | 1962 | 1987 | 1994 | 1983 | 1981 | 1993 | 1963 | 1993 | 1998 | 1963 | 1960 |
| $Mh_N$ mm / $Mh_A$ mm | 27 | 37 | 43 | 36 | 38 | 30 | 25 | 22 | 23 | 20 | 19 | 22 | 27 | 37 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.319 | am 20.08.2012 | 0.327 | 0.319 | 0.319 | am 20.08.2012 |
| MQ $m^3/s$ | 0.720 | | 0.925 | 0.518 | 0.728 | |
| HQ $m^3/s$ | 6.57 | am 05.01.2012 bei W= 104 cm | 6.57 | 3.72 | 6.57 | am 05.01.2012 bei W= 104 cm |
| Nq $l/(s km^2)$ | 3.90 | | 4.00 | 3.90 | 3.90 | |
| Mq $l/(s km^2)$ | 8.81 | | 11.3 | 6.34 | 8.91 | |
| Hq $l/(s km^2)$ | 80.4 | | 80.4 | 45.6 | 80.4 | |
| $h_N$ mm / $h_A$ mm | 279 | | 178 | 101 | 282 | |
| | 1959/2012 (*) 54 Jahre | | | | 1959/2012 | |
| NQ $m^3/s$ | 0.050 | am 09.11.1960 | 0.050 | 0.060 | 0.050 | am 09.11.1960 |
| MNQ $m^3/s$ | 0.302 | | 0.508 | 0.329 | 0.327 | |
| MQ $m^3/s$ | 0.885 | | 1.10 | 0.676 | 0.885 | |
| MHQ $m^3/s$ | 5.99 | | 5.37 | 3.46 | 6.09 | |
| HQ $m^3/s$ | 14.1 | am 28.10.1998 bei W= 185 cm | 12.3 | 14.1 | 14.1 | am 28.10.1998 bei W= 185 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.70 | | 6.22 | 4.03 | 4.00 | |
| Mq $l/(s km^2)$ | 10.8 | | 13.5 | 8.27 | 10.8 | |
| MHq $l/(s km^2)$ | 73.3 | | 65.7 | 42.4 | 74.5 | |
| $Mh_N$ mm / $Mh_A$ mm | 343 | | 212 | 132 | 343 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.050 | 0.612 | 09.11.1960 | 14.1 | 173 | 185 | 28.10.1998 |
| 2 | 0.064 | 0.783 | 29.05.2005 | 13.8 | 169 | 184 | 21.08.1963 |
| 3 | 0.081 | 0.991 | 13.08.1987 | 12.3 | 151 | 174 | 15.01.1968 |
| 4 | 0.150 | 1.84 | 08.06.1963 | 12.2 | 149 | 142 | 05.12.1960 |
| 5 | 0.150 | 1.84 | 07.09.1962 | 10.6 | 130 | 138 | 02.12.1961 |
| 6 | 0.153 | 1.87 | 19.07.1993 | 10.3 | 126 | 167 | 25.07.1993 |
| 7 | 0.166 | 2.03 | 18.10.1984 | 10.2 | 125 | 145 | 18.03.1987 |
| 8 | 0.180 | 2.20 | 14.08.2006 | 9.98 | 122 | 152 | 14.10.1993 |
| 9 | 0.187 | 2.29 | 16.08.1976 | 9.47 | 116 | 149 | 26.09.1993 |
| 10 | 0.200 | 2.45 | 14.06.1964 | 9.45 | 116 | 139 | 19.03.1994 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1959/2012 54 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.77 | 4.77 | | | |
| 364 | 4.18 | 4.18 | 12.7 | 5.34 | 1.04 |
| 363 | 3.84 | 3.84 | 11.5 | 4.45 | 0.957 |
| 362 | 2.77 | 3.11 | 8.51 | 4.01 | 0.922 |
| 361 | 2.75 | 2.77 | 8.02 | 3.63 | 0.840 |
| 360 | 2.73 | 2.76 | 7.75 | 3.38 | 0.830 |
| 359 | 2.70 | 2.75 | 7.10 | 3.17 | 0.825 |
| 358 | 2.70 | 2.73 | 6.90 | 3.01 | 0.802 |
| 357 | 2.70 | 2.70 | 6.55 | 2.89 | 0.788 |
| 356 | 2.50 | 2.70 | 6.55 | 2.76 | 0.767 |
| 350 | 1.92 | 1.92 | 4.95 | 2.39 | 0.737 |
| 340 | 1.44 | 1.41 | 4.10 | 1.92 | 0.713 |
| 330 | 1.21 | 1.17 | 3.90 | 1.61 | 0.661 |
| 320 | 1.08 | 1.02 | 3.55 | 1.42 | 0.640 |
| 300 | 0.921 | 0.849 | 3.20 | 1.19 | 0.550 |
| 270 | 0.751 | 0.731 | 2.80 | 0.970 | 0.360 |
| 240 | 0.656 | 0.641 | 2.60 | 0.851 | 0.320 |
| 210 | 0.607 | 0.606 | 2.48 | 0.756 | 0.260 |
| 183 | 0.579 | 0.579 | 2.45 | 0.687 | 0.250 |
| 150 | 0.512 | 0.532 | 2.30 | 0.615 | 0.220 |
| 130 | 0.480 | 0.508 | 2.15 | 0.578 | 0.200 |
| 120 | 0.462 | 0.502 | 2.10 | 0.556 | 0.190 |
| 110 | 0.442 | 0.495 | 2.05 | 0.535 | 0.180 |
| 100 | 0.429 | 0.480 | 2.05 | 0.514 | 0.160 |
| 90 | 0.412 | 0.470 | 2.05 | 0.497 | 0.150 |
| 80 | 0.395 | 0.445 | 2.00 | 0.477 | 0.130 |
| 70 | 0.385 | 0.429 | 2.00 | 0.456 | 0.130 |
| 60 | 0.379 | 0.412 | 1.95 | 0.435 | 0.110 |
| 50 | 0.374 | 0.392 | 1.85 | 0.409 | 0.100 |
| 40 | 0.363 | 0.383 | 1.80 | 0.386 | 0.080 |
| 30 | 0.357 | 0.372 | 1.65 | 0.356 | 0.080 |
| 25 | 0.351 | 0.363 | 1.60 | 0.342 | 0.070 |
| 20 | 0.348 | 0.359 | 1.60 | 0.320 | 0.070 |
| 15 | 0.342 | 0.352 | 1.55 | 0.297 | 0.070 |
| 10 | 0.337 | 0.350 | 1.55 | 0.252 | 0.060 |
| 9 | 0.337 | 0.350 | 1.55 | 0.245 | 0.060 |
| 8 | 0.337 | 0.343 | 1.55 | 0.231 | 0.060 |
| 7 | 0.332 | 0.342 | 1.50 | 0.221 | 0.060 |
| 6 | 0.331 | 0.342 | 1.50 | 0.203 | 0.060 |
| 5 | 0.330 | 0.342 | 1.50 | 0.191 | 0.060 |
| 4 | 0.329 | 0.337 | 1.45 | 0.168 | 0.060 |
| 3 | 0.329 | 0.334 | 1.45 | 0.142 | 0.060 |
| 2 | 0.329 | 0.329 | 1.45 | 0.120 | 0.060 |
| 1 | 0.327 | 0.328 | 1.45 | 0.081 | 0.060 |
| 0 | 0.319 | 0.319 | 1.20 | 0.050 | 0.050 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Löninger Höhen

NLWKN

$A_{Eo}$ : 86.9 $km^2$

PNP : NN + 16.42 m

Lage: 3.2 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Lotten Nr. 3676106

Gewässer : Lotter Beeke

Gebiet : Hase

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.727 | 0.536 | 2.29 | 2.07 | 1.66 | 0.773 | 0.549 | 0.511 | 0.375 | 0.513 | 0.451 | 0.915 | 0.906 | 0.760 |
| 2. | 0.718 | 0.594 | 3.05 | 2.00 | 1.60 | 0.759 | 0.544 | 0.470 | 0.357 | 0.484 | 0.370 | 0.930 | 0.861 | 0.779 |
| 3. | 0.709 | 0.606 | 3.02 | 1.80 | 1.56 | 0.755 | 0.628 | 0.456 | 0.350 | 0.443 | 0.355 | 0.953 | 0.815 | 0.782 |
| 4. | 0.692 | 0.654 | 3.41 | 1.68 | 1.52 | 0.723 | 0.610 | 0.480 | 0.350 | 0.410 | 0.381 | 1.29 | 0.817 | 0.842 |
| 5. | 0.668 | 0.672 | 4.45 | 1.64 | 1.60 | 0.686 | 0.598 | 0.502 | 0.340 | 0.389 | 0.430 | 1.59 | 0.848 | 0.836 |
| 6. | 0.653 | 0.928 | 3.40 | 1.60 | 1.46 | 0.695 | 0.576 | 0.485 | 0.331 | 0.398 | 0.377 | 2.15 | 0.825 | 0.819 |
| 7. | 0.633 | 1.18 | 3.23 | 1.52 | 1.42 | 0.701 | 0.556 | 0.494 | 0.347 | 0.419 | 0.309 | 2.13 | 0.853 | 0.820 |
| 8. | 0.625 | 1.29 | 3.36 | 1.57 | 1.61 | 0.659 | 0.550 | 0.503 | 0.588 | 0.426 | 0.313 | 1.79 | 0.859 | 0.781 |
| 9. | 0.611 | 1.54 | 3.05 | 1.56 | 1.44 | 0.713 | 0.566 | 0.496 | 0.722 | 0.450 | 0.328 | 1.63 | 0.866 | 0.927 |
| 10. | 0.605 | 1.62 | 2.75 | 1.50 | 1.38 | 0.787 | 0.574 | 0.468 | 0.596 | 0.432 | 0.352 | 1.48 | 0.883 | 1.31 |
| 11. | 0.595 | 1.50 | 2.57 | 1.48 | 1.34 | 0.850 | 0.635 | 0.466 | 0.556 | 0.417 | 0.374 | 1.38 | 0.856 | 1.32 |
| 12. | 0.585 | 1.44 | 2.47 | 1.51 | 1.28 | 0.858 | 0.600 | 0.469 | 0.468 | 0.414 | 0.418 | 1.37 | 0.807 | 1.32 |
| 13. | 0.577 | 1.49 | 2.48 | 1.37 | 1.23 | 0.869 | 0.588 | 0.511 | 0.404 | 0.407 | 0.433 | 1.40 | 0.791 | 1.31 |
| 14. | 0.566 | 1.78 | 2.36 | 1.16 | 1.20 | 0.845 | 0.572 | 0.469 | 0.461 | 0.400 | 0.446 | 1.48 | 0.784 | 1.29 |
| 15. | 0.566 | 1.89 | 2.22 | 1.24 | 1.17 | 0.822 | 0.563 | 0.449 | 0.542 | 0.396 | 0.466 | 1.39 | 0.786 | 1.51 |
| 16. | 0.573 | 2.19 | 2.10 | 1.15 | 1.15 | 0.771 | 0.571 | 0.465 | 0.532 | 0.398 | 0.469 | 1.30 | 0.789 | 1.54 |
| 17. | 0.578 | 2.36 | 1.99 | 1.21 | 1.11 | 0.745 | 0.541 | 0.478 | 0.658 | 0.403 | 0.478 | 1.25 | 0.791 | 1.55 |
| 18. | 0.578 | 2.06 | 1.92 | 1.22 | 1.07 | 0.736 | 0.528 | 0.464 | 0.863 | 0.391 | 0.498 | 1.21 | 0.785 | 1.63 |
| 19. | 0.568 | 1.96 | 2.32 | 1.46 | 1.03 | 0.723 | 0.519 | 0.475 | 0.996 | 0.383 | 0.521 | 1.16 | 0.768 | 1.54 |
| 20. | 0.562 | 2.05 | 2.80 | 1.28 | 0.980 | 0.680 | 0.511 | 0.450 | 1.12 | 0.372 | 0.527 | 1.10 | 0.768 | 1.48 |
| 21. | 0.553 | 2.14 | 2.92 | 1.30 | 0.959 | 0.658 | 0.512 | 0.442 | 0.755 | 0.358 | 0.537 | 1.06 | 0.757 | 1.47 |
| 22. | 0.549 | 2.06 | 3.10 | 1.35 | 0.945 | 0.647 | 0.496 | 0.459 | 0.606 | 0.356 | 0.551 | 1.04 | 0.749 | 1.64 |
| 23. | 0.541 | 2.08 | 3.18 | 1.56 | 0.930 | 0.649 | 0.478 | 0.453 | 0.524 | 0.353 | 0.575 | 1.00 | 0.748 | 2.50 |
| 24. | 0.545 | 2.28 | 2.90 | 1.72 | 0.915 | 0.637 | 0.474 | 0.434 | 0.492 | 0.352 | 0.811 | 0.989 | 0.763 | 2.34 |
| 25. | 0.550 | 2.23 | 2.57 | 1.89 | 0.900 | 0.622 | 0.463 | 0.481 | 0.441 | 0.359 | 0.929 | 0.983 | 0.811 | 2.54 |
| 26. | 0.538 | 2.09 | 2.38 | 1.76 | 0.885 | 0.595 | 0.451 | 0.470 | 0.403 | 0.362 | 0.897 | 0.958 | 0.801 | 2.38 |
| 27. | 0.551 | 2.01 | 2.33 | 1.69 | 0.870 | 0.570 | 0.449 | 0.448 | 0.382 | 0.378 | 0.933 | 0.928 | 0.817 | 2.30 |
| 28. | 0.553 | 1.94 | 2.17 | 1.66 | 0.855 | 0.584 | 0.448 | 0.439 | 0.556 | 0.371 | 0.953 | 0.875 | 0.806 | 2.04 |
| 29. | 0.531 | 1.95 | 2.06 | 1.68 | 0.840 | 0.581 | 0.439 | 0.420 | 0.629 | 0.348 | 0.948 | 0.875 | 0.801 | 1.97 |
| 30. | 0.544 | 2.37 | 1.95 | | 0.855 | 0.554 | 0.419 | 0.398 | 0.569 | 0.336 | 0.931 | 0.939 | 0.762 | 1.90 |
| 31. | | 2.32 | 1.81 | | 0.822 | | 0.445 | | 0.551 | 0.338 | | 0.904 | | 1.78 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 29. | 1. | 31. | 16. | 31. | 30. | 30. | 30. | 6. | 30. | 7. | 28.+ | 23. | 1. |
| NQ | 0.531 | 0.536 | 1.81 | 1.15 | 0.822 | 0.554 | 0.419 | 0.398 | 0.331 | 0.336 | 0.309 | 0.875 | 0.748 | 0.760 |
| MQ | 0.595 | 1.67 | 2.67 | 1.54 | 1.18 | 0.708 | 0.531 | 0.467 | 0.544 | 0.395 | 0.545 | 1.24 | 0.809 | 1.48 |
| HQ | 0.730 | 2.68 | 5.47 | 2.35 | 1.68 | 0.910 | 0.704 | 0.526 | 1.37 | 0.533 | 1.03 | 2.64 | 0.920 | 2.94 |
| Tag | 2. | 17. | 5. | 1. | 1. | 12. | 3. | 1. | 19. | 1. | 25. | 6. | 1. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 18 | 51 | 82 | 44 | 36 | 21 | 16 | 14 | 17 | 12 | 16 | 38 | 24 | 46 |

| | 1972/2011 | | 1973/2012 40 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1975 | 2003 | 1973 | 1986 | 2011 | 2011 | 1974 | 2006 | 2010 | 2006 | 2009 | 2009 | 1975 | 2003 |
| NQ | 0.290 | 0.467 | 0.460 | 0.614 | 0.651 | 0.408 | 0.250 | 0.226 | 0.137 | 0.149 | 0.153 | 0.231 | 0.290 | 0.467 |
| MNQ | 0.722 | 0.909 | 1.16 | 1.11 | 1.06 | 0.817 | 0.607 | 0.441 | 0.386 | 0.357 | 0.451 | 0.601 | 0.727 | 0.916 |
| MQ | 1.01 | 1.36 | 1.66 | 1.49 | 1.43 | 1.05 | 0.762 | 0.627 | 0.517 | 0.481 | 0.613 | 0.794 | 1.01 | 1.38 |
| MHQ | 1.69 | 2.47 | 3.30 | 2.43 | 2.60 | 1.57 | 1.03 | 1.12 | 0.917 | 0.811 | 1.05 | 1.50 | 1.67 | 2.52 |
| HQ | 7.30 | 7.38 | 8.24 | 6.12 | 7.69 | 7.70 | 2.69 | 3.53 | 3.21 | 3.54 | 6.13 | 11.8 | 7.30 | 7.38 |
| Jahr | 1998 | 1993 | 1994 | 2002 | 1994 | 1994 | 1975 | 2001 | 1993 | 1987 | 1993 | 1998 | 1998 | 1993 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 30 | 42 | 51 | 43 | 44 | 31 | 23 | 19 | 16 | 15 | 18 | 24 | 30 | 43 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.309 | am 07.09.2012 | 0.531 | 0.309 | 0.309 | am 07.09.2012 |
| MQ $m^3/s$ | 1.01 | | 1.40 | 0.622 | 1.01 | |
| HQ $m^3/s$ | 5.47 | am 05.01.2012 bei W= 134 cm | 5.47 | 2.64 | 5.47 | am 05.01.2012 bei W= 134 cm |
| Nq $l/(s km^2)$ | 3.56 | | 6.11 | 3.56 | 3.56 | |
| Mq $l/(s km^2)$ | 11.6 | | 16.1 | 7.16 | 11.6 | |
| Hq $l/(s km^2)$ | 62.9 | | 62.9 | 30.4 | 62.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 368 | | 253 | 114 | 368 | |
| | 1973/2012 (*) 40 Jahre | | | | 1973/2012 | |
| NQ $m^3/s$ | 0.137 | am 22.07.2010 | 0.290 | 0.137 | 0.137 | am 22.07.2010 |
| MNQ $m^3/s$ | 0.319 | | 0.620 | 0.323 | 0.323 | |
| MQ $m^3/s$ | 0.982 | | 1.34 | 0.632 | 0.984 | |
| MHQ $m^3/s$ | 4.35 | | 3.98 | 2.21 | 4.44 | |
| HQ $m^3/s$ | 11.8 | am 28.10.1998 bei W= 258 cm | 8.24 | 11.8 | 11.8 | am 28.10.1998 bei W= 258 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.67 | | 7.13 | 3.72 | 3.72 | |
| Mq $l/(s km^2)$ | 11.3 | | 15.4 | 7.27 | 11.3 | |
| MHq $l/(s km^2)$ | 50.1 | | 45.8 | 25.4 | 51.1 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 357 | | 242 | 116 | 358 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.137 | 1.58 | 22.07.2010 | 11.8 | 136 | 258 | 28.10.1998 |
| 2 | 0.149 | 1.71 | 08.08.2006 | 10.6 | 122 | 210 | 04.10.1993 |
| 3 | 0.153 | 1.76 | 11.09.2009 | 8.24 | 94.8 | 172 | 28.01.1994 |
| 4 | 0.182 | 2.09 | 14.08.2003 | 7.94 | 91.4 | 171 | 25.01.1985 |
| 5 | 0.184 | 2.12 | 12.07.2011 | 7.70 | 88.6 | 165 | 05.04.1994 |
| 6 | 0.190 | 2.19 | 26.08.1976 | 7.69 | 88.5 | 162 | 19.03.1994 |
| 7 | 0.200 | 2.30 | 01.08.1974 | 7.38 | 84.9 | 156 | 31.12.1993 |
| 8 | 0.228 | 2.62 | 22.08.1995 | 7.31 | 84.1 | 161 | 02.01.1987 |
| 9 | 0.238 | 2.74 | 27.08.1983 | 7.03 | 80.9 | 157 | 18.03.1987 |
| 10 | 0.240 | 2.76 | 09.09.1973 | 6.19 | 71.2 | 156 | 22.01.2008 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1973/2012 40 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.45 | 4.45 | | | |
| 364 | 3.41 | 3.41 | 10.6 | 4.07 | 1.58 |
| 363 | 3.40 | 3.40 | 7.17 | 3.60 | 1.51 |
| 362 | 3.36 | 3.36 | 6.95 | 3.29 | 1.44 |
| 361 | 3.23 | 3.23 | 6.54 | 3.10 | 1.42 |
| 360 | 3.18 | 3.18 | 5.78 | 2.97 | 1.42 |
| 359 | 3.10 | 3.10 | 5.14 | 2.85 | 1.39 |
| 358 | 3.10 | 3.10 | 5.06 | 2.73 | 1.34 |
| 357 | 3.10 | 3.10 | 4.84 | 2.67 | 1.33 |
| 356 | 3.02 | 3.02 | 4.77 | 2.58 | 1.29 |
| 350 | 2.75 | 2.75 | 3.86 | 2.29 | 1.24 |
| 340 | 2.29 | 2.32 | 3.43 | 2.00 | 1.15 |
| 330 | 2.09 | 2.04 | 3.09 | 1.82 | 1.10 |
| 320 | 1.96 | 1.79 | 2.86 | 1.68 | 1.05 |
| 300 | 1.62 | 1.57 | 2.46 | 1.46 | 0.920 |
| 270 | 1.38 | 1.32 | 2.10 | 1.23 | 0.810 |
| 240 | 0.996 | 0.980 | 1.81 | 1.07 | 0.710 |
| 210 | 0.858 | 0.859 | 1.50 | 0.937 | 0.590 |
| 183 | 0.680 | 0.801 | 1.40 | 0.832 | 0.500 |
| 150 | 0.581 | 0.659 | 1.29 | 0.719 | 0.450 |
| 130 | 0.554 | 0.575 | 1.22 | 0.651 | 0.389 |
| 120 | 0.545 | 0.563 | 1.18 | 0.621 | 0.366 |
| 110 | 0.531 | 0.532 | 1.12 | 0.591 | 0.323 |
| 100 | 0.512 | 0.512 | 1.05 | 0.563 | 0.311 |
| 90 | 0.481 | 0.481 | 0.869 | 0.535 | 0.305 |
| 80 | 0.470 | 0.470 | 0.830 | 0.505 | 0.287 |
| 70 | 0.459 | 0.459 | 0.811 | 0.478 | 0.283 |
| 60 | 0.449 | 0.449 | 0.785 | 0.450 | 0.277 |
| 50 | 0.432 | 0.432 | 0.754 | 0.415 | 0.263 |
| 40 | 0.407 | 0.407 | 0.730 | 0.381 | 0.235 |
| 30 | 0.389 | 0.389 | 0.699 | 0.349 | 0.216 |
| 25 | 0.377 | 0.377 | 0.698 | 0.328 | 0.198 |
| 20 | 0.370 | 0.370 | 0.682 | 0.310 | 0.179 |
| 15 | 0.356 | 0.356 | 0.678 | 0.286 | 0.171 |
| 10 | 0.352 | 0.352 | 0.623 | 0.267 | 0.162 |
| 9 | 0.352 | 0.352 | 0.614 | 0.261 | 0.159 |
| 8 | 0.348 | 0.348 | 0.614 | 0.260 | 0.158 |
| 7 | 0.347 | 0.347 | 0.614 | 0.252 | 0.158 |
| 6 | 0.340 | 0.340 | 0.605 | 0.243 | 0.158 |
| 5 | 0.338 | 0.338 | 0.605 | 0.236 | 0.155 |
| 4 | 0.336 | 0.336 | 0.597 | 0.226 | 0.152 |
| 3 | 0.331 | 0.331 | 0.591 | 0.215 | 0.151 |
| 2 | 0.328 | 0.328 | 0.584 | 0.204 | 0.150 |
| 1 | 0.313 | 0.313 | 0.584 | 0.184 | 0.148 |
| 0 | 0.309 | 0.309 | 0.579 | 0.137 | 0.137 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Emsland

NLWKN

$A_{Eo}$ : 127 $km^2$

PNP : NN + 14.00 m

Lage: 9.4 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Apeldorn Nr. 3723105

Gewässer : Nordradde

Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.704 | 0.769 | 1.52 | 1.47 | 1.08 | 0.972 | 0.820 | 0.812 | 0.641 | 1.55 | 0.577 | 0.632 | 0.709 | 0.757 |
| 2. | 0.698 | 0.861 | 2.08 | 2.09 | 1.07 | 0.955 | 0.831 | 0.762 | 0.612 | 1.42 | 0.553 | 0.644 | 0.728 | 0.796 |
| 3. | 0.684 | 0.863 | 1.86 | 1.64 | 1.06 | 0.952 | 0.883 | 0.772 | 0.560 | 0.871 | 0.533 | 0.665 | 0.722 | 0.807 |
| 4. | 0.664 | 0.886 | 2.14 | 1.30 | 1.06 | 0.958 | 0.921 | 0.767 | 0.574 | 0.656 | 0.542 | 0.763 | 0.731 | 0.863 |
| 5. | 0.658 | 0.872 | 2.62 | 1.29 | 1.01 | 0.930 | 0.895 | 0.769 | 0.509 | 0.653 | 0.537 | 0.920 | 0.739 | 0.952 |
| 6. | 0.652 | 0.987 | 2.10 | 1.28 | 0.992 | 0.852 | 0.860 | 0.750 | 0.501 | 0.761 | 0.532 | 1.39 | 0.751 | 0.874 |
| 7. | 0.631 | 1.03 | 1.97 | 1.20 | 0.969 | 0.889 | 0.854 | 0.752 | 0.478 | 0.975 | 0.540 | 1.22 | 0.786 | 0.786 |
| 8. | 0.599 | 1.12 | 2.07 | 1.11 | 1.02 | 0.897 | 0.881 | 0.711 | 0.469 | 0.946 | 0.556 | 0.893 | 0.786 | 0.776 |
| 9. | 0.593 | 1.28 | 1.89 | 1.03 | 0.996 | 0.969 | 0.889 | 0.688 | 0.834 | 1.15 | 0.554 | 0.844 | 0.796 | 0.884 |
| 10. | 0.591 | 1.30 | 1.78 | 1.01 | 0.950 | 1.01 | 1.10 | 0.671 | 0.809 | 1.01 | 0.512 | 0.812 | 0.800 | 1.33 |
| 11. | 0.598 | 1.17 | 1.72 | 1.00 | 0.921 | 1.19 | 1.01 | 0.659 | 0.521 | 0.806 | 0.509 | 0.795 | 0.786 | 1.12 |
| 12. | 0.607 | 1.15 | 1.68 | 1.03 | 0.907 | 1.11 | 0.905 | 0.650 | 0.679 | 0.776 | 0.514 | 0.794 | 0.762 | 1.06 |
| 13. | 0.615 | 1.24 | 1.67 | 1.03 | 0.898 | 1.19 | 0.849 | 0.607 | 1.07 | 0.703 | 0.502 | 0.873 | 0.765 | 0.985 |
| 14. | 0.624 | 1.43 | 1.63 | 1.02 | 0.888 | 1.13 | 0.838 | 0.574 | 0.797 | 0.592 | 0.518 | 0.918 | 0.751 | 0.971 |
| 15. | 0.632 | 1.46 | 1.55 | 1.04 | 0.878 | 1.09 | 0.846 | 0.549 | 1.27 | 0.537 | 0.544 | 0.841 | 0.753 | 1.25 |
| 16. | 0.640 | 1.62 | 1.48 | 1.05 | 0.896 | 1.06 | 0.831 | 0.570 | 0.771 | 0.513 | 0.546 | 0.801 | 0.757 | 1.24 |
| 17. | 0.649 | 1.71 | 1.44 | 1.08 | 0.881 | 1.09 | 0.789 | 0.618 | 0.953 | 0.503 | 0.552 | 0.782 | 0.739 | 1.23 |
| 18. | 0.657 | 1.46 | 1.45 | 1.10 | 0.888 | 1.11 | 0.788 | 0.625 | 1.82 | 0.509 | 0.562 | 0.770 | 0.744 | 1.43 |
| 19. | 0.666 | 1.40 | 1.51 | 1.12 | 0.898 | 1.07 | 0.774 | 0.628 | 2.02 | 0.515 | 0.572 | 0.748 | 0.764 | 1.38 |
| 20. | 0.674 | 1.45 | 1.63 | 1.14 | 0.861 | 0.929 | 0.767 | 0.588 | 2.36 | 0.503 | 0.587 | 0.735 | 0.767 | 1.33 |
| 21. | 0.683 | 1.52 | 1.67 | 1.18 | 0.878 | 0.928 | 0.763 | 0.577 | 1.83 | 0.519 | 0.591 | 0.724 | 0.770 | 1.19 |
| 22. | 0.691 | 1.40 | 1.78 | 1.23 | 0.882 | 0.962 | 0.738 | 0.587 | 1.34 | 0.540 | 0.607 | 0.703 | 0.773 | 1.31 |
| 23. | 0.700 | 1.44 | 1.87 | 1.27 | 0.890 | 0.969 | 0.722 | 0.574 | 0.792 | 0.536 | 0.611 | 0.701 | 0.772 | 2.59 |
| 24. | 0.708 | 1.66 | 1.70 | 1.25 | 0.893 | 0.990 | 0.778 | 0.613 | 1.04 | 0.554 | 0.663 | 0.701 | 0.772 | 2.14 |
| 25. | 0.717 | 1.59 | 1.62 | 1.22 | 0.895 | 0.941 | 0.739 | 1.34 | 1.07 | 0.564 | 0.755 | 0.725 | 0.785 | 2.62 |
| 26. | 0.725 | 1.50 | 1.57 | 1.18 | 0.852 | 0.780 | 0.718 | 1.06 | 0.946 | 0.585 | 0.688 | 0.711 | 0.788 | 2.13 |
| 27. | 0.734 | 1.47 | 1.56 | 1.16 | 0.898 | 0.757 | 0.741 | 0.852 | 0.887 | 0.597 | 0.679 | 0.704 | 0.818 | 2.03 |
| 28. | 0.742 | 1.45 | 1.50 | 1.13 | 0.912 | 0.806 | 0.731 | 0.828 | 1.15 | 0.605 | 0.683 | 0.686 | 0.813 | 1.76 |
| 29. | 0.751 | 1.44 | 1.43 | 1.12 | 0.917 | 0.805 | 0.729 | 0.754 | 1.95 | 0.584 | 0.671 | 0.682 | 0.819 | 1.54 |
| 30. | 0.759 | 1.61 | 1.37 | | 0.944 | 0.793 | 0.731 | 0.711 | 1.82 | 0.576 | 0.648 | 0.728 | 0.825 | 1.55 |
| 31. | | 1.57 | 1.33 | | 0.959 | | 0.755 | | 1.63 | 0.565 | | 0.715 | | 1.53 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | 2012 Feb | 2012 Mrz | 2012 Apr | 2012 Mai | 2012 Jun | 2012 Jul | 2012 Aug | 2012 Sep | 2012 Okt | 2012 Nov | 2012 Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 10. | 1. | 31. | 11. | 26. | 27. | 26. | 15. | 8. | 17.+ | 13. | 1. | 1. | 1. |
| NQ | 0.591 | 0.769 | 1.33 | 1.00 | 0.852 | 0.757 | 0.718 | 0.549 | 0.469 | 0.503 | 0.502 | 0.632 | 0.709 | 0.757 |
| MQ | 0.668 | 1.31 | 1.72 | 1.20 | 0.937 | 0.970 | 0.822 | 0.714 | 1.05 | 0.715 | 0.581 | 0.794 | 0.769 | 1.33 |
| HQ | 0.777 | 1.98 | 3.15 | 2.49 | 1.12 | 1.24 | 1.23 | 1.51 | 2.60 | 1.93 | 0.797 | 1.88 | 0.847 | 3.67 |
| Tag | 1. | 17. | 5. | 2. | 1. | 13. | 10. | 25. | 20. | 2. | 25. | 6. | 28. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 14 | 28 | 36 | 24 | 20 | 20 | 17 | 15 | 22 | 15 | 12 | 17 | 16 | 28 |

| | 1976/2011 | | 1977/2012 36 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1976 | 1996 | 1996 | 1977 | 2007 | 2011 | 1990 | 2003 | 2008 | 2008 | 1984 | 1983 | 1996 |
| NQ | 0.389 | 0.660 | 0.562 | 0.489 | 0.640 | 0.635 | 0.493 | 0.097 | 0.170 | 0.096 | 0.350 | 0.407 | 0.389 | 0.692 |
| MNQ | 0.863 | 0.926 | 1.05 | 1.07 | 1.06 | 0.933 | 0.781 | 0.595 | 0.501 | 0.548 | 0.679 | 0.756 | 0.868 | 0.929 |
| MQ | 1.09 | 1.28 | 1.47 | 1.38 | 1.40 | 1.11 | 0.933 | 0.863 | 0.847 | 0.881 | 0.913 | 1.01 | 1.10 | 1.29 |
| MHQ | 2.00 | 2.75 | 3.65 | 2.87 | 3.63 | 1.72 | 1.41 | 2.11 | 2.36 | 1.93 | 2.29 | 2.45 | 2.01 | 2.82 |
| HQ | 7.08 | 7.24 | 8.50 | 9.38 | 11.5 | 10.1 | 6.91 | 13.5 | 9.88 | 5.53 | 9.70 | 21.0 | 7.08 | 7.24 |
| Jahr | 1998 | 1998 | 2008 | 1995 | 1987 | 1994 | 1983 | 1981 | 1993 | 1993 | 1985 | 1998 | 1998 | 1998 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 22 | 27 | 31 | 27 | 30 | 23 | 20 | 18 | 18 | 19 | 19 | 21 | 22 | 27 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.469 | am 08.07.2012 | 0.591 | 0.469 | 0.469 | am 08.07.2012 |
| MQ $m^3/s$ | 0.958 | | 1.14 | 0.782 | 0.968 | |
| HQ $m^3/s$ | 3.15 | am 05.01.2012 bei W= 80 cm | 3.15 | 2.60 | 3.67 | am 23.12.2012 bei W= 88 cm |
| Nq $l/(s km^2)$ | 3.69 | | 4.65 | 3.69 | 3.69 | |
| Mq $l/(s km^2)$ | 7.54 | | 8.98 | 6.16 | 7.62 | |
| Hq $l/(s km^2)$ | 24.8 | | 24.8 | 20.4 | 28.9 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 239 | | 141 | 98 | 241 | |
| | 1977/2012 (*) 36 Jahre | | | | 1977/2012 | |
| NQ $m^3/s$ | 0.096 | am 03.08.2008 | 0.389 | 0.096 | 0.096 | am 03.08.2008 |
| MNQ $m^3/s$ | 0.414 | | 0.790 | 0.414 | 0.409 | |
| MQ $m^3/s$ | 1.10 | | 1.29 | 0.908 | 1.10 | |
| MHQ $m^3/s$ | 6.66 | | 5.37 | 4.64 | 6.73 | |
| HQ $m^3/s$ | 21.0 | am 28.10.1998 bei W= 267 cm | 11.5 | 21.0 | 21.0 | am 28.10.1998 bei W= 267 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.26 | | 6.22 | 3.26 | 3.22 | |
| Mq $l/(s km^2)$ | 8.66 | | 10.2 | 7.15 | 8.66 | |
| MHq $l/(s km^2)$ | 52.4 | | 42.3 | 36.5 | 53.0 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 274 | | 160 | 114 | 274 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.096 | 0.756 | 03.08.2008 | 21.0 | 165 | 267 | 28.10.1998 |
| 2 | 0.097 | 0.764 | 18.06.1990 | 14.8 | 117 | 206 | 04.10.1993 |
| 3 | 0.170 | 1.34 | 16.07.2003 | 13.5 | 106 | 191 | 30.06.1981 |
| 4 | 0.173 | 1.36 | 10.07.1995 | 11.5 | 90.6 | 177 | 18.03.1987 |
| 5 | 0.178 | 1.40 | 18.07.2005 | 10.3 | 81.1 | 168 | 12.03.1981 |
| 6 | 0.214 | 1.69 | 16.08.1996 | 10.1 | 79.5 | 158 | 05.04.1994 |
| 7 | 0.215 | 1.69 | 02.07.2000 | 9.88 | 77.8 | 167 | 25.07.1993 |
| 8 | 0.218 | 1.72 | 27.07.2010 | 9.70 | 76.4 | 193 | 04.09.1985 |
| 9 | 0.247 | 1.94 | 12.08.1997 | 9.40 | 74.0 | 149 | 19.03.1994 |
| 10 | 0.286 | 2.25 | 02.08.2011 | 9.38 | 73.9 | 152 | 02.02.1995 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1977/2012 36 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 2.62 | 2.63 | | | |
| 364 | 2.36 | 2.63 | 16.1 | 4.83 | 1.81 |
| 363 | 2.14 | 2.59 | 9.33 | 3.95 | 1.78 |
| 362 | 2.10 | 2.36 | 6.51 | 3.60 | 1.72 |
| 361 | 2.09 | 2.36 | 6.24 | 3.33 | 1.54 |
| 360 | 2.08 | 2.36 | 5.15 | 3.07 | 1.47 |
| 359 | 2.07 | 2.13 | 5.09 | 2.93 | 1.38 |
| 358 | 2.02 | 2.10 | 5.09 | 2.81 | 1.34 |
| 357 | 1.97 | 2.09 | 4.63 | 2.71 | 1.32 |
| 356 | 1.95 | 2.08 | 4.56 | 2.61 | 1.24 |
| 350 | 1.83 | 1.89 | 3.75 | 2.21 | 1.08 |
| 340 | 1.64 | 1.70 | 3.08 | 1.90 | 1.00 |
| 330 | 1.56 | 1.56 | 2.82 | 1.71 | 0.930 |
| 320 | 1.48 | 1.47 | 2.63 | 1.58 | 0.910 |
| 300 | 1.33 | 1.27 | 2.25 | 1.41 | 0.870 |
| 270 | 1.11 | 1.09 | 1.85 | 1.24 | 0.800 |
| 240 | 0.992 | 0.971 | 1.67 | 1.13 | 0.740 |
| 210 | 0.905 | 0.897 | 1.55 | 1.04 | 0.710 |
| 183 | 0.863 | 0.854 | 1.47 | 0.962 | 0.680 |
| 150 | 0.776 | 0.789 | 1.37 | 0.886 | 0.640 |
| 130 | 0.750 | 0.769 | 1.30 | 0.841 | 0.620 |
| 120 | 0.729 | 0.761 | 1.25 | 0.821 | 0.610 |
| 110 | 0.715 | 0.752 | 1.22 | 0.801 | 0.600 |
| 100 | 0.698 | 0.735 | 1.15 | 0.778 | 0.586 |
| 90 | 0.682 | 0.718 | 1.11 | 0.756 | 0.573 |
| 80 | 0.657 | 0.703 | 1.07 | 0.734 | 0.564 |
| 70 | 0.640 | 0.665 | 1.03 | 0.713 | 0.560 |
| 60 | 0.611 | 0.628 | 1.02 | 0.691 | 0.539 |
| 50 | 0.592 | 0.592 | 0.991 | 0.667 | 0.520 |
| 40 | 0.576 | 0.576 | 0.920 | 0.633 | 0.492 |
| 30 | 0.556 | 0.556 | 0.876 | 0.598 | 0.427 |
| 25 | 0.546 | 0.546 | 0.865 | 0.574 | 0.405 |
| 20 | 0.540 | 0.540 | 0.853 | 0.551 | 0.391 |
| 15 | 0.521 | 0.521 | 0.834 | 0.521 | 0.350 |
| 10 | 0.513 | 0.513 | 0.820 | 0.487 | 0.294 |
| 9 | 0.512 | 0.512 | 0.819 | 0.477 | 0.263 |
| 8 | 0.512 | 0.512 | 0.818 | 0.462 | 0.260 |
| 7 | 0.512 | 0.512 | 0.816 | 0.448 | 0.253 |
| 6 | 0.512 | 0.512 | 0.815 | 0.428 | 0.245 |
| 5 | 0.509 | 0.509 | 0.813 | 0.410 | 0.238 |
| 4 | 0.509 | 0.509 | 0.802 | 0.392 | 0.216 |
| 3 | 0.502 | 0.502 | 0.794 | 0.369 | 0.180 |
| 2 | 0.501 | 0.501 | 0.789 | 0.329 | 0.159 |
| 1 | 0.478 | 0.478 | 0.787 | 0.254 | 0.105 |
| 0 | 0.469 | 0.469 | 0.746 | 0.096 | 0.096 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Hümling

NLWKN

$A_{Eo}$ : 72.8 $km^2$

PNP : NN + 3.92 m

Lage: 1.6 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Walchum Nr. 3749101

Gewässer : Walchumer Schloot

Gebiet : Mittlere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.426 | 0.947 | 2.19 | 1.58 | 0.850 | 0.569 | 0.492 | 0.274 | 0.171 | 0.173 | 0.136 | 0.255 | 0.441 | 0.541 |
| 2. | 0.428 | 1.06 | 3.06 | 1.76 | 0.839 | 0.574 | 0.482 | 0.259 | 0.163 | 0.172 | 0.136 | 0.277 | 0.443 | 0.544 |
| 3. | 0.430 | 1.24 | 3.49 | 1.73 | 0.800 | 0.579 | 0.471 | 0.254 | 0.176 | 0.165 | 0.136 | 0.296 | 0.424 | 0.547 |
| 4. | 0.432 | 1.31 | 4.36 | 1.63 | 0.763 | 0.583 | 0.476 | 0.249 | 0.174 | 0.158 | 0.132 | 0.314 | 0.437 | 0.573 |
| 5. | 0.434 | 1.53 | 4.70 | 1.51 | 0.753 | 0.569 | 0.465 | 0.244 | 0.166 | 0.151 | 0.133 | 0.364 | 0.452 | 0.611 |
| 6. | 0.415 | 1.65 | 4.60 | 1.39 | 0.769 | 0.574 | 0.439 | 0.239 | 0.166 | 0.150 | 0.133 | 0.435 | 0.458 | 0.644 |
| 7. | 0.397 | 1.77 | 3.54 | 1.27 | 0.705 | 0.559 | 0.428 | 0.234 | 0.158 | 0.149 | 0.130 | 0.437 | 0.464 | 0.664 |
| 8. | 0.379 | 2.01 | 3.52 | 1.17 | 0.722 | 0.564 | 0.403 | 0.229 | 0.147 | 0.161 | 0.129 | 0.426 | 0.477 | 0.667 |
| 9. | 0.382 | 2.15 | 3.24 | 1.08 | 0.711 | 0.569 | 0.394 | 0.224 | 0.147 | 0.166 | 0.125 | 0.432 | 0.494 | 0.742 |
| 10. | 0.393 | 2.46 | 2.84 | 0.997 | 0.649 | 0.593 | 0.402 | 0.219 | 0.151 | 0.166 | 0.125 | 0.437 | 0.520 | 1.01 |
| 11. | 0.403 | 2.49 | 2.56 | 0.913 | 0.639 | 0.619 | 0.410 | 0.206 | 0.155 | 0.165 | 0.131 | 0.438 | 0.527 | 1.12 |
| 12. | 0.426 | 2.23 | 2.40 | 0.835 | 0.604 | 0.668 | 0.391 | 0.201 | 0.162 | 0.158 | 0.131 | 0.421 | 0.529 | 1.19 |
| 13. | 0.448 | 2.16 | 2.31 | 0.800 | 0.594 | 0.788 | 0.386 | 0.188 | 0.168 | 0.157 | 0.134 | 0.482 | 0.511 | 1.19 |
| 14. | 0.471 | 2.29 | 2.38 | 0.801 | 0.573 | 0.794 | 0.380 | 0.187 | 0.174 | 0.150 | 0.138 | 0.529 | 0.511 | 1.10 |
| 15. | 0.493 | 2.52 | 2.18 | 0.798 | 0.590 | 0.800 | 0.375 | 0.179 | 0.201 | 0.137 | 0.142 | 0.552 | 0.503 | 1.13 |
| 16. | 0.515 | 2.52 | 2.04 | 0.788 | 0.571 | 0.776 | 0.370 | 0.178 | 0.200 | 0.131 | 0.143 | 0.539 | 0.495 | 1.20 |
| 17. | 0.514 | 3.02 | 1.95 | 0.757 | 0.576 | 0.752 | 0.364 | 0.177 | 0.220 | 0.127 | 0.139 | 0.536 | 0.498 | 1.29 |
| 18. | 0.536 | 2.71 | 1.87 | 0.749 | 0.582 | 0.756 | 0.347 | 0.170 | 0.254 | 0.128 | 0.141 | 0.529 | 0.501 | 1.38 |
| 19. | 0.557 | 2.40 | 1.83 | 0.762 | 0.587 | 0.745 | 0.341 | 0.169 | 0.323 | 0.124 | 0.147 | 0.499 | 0.493 | 1.40 |
| 20. | 0.579 | 2.39 | 2.02 | 0.804 | 0.560 | 0.712 | 0.336 | 0.162 | 0.373 | 0.120 | 0.146 | 0.495 | 0.485 | 1.39 |
| 21. | 0.601 | 2.64 | 2.12 | 0.743 | 0.565 | 0.679 | 0.331 | 0.160 | 0.355 | 0.120 | 0.153 | 0.482 | 0.488 | 1.32 |
| 22. | 0.606 | 2.52 | 2.43 | 0.756 | 0.571 | 0.648 | 0.326 | 0.159 | 0.319 | 0.120 | 0.156 | 0.479 | 0.488 | 1.22 |
| 23. | 0.627 | 2.40 | 2.67 | 0.806 | 0.576 | 0.636 | 0.309 | 0.158 | 0.300 | 0.121 | 0.160 | 0.459 | 0.471 | 2.16 |
| 24. | 0.648 | 2.56 | 2.48 | 0.914 | 0.581 | 0.624 | 0.292 | 0.157 | 0.265 | 0.117 | 0.177 | 0.446 | 0.474 | 2.57 |
| 25. | 0.669 | 2.80 | 2.17 | 0.933 | 0.569 | 0.612 | 0.276 | 0.172 | 0.229 | 0.117 | 0.209 | 0.440 | 0.499 | 2.46 |
| 26. | 0.651 | 2.45 | 1.95 | 0.979 | 0.557 | 0.582 | 0.272 | 0.178 | 0.211 | 0.126 | 0.220 | 0.428 | 0.526 | 2.71 |
| 27. | 0.651 | 2.19 | 1.83 | 0.910 | 0.562 | 0.571 | 0.267 | 0.177 | 0.190 | 0.134 | 0.225 | 0.430 | 0.529 | 2.68 |
| 28. | 0.686 | 2.03 | 1.72 | 0.899 | 0.567 | 0.525 | 0.254 | 0.183 | 0.183 | 0.135 | 0.234 | 0.423 | 0.550 | 2.29 |
| 29. | 0.837 | 1.92 | 1.57 | 0.888 | 0.554 | 0.548 | 0.249 | 0.182 | 0.202 | 0.135 | 0.248 | 0.401 | 0.548 | 2.05 |
| 30. | 0.915 | 2.11 | 1.51 | | 0.559 | 0.537 | 0.245 | 0.180 | 0.188 | 0.135 | 0.255 | 0.424 | 0.538 | 1.91 |
| 31. | | 2.41 | 1.40 | | 0.564 | | 0.241 | | 0.180 | 0.131 | | 0.438 | | 1.77 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 8. | 1. | 31. | 21. | 29. | 28. | 31. | 24. | 8.+ | 24.+ | 9.+ | 1. | 3. | 1. |
| NQ | 0.379 | 0.947 | 1.40 | 0.743 | 0.554 | 0.525 | 0.241 | 0.157 | 0.147 | 0.117 | 0.125 | 0.255 | 0.424 | 0.541 |
| MQ | 0.532 | 2.16 | 2.55 | 1.03 | 0.634 | 0.637 | 0.362 | 0.198 | 0.209 | 0.142 | 0.158 | 0.437 | 0.492 | 1.36 |
| HQ | 1.01 | 3.02 | 5.20 | 1.77 | 0.850 | 0.800 | 0.492 | 0.274 | 0.375 | 0.173 | 0.256 | 0.571 | 0.558 | 3.14 |
| Tag | 30. | 17. | 5. | 1. | 1. | 15. | 1. | 1. | 19. | 1. | 30. | 14. | 29. | 24. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 19 | 79 | 94 | 35 | 23 | 23 | 13 | 7 | 8 | 5 | 6 | 16 | 18 | 50 |

| | 1981/2011 | | 1982/2012 31 Jahre | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jahr | 1983 | 1989 | 1996 | 1996 | 1996 | 2011 | 2011 | 2011 | 2005 | 1992 | 2009 | 2009 | 1983 | 1989 |
| NQ | 0.074 | 0.161 | 0.196 | 0.244 | 0.270 | 0.227 | 0.083 | 0.048 | 0.017 | 0.022 | 0.023 | 0.036 | 0.074 | 0.161 |
| MNQ | 0.445 | 0.642 | 0.821 | 0.814 | 0.730 | 0.532 | 0.286 | 0.153 | 0.095 | 0.131 | 0.190 | 0.303 | 0.438 | 0.641 |
| MQ | 0.802 | 1.16 | 1.46 | 1.29 | 1.14 | 0.753 | 0.447 | 0.273 | 0.211 | 0.227 | 0.383 | 0.548 | 0.788 | 1.16 |
| MHQ | 1.56 | 2.19 | 3.04 | 2.42 | 2.27 | 1.21 | 0.705 | 0.528 | 0.491 | 0.641 | 0.883 | 1.43 | 1.50 | 2.21 |
| HQ | 5.14 | 5.88 | 7.62 | 7.13 | 6.48 | 4.97 | 2.27 | 2.02 | 1.66 | 4.97 | 6.48 | 9.44 | 5.14 | 5.88 |
| Jahr | 1998 | 2007 | 2008 | 1995 | 1987 | 1994 | 1983 | 1991 | 1991 | 2000 | 2001 | 1998 | 1998 | 2007 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 29 | 43 | 54 | 44 | 42 | 27 | 16 | 10 | 8 | 8 | 14 | 20 | 28 | 43 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.117 | am 24.08.2012 | 0.379 | 0.117 | 0.117 | am 24.08.2012 |
| MQ $m^3/s$ | 0.756 | | 1.27 | 0.252 | 0.685 | |
| HQ $m^3/s$ | 5.20 | am 05.01.2012 bei W= 197 cm | 5.20 | 0.571 | 5.20 | am 05.01.2012 bei W= 197 cm |
| Nq $l/(s km^2)$ | 1.61 | | 5.21 | 1.61 | 1.61 | |
| Mq $l/(s km^2)$ | 10.4 | | 17.4 | 3.46 | 9.41 | |
| Hq $l/(s km^2)$ | 71.5 | | 71.5 | 7.84 | 71.5 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 328 | | 274 | 55 | 298 | |

| | 1982/2012 (*) 31 Jahre | | | | 1982/2012 | |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.017 | am 06.07.2005 | 0.074 | 0.017 | 0.017 | am 06.07.2005 |
| MNQ $m^3/s$ | 0.069 | | 0.356 | 0.072 | 0.072 | |
| MQ $m^3/s$ | 0.722 | | 1.10 | 0.348 | 0.721 | |
| MHQ $m^3/s$ | 4.18 | | 3.74 | 1.86 | 4.20 | |
| HQ $m^3/s$ | 9.44 | am 28.10.1998 bei W= 242 cm | 7.62 | 9.44 | 9.44 | am 28.10.1998 bei W= 242 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 0.948 | | 4.89 | 0.989 | 0.989 | |
| Mq $l/(s km^2)$ | 9.92 | | 15.1 | 4.78 | 9.90 | |
| MHq $l/(s km^2)$ | 57.4 | | 51.4 | 25.5 | 57.7 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 314 | | 238 | 76 | 313 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.017 | 0.234 | 06.07.2005 | 9.44 | 130 | 242 | 28.10.1998 |
| 2 | 0.022 | 0.302 | 22.08.1992 | 7.62 | 105 | 225 | 22.01.2008 |
| 3 | 0.023 | 0.316 | 20.09.2009 | 7.13 | 97.9 | 220 | 02.02.1995 |
| 4 | 0.027 | 0.371 | 31.07.1982 | 7.05 | 96.8 | 218 | 04.10.1993 |
| 5 | 0.028 | 0.385 | 17.08.1997 | 6.48 | 89.0 | 215 | 23.09.2001 |
| 6 | 0.028 | 0.385 | 15.09.1991 | 6.48 | 89.0 | 213 | 18.03.1987 |
| 7 | 0.031 | 0.426 | 29.07.2006 | 5.95 | 81.7 | 207 | 26.02.2002 |
| 8 | 0.041 | 0.563 | 06.08.1996 | 5.80 | 79.7 | 207 | 01.02.2004 |
| 9 | 0.041 | 0.563 | 12.09.1989 | 5.72 | 78.6 | 207 | 19.01.2007 |
| 10 | 0.043 | 0.591 | 05.07.2011 | 5.66 | 77.7 | 205 | 03.01.2003 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalenderjahr 2012 | 1982/2012 31 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.70 | 4.70 | | | |
| 364 | 4.60 | 4.60 | 8.71 | 4.21 | 1.40 |
| 363 | 4.36 | 4.36 | 7.52 | 3.74 | 1.36 |
| 362 | 3.54 | 3.54 | 7.03 | 3.44 | 1.33 |
| 361 | 3.52 | 3.52 | 5.93 | 3.18 | 1.29 |
| 360 | 3.49 | 3.49 | 4.89 | 3.01 | 1.20 |
| 359 | 3.24 | 3.24 | 4.11 | 2.88 | 1.18 |
| 358 | 3.06 | 3.06 | 4.08 | 2.74 | 1.18 |
| 357 | 3.02 | 2.84 | 3.92 | 2.64 | 1.18 |
| 356 | 2.84 | 2.71 | 3.89 | 2.54 | 1.12 |
| 350 | 2.64 | 2.46 | 3.34 | 2.19 | 1.07 |
| 340 | 2.41 | 2.12 | 2.79 | 1.80 | 0.887 |
| 330 | 2.18 | 1.77 | 2.30 | 1.60 | 0.825 |
| 320 | 2.01 | 1.51 | 2.16 | 1.46 | 0.769 |
| 300 | 1.27 | 0.914 | 1.80 | 1.24 | 0.585 |
| 270 | 0.769 | 0.742 | 1.47 | 0.965 | 0.386 |
| 240 | 0.606 | 0.576 | 1.27 | 0.794 | 0.292 |
| 210 | 0.560 | 0.537 | 1.10 | 0.636 | 0.250 |
| 183 | 0.476 | 0.485 | 0.943 | 0.527 | 0.235 |
| 150 | 0.394 | 0.403 | 0.836 | 0.399 | 0.152 |
| 130 | 0.314 | 0.314 | 0.740 | 0.331 | 0.120 |
| 120 | 0.265 | 0.265 | 0.708 | 0.290 | 0.117 |
| 110 | 0.245 | 0.245 | 0.635 | 0.259 | 0.109 |
| 100 | 0.224 | 0.224 | 0.612 | 0.234 | 0.091 |
| 90 | 0.190 | 0.190 | 0.594 | 0.207 | 0.069 |
| 80 | 0.179 | 0.179 | 0.564 | 0.183 | 0.064 |
| 70 | 0.173 | 0.173 | 0.531 | 0.162 | 0.059 |
| 60 | 0.166 | 0.166 | 0.482 | 0.145 | 0.056 |
| 50 | 0.159 | 0.159 | 0.438 | 0.131 | 0.053 |
| 40 | 0.151 | 0.151 | 0.398 | 0.115 | 0.049 |
| 30 | 0.138 | 0.138 | 0.346 | 0.093 | 0.043 |
| 25 | 0.136 | 0.136 | 0.333 | 0.083 | 0.038 |
| 20 | 0.134 | 0.134 | 0.319 | 0.076 | 0.032 |
| 15 | 0.132 | 0.132 | 0.319 | 0.067 | 0.027 |
| 10 | 0.127 | 0.127 | 0.296 | 0.057 | 0.025 |
| 9 | 0.126 | 0.126 | 0.286 | 0.055 | 0.025 |
| 8 | 0.126 | 0.126 | 0.271 | 0.053 | 0.025 |
| 7 | 0.126 | 0.126 | 0.268 | 0.051 | 0.025 |
| 6 | 0.124 | 0.124 | 0.247 | 0.049 | 0.025 |
| 5 | 0.121 | 0.121 | 0.240 | 0.045 | 0.024 |
| 4 | 0.121 | 0.121 | 0.233 | 0.042 | 0.024 |
| 3 | 0.121 | 0.121 | 0.213 | 0.037 | 0.023 |
| 2 | 0.121 | 0.121 | 0.184 | 0.032 | 0.023 |
| 1 | 0.120 | 0.120 | 0.183 | 0.027 | 0.021 |
| 0 | 0.117 | 0.117 | 0.166 | 0.017 | 0.017 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Bourtanger Moor

NLWKN

$A_{Eo}$ : 75.4 $km^2$

PNP : NN + 25.16 m

Lage: 51.0 km oberhalb der Mündung rechts

# Q

$m^3/s$

Pegel : Stedingsmühlen Nr. 3881105

Gewässer : Soeste

Gebiet : Leda

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.370 | 0.407 | 1.33 | 0.609 | 0.834 | 0.575 | 0.581 | 0.740 | 0.449 | 0.490 | 0.383 | 0.368 | 0.469 | 0.444 |
| 2. | 0.382 | 0.808 | 3.68 | 0.586 | 0.819 | 0.599 | 0.513 | 0.446 | 0.497 | 0.549 | 0.371 | 0.483 | 0.564 | 0.472 |
| 3. | 0.405 | 0.649 | 2.74 | 0.590 | 0.787 | 0.627 | 1.16 | 0.465 | 0.459 | 0.466 | 0.385 | 0.579 | 0.547 | 0.454 |
| 4. | 0.421 | 0.517 | 2.80 | 0.588 | 0.773 | 0.595 | 0.730 | 0.565 | 0.448 | 0.423 | 0.382 | 1.21 | 0.486 | 0.609 |
| 5. | 0.359 | 0.601 | 4.29 | 0.583 | 0.848 | 0.576 | 0.572 | 0.596 | 0.424 | 0.426 | 0.385 | 1.33 | 0.512 | 0.615 |
| 6. | 0.349 | 1.12 | 2.79 | 0.618 | 0.783 | 0.599 | 0.503 | 0.489 | 0.431 | 0.469 | 0.392 | 2.28 | 0.515 | 0.490 |
| 7. | 0.341 | 0.915 | 2.18 | 0.694 | 0.857 | 0.612 | 0.501 | 0.487 | 0.676 | 0.621 | 0.364 | 1.10 | 0.600 | 0.471 |
| 8. | 0.397 | 1.43 | 2.54 | 0.642 | 1.17 | 0.576 | 0.490 | 0.639 | 0.799 | 0.600 | 0.362 | 0.625 | 0.513 | 0.447 |
| 9. | 0.419 | 1.70 | 1.86 | 0.681 | 0.843 | 0.708 | 0.647 | 0.679 | 0.891 | 0.561 | 0.346 | 0.575 | 0.597 | 0.842 |
| 10. | 0.384 | 1.46 | 1.49 | 0.673 | 0.743 | 0.879 | 0.660 | 0.449 | 0.543 | 0.468 | 0.336 | 0.506 | 0.486 | 1.39 |
| 11. | 0.354 | 0.826 | 1.18 | 0.639 | 0.707 | 0.789 | 0.716 | 0.455 | 0.558 | 0.427 | 0.418 | 0.480 | 0.439 | 0.728 |
| 12. | 0.363 | 0.719 | 1.15 | 0.634 | 0.667 | 0.762 | 0.502 | 0.467 | 0.522 | 0.391 | 0.420 | 0.595 | 0.413 | 0.646 |
| 13. | 0.329 | 0.875 | 1.31 | 0.689 | 0.686 | 0.697 | 0.449 | 0.464 | 0.591 | 0.396 | 0.402 | 0.956 | 0.444 | 0.657 |
| 14. | 0.358 | 1.67 | 0.981 | 0.701 | 0.663 | 0.668 | 0.450 | 0.430 | 0.757 | 0.406 | 0.390 | 0.555 | 0.464 | 0.556 |
| 15. | 0.422 | 1.33 | 0.774 | 0.778 | 0.676 | 0.720 | 0.559 | 0.437 | 0.678 | 0.382 | 0.458 | 0.502 | 0.415 | 1.26 |
| 16. | 0.391 | 1.99 | 0.669 | 0.666 | 0.678 | 0.662 | 0.706 | 0.470 | 1.08 | 0.382 | 0.386 | 0.486 | 0.421 | 0.883 |
| 17. | 0.370 | 2.27 | 0.638 | 0.735 | 0.669 | 0.624 | 0.552 | 0.452 | 1.24 | 0.360 | 0.340 | 0.472 | 0.431 | 0.729 |
| 18. | 0.362 | 1.50 | 0.606 | 0.757 | 0.655 | 0.606 | 0.445 | 0.540 | 0.695 | 0.354 | 0.380 | 0.466 | 0.490 | 1.05 |
| 19. | 0.363 | 1.38 | 0.937 | 1.03 | 0.631 | 0.602 | 0.416 | 0.509 | 0.772 | 0.319 | 0.365 | 0.440 | 0.501 | 0.788 |
| 20. | 0.343 | 1.33 | 1.70 | 0.729 | 0.629 | 0.610 | 0.449 | 0.432 | 0.655 | 0.317 | 0.354 | 0.426 | 0.466 | 0.621 |
| 21. | 0.339 | 1.18 | 2.55 | 0.698 | 0.624 | 0.601 | 0.501 | 0.415 | 0.553 | 0.369 | 0.360 | 0.391 | 0.447 | 0.534 |
| 22. | 0.356 | 1.18 | 3.33 | 0.699 | 0.620 | 0.656 | 0.433 | 0.427 | 0.485 | 0.410 | 0.392 | 0.356 | 0.449 | 0.573 |
| 23. | 0.370 | 1.09 | 3.48 | 0.795 | 0.612 | 0.637 | 0.399 | 0.419 | 0.451 | 0.379 | 0.339 | 0.420 | 0.493 | 2.35 |
| 24. | 0.367 | 1.50 | 1.99 | 0.845 | 0.613 | 0.609 | 0.405 | 0.880 | 0.455 | 0.384 | 1.20 | 0.466 | 0.487 | 1.46 |
| 25. | 0.364 | 1.09 | 1.33 | 0.958 | 0.601 | 0.596 | 0.415 | 1.45 | 0.416 | 0.489 | 1.13 | 0.386 | 0.544 | 2.52 |
| 26. | 0.378 | 0.926 | 1.03 | 0.869 | 0.583 | 0.559 | 0.400 | 0.737 | 0.427 | 0.852 | 0.804 | 0.383 | 0.580 | 1.71 |
| 27. | 0.362 | 0.838 | 1.01 | 0.836 | 0.601 | 0.538 | 0.372 | 0.582 | 0.425 | 0.692 | 0.709 | 0.465 | 0.591 | 1.46 |
| 28. | 0.357 | 0.760 | 0.865 | 0.850 | 0.596 | 0.612 | 0.371 | 0.523 | 1.01 | 0.480 | 0.773 | 0.460 | 0.502 | 1.02 |
| 29. | 0.368 | 0.778 | 0.743 | 0.857 | 0.587 | 0.535 | 0.378 | 0.482 | 1.02 | 0.432 | 0.485 | 0.413 | 0.454 | 0.868 |
| 30. | 0.372 | 2.84 | 0.683 | | 0.642 | 0.493 | 0.414 | 0.448 | 0.619 | 0.429 | 0.430 | 0.638 | 0.441 | 0.833 |
| 31. | | 1.70 | 0.648 | | 0.618 | | 0.575 | | 0.539 | 0.404 | | 0.488 | | 0.755 |

## Hauptwerte

| | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tag | 13. | 1. | 18. | 5. | 26. | 30. | 28. | 21. | 25. | 20. | 10. | 22. | 12. | 1. |
| NQ | 0.329 | 0.407 | 0.606 | 0.583 | 0.583 | 0.493 | 0.371 | 0.415 | 0.416 | 0.317 | 0.336 | 0.356 | 0.413 | 0.444 |
| MQ | 0.370 | 1.21 | 1.72 | 0.725 | 0.704 | 0.631 | 0.525 | 0.552 | 0.631 | 0.456 | 0.475 | 0.622 | 0.492 | 0.911 |
| HQ | 0.464 | 3.95 | 5.45 | 1.34 | 1.48 | 1.11 | 2.35 | 2.22 | 2.24 | 1.51 | 2.33 | 3.52 | 0.828 | 3.62 |
| Tag | 8. | 30. | 5. | 19. | 7. | 10. | 3. | 24. | 9. | 26. | 25. | 6. | 8. | 25. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 13 | 43 | 61 | 24 | 25 | 22 | 19 | 19 | 22 | 16 | 16 | 22 | 17 | 32 |
| | 1961/2011 | | 1962/2012 51 Jahre | | | | | | | | | | | |
| Jahr | 1997 | 2003 | 1970 | 1970 | 1972 | 1998 | 1966+ | 1964 | 2003 | 1963 | 1977 | 1971 | 1997 | 2003 |
| NQ | 0.177 | 0.135 | 0.233 | 0.267 | 0.179 | 0.232 | 0.232 | 0.180 | 0.168 | 0.160 | 0.134 | 0.154 | 0.177 | 0.135 |
| MNQ | 0.401 | 0.444 | 0.522 | 0.564 | 0.580 | 0.517 | 0.438 | 0.373 | 0.344 | 0.330 | 0.335 | 0.353 | 0.402 | 0.443 |
| MQ | 0.629 | 0.835 | 0.965 | 0.916 | 0.930 | 0.728 | 0.599 | 0.519 | 0.497 | 0.473 | 0.513 | 0.542 | 0.620 | 0.815 |
| MHQ | 2.14 | 2.81 | 3.18 | 2.73 | 2.87 | 1.96 | 1.89 | 2.03 | 2.06 | 2.07 | 1.91 | 2.08 | 2.09 | 2.72 |
| HQ | 4.80 | 8.00 | 8.59 | 8.75 | 7.77 | 6.67 | 4.49 | 7.48 | 5.28 | 5.50 | 6.53 | 15.1 | 4.80 | 6.62 |
| Jahr | 1963 | 1961 | 1968 | 1962 | 1981 | 1994 | 1969 | 1981 | 1993 | 1963 | 1993 | 1998 | 1963 | 1965 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 22 | 30 | 34 | 30 | 33 | 25 | 21 | 18 | 18 | 17 | 18 | 19 | 21 | 29 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.317 | am 20.08.2012 | 0.329 | 0.317 | 0.317 | am 20.08.2012 |
| MQ $m^3/s$ | 0.720 | | 0.899 | 0.544 | 0.705 | |
| HQ $m^3/s$ | 5.45 | am 05.01.2012 bei W= 283 cm | 5.45 | 3.52 | 5.45 | am 05.01.2012 bei W= 283 cm |
| Nq $l/(s km^2)$ | 4.20 | | 4.36 | 4.20 | 4.20 | |
| Mq $l/(s km^2)$ | 9.55 | | 11.9 | 7.21 | 9.35 | |
| Hq $l/(s km^2)$ | 72.2 | | 72.2 | 46.7 | 72.2 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 302 | | 187 | 115 | 296 | |
| | 1962/2012 (*) 51 Jahre | | | | 1962/2012 | |
| NQ $m^3/s$ | 0.134 | am 15.09.1977 | 0.135 | 0.134 | 0.134 | am 15.09.1977 |
| MNQ $m^3/s$ | 0.268 | | 0.368 | 0.280 | 0.271 | |
| MQ $m^3/s$ | 0.678 | | 0.834 | 0.524 | 0.675 | |
| MHQ $m^3/s$ | 5.21 | | 4.68 | 3.75 | 5.23 | |
| HQ $m^3/s$ | 15.1 | am 28.10.1998 bei W= 325 cm | 8.75 | 15.1 | 15.1 | am 28.10.1998 bei W= 325 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 3.55 | | 4.88 | 3.71 | 3.59 | |
| Mq $l/(s km^2)$ | 8.99 | | 11.1 | 6.95 | 8.95 | |
| MHq $l/(s km^2)$ | 69.1 | | 62.1 | 49.7 | 69.4 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 284 | | 174 | 110 | 283 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.134 | 1.78 | 15.09.1977 | 15.1 | 200 | 325 | 28.10.1998 |
| 2 | 0.135 | 1.79 | 10.12.2003 | 8.75 | 116 | 297 | 13.02.1962 |
| 3 | 0.144 | 1.91 | 02.09.1991 | 8.69 | 115 | 283 | 23.02.1970 |
| 4 | 0.150 | 1.99 | 04.09.1964 | 8.59 | 114 | 295 | 15.01.1968 |
| 5 | 0.154 | 2.04 | 17.10.1971 | 8.00 | 106 | 299 | 02.12.1961 |
| 6 | 0.157 | 2.08 | 16.12.1997 | 7.77 | 103 | 286 | 12.03.1981 |
| 7 | 0.160 | 2.12 | 25.08.1963 | 7.74 | 103 | 296 | 22.01.2008 |
| 8 | 0.179 | 2.37 | 07.08.1976 | 7.70 | 102 | 278 | 25.01.1962 |
| 9 | 0.181 | 2.40 | 08.09.1980 | 7.48 | 99.2 | 287 | 30.06.1981 |
| 10 | 0.199 | 2.64 | 10.10.1973 | 7.04 | 93.4 | 290 | 28.06.2001 |

## Dauertabelle

| Unterschreitungsdauer in Tagen | Unterschrittene Abflüsse $m^3/s$: Abfluß-jahr (*) 2012 | Kalender jahr 2012 | 1962/2012 51 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 4.29 | 4.29 | | | |
| 364 | 3.68 | 3.68 | 10.8 | 4.14 | 0.970 |
| 363 | 3.48 | 3.48 | 10.4 | 3.48 | 0.900 |
| 362 | 3.33 | 3.33 | 6.75 | 3.14 | 0.840 |
| 361 | 2.84 | 2.80 | 6.75 | 2.86 | 0.840 |
| 360 | 2.80 | 2.79 | 5.61 | 2.66 | 0.838 |
| 359 | 2.79 | 2.74 | 4.80 | 2.52 | 0.800 |
| 358 | 2.74 | 2.55 | 3.99 | 2.38 | 0.732 |
| 357 | 2.55 | 2.54 | 3.91 | 2.25 | 0.715 |
| 356 | 2.54 | 2.52 | 3.79 | 2.16 | 0.705 |
| 350 | 1.86 | 1.71 | 3.17 | 1.70 | 0.628 |
| 340 | 1.43 | 1.31 | 2.79 | 1.36 | 0.563 |
| 330 | 1.20 | 1.10 | 2.58 | 1.17 | 0.512 |
| 320 | 1.10 | 0.958 | 2.22 | 1.04 | 0.470 |
| 300 | 0.865 | 0.833 | 1.58 | 0.874 | 0.423 |
| 270 | 0.757 | 0.708 | 1.21 | 0.732 | 0.378 |
| 240 | 0.673 | 0.656 | 1.03 | 0.646 | 0.356 |
| 210 | 0.619 | 0.610 | 0.854 | 0.581 | 0.335 |
| 183 | 0.588 | 0.586 | 0.791 | 0.532 | 0.303 |
| 150 | 0.506 | 0.515 | 0.713 | 0.477 | 0.285 |
| 130 | 0.482 | 0.490 | 0.666 | 0.450 | 0.272 |
| 120 | 0.466 | 0.483 | 0.657 | 0.435 | 0.260 |
| 110 | 0.450 | 0.468 | 0.640 | 0.422 | 0.257 |
| 100 | 0.433 | 0.460 | 0.631 | 0.409 | 0.252 |
| 90 | 0.427 | 0.450 | 0.619 | 0.394 | 0.248 |
| 80 | 0.420 | 0.445 | 0.610 | 0.379 | 0.240 |
| 70 | 0.406 | 0.432 | 0.604 | 0.365 | 0.233 |
| 60 | 0.396 | 0.425 | 0.596 | 0.351 | 0.228 |
| 50 | 0.385 | 0.416 | 0.580 | 0.335 | 0.224 |
| 40 | 0.379 | 0.402 | 0.573 | 0.318 | 0.205 |
| 30 | 0.369 | 0.390 | 0.562 | 0.299 | 0.199 |
| 25 | 0.364 | 0.384 | 0.553 | 0.289 | 0.195 |
| 20 | 0.362 | 0.379 | 0.549 | 0.277 | 0.187 |
| 15 | 0.357 | 0.369 | 0.540 | 0.265 | 0.176 |
| 10 | 0.349 | 0.362 | 0.532 | 0.249 | 0.164 |
| 9 | 0.346 | 0.362 | 0.532 | 0.245 | 0.164 |
| 8 | 0.343 | 0.356 | 0.523 | 0.241 | 0.162 |
| 7 | 0.341 | 0.356 | 0.523 | 0.235 | 0.162 |
| 6 | 0.340 | 0.356 | 0.523 | 0.231 | 0.162 |
| 5 | 0.340 | 0.346 | 0.520 | 0.226 | 0.162 |
| 4 | 0.340 | 0.340 | 0.520 | 0.221 | 0.161 |
| 3 | 0.336 | 0.339 | 0.517 | 0.209 | 0.157 |
| 2 | 0.329 | 0.336 | 0.506 | 0.196 | 0.148 |
| 1 | 0.319 | 0.319 | 0.500 | 0.182 | 0.143 |
| 0 | 0.317 | 0.317 | 0.496 | 0.134 | 0.134 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Dwergter Geest

NLWKN

$A_{Eo}$ : 47.6 $km^2$

PNP : NN - 5.00 m

Lage: 9.5 km oberhalb der Mündung links

# Q

$m^3/s$

Pegel : Bagband Nr. 3926104

Gewässer : Bagbander Tief

Gebiet : Untere Ems

## Tageswerte

| Tag | 2011 Nov | 2011 Dez | 2012 Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 0.132 | 0.114 | 1.70 | 0.148 | 0.299 | 0.141 | 0.133 | 0.087 | 0.067 | 0.106 | 0.146 | 0.170 | 0.260 | 0.150 |
| 2. | 0.125 | 0.399 | 5.33 | 0.124 | 0.248 | 0.142 | 0.125 | 0.079 | 0.067 | 0.105 | 0.148 | 0.169 | 0.276 | 0.149 |
| 3. | 0.120 | 0.435 | 4.04 | 0.110 | 0.235 | 0.142 | 0.123 | 0.078 | 0.067 | 0.117 | 0.149 | 0.169 | 0.345 | 0.150 |
| 4. | 0.114 | 0.574 | 5.40 | 0.102 | 0.221 | 0.139 | 0.125 | 0.078 | 0.067 | 0.111 | 0.151 | 0.180 | 0.506 | 0.300 |
| 5. | 0.106 | 1.20 | 5.60 | 0.094 | 0.274 | 0.132 | 0.120 | 0.074 | 0.062 | 0.110 | 0.152 | 0.419 | 0.666 | 0.428 |
| 6. | 0.099 | 2.89 | 5.12 | 0.087 | 0.234 | 0.129 | 0.113 | 0.072 | 0.062 | 0.134 | 0.154 | 0.829 | 0.570 | 0.333 |
| 7. | 0.094 | 4.63 | 3.22 | 0.082 | 0.258 | 0.140 | 0.109 | 0.071 | 0.062 | 0.149 | 0.157 | 0.676 | 0.793 | 0.265 |
| 8. | 0.093 | 5.28 | 2.68 | 0.078 | 0.862 | 0.134 | 0.106 | 0.071 | 0.062 | 0.205 | 0.159 | 0.511 | 0.655 | 0.190 |
| 9. | 0.092 | 5.42 | 1.64 | 0.076 | 0.419 | 0.135 | 0.145 | 0.071 | 0.064 | 0.314 | 0.161 | 0.353 | 0.463 | 0.828 |
| 10. | 0.091 | 5.65 | 1.20 | 0.072 | 0.338 | 0.182 | 0.182 | 0.071 | 0.064 | 0.262 | 0.165 | 0.249 | 0.449 | 3.16 |
| 11. | 0.091 | 4.46 | 0.897 | 0.066 | 0.289 | 0.281 | 0.181 | 0.070 | 0.064 | 0.215 | 0.171 | 0.198 | 0.454 | 1.35 |
| 12. | 0.090 | 2.32 | 0.773 | 0.065 | 0.260 | 0.477 | 0.130 | 0.070 | 0.063 | 0.187 | 0.151 | 0.203 | 0.334 | 0.766 |
| 13. | 0.089 | 2.34 | 0.902 | 0.067 | 0.244 | 0.602 | 0.104 | 0.071 | 0.065 | 0.163 | 0.141 | 0.460 | 0.266 | 0.720 |
| 14. | 0.089 | 2.65 | 0.641 | 0.082 | 0.237 | 0.371 | 0.093 | 0.071 | 0.153 | 0.148 | 0.143 | 0.714 | 0.228 | 0.519 |
| 15. | 0.090 | 1.37 | 0.464 | 0.128 | 0.225 | 0.268 | 0.088 | 0.070 | 0.109 | 0.138 | 0.144 | 0.645 | 0.202 | 2.52 |
| 16. | 0.090 | 1.97 | 0.362 | 0.103 | 0.216 | 0.213 | 0.086 | 0.070 | 0.086 | 0.132 | 0.146 | 0.541 | 0.177 | 1.60 |
| 17. | 0.091 | 3.62 | 0.335 | 0.132 | 0.207 | 0.191 | 0.083 | 0.070 | 0.088 | 0.135 | 0.148 | 0.386 | 0.162 | 1.30 |
| 18. | 0.092 | 2.24 | 0.306 | 0.152 | 0.216 | 0.181 | 0.083 | 0.071 | 0.128 | 0.131 | 0.150 | 0.305 | 0.159 | 1.24 |
| 19. | 0.092 | 2.71 | 0.945 | 0.357 | 0.211 | 0.181 | 0.082 | 0.070 | 0.368 | 0.128 | 0.152 | 0.256 | 0.165 | 0.847 |
| 20. | 0.093 | 2.81 | 1.97 | 0.256 | 0.187 | 0.175 | 0.082 | 0.070 | 0.441 | 0.129 | 0.152 | 0.215 | 0.164 | 0.594 |
| 21. | 0.094 | 2.83 | 2.48 | 0.377 | 0.175 | 0.163 | 0.082 | 0.069 | 0.244 | 0.135 | 0.152 | 0.185 | 0.161 | 0.424 |
| 22. | 0.095 | 2.06 | 3.16 | 0.510 | 0.168 | 0.161 | 0.082 | 0.069 | 0.169 | 0.278 | 0.162 | 0.183 | 0.159 | 0.339 |
| 23. | 0.096 | 1.90 | 4.93 | 0.661 | 0.163 | 0.196 | 0.081 | 0.069 | 0.134 | 0.234 | 0.159 | 0.183 | 0.159 | 2.51 |
| 24. | 0.096 | 3.48 | 3.21 | 0.635 | 0.158 | 0.193 | 0.081 | 0.083 | 0.113 | 0.198 | 0.167 | 0.252 | 0.204 | 3.19 |
| 25. | 0.098 | 2.67 | 1.63 | 0.954 | 0.152 | 0.191 | 0.080 | 0.143 | 0.101 | 0.195 | 0.180 | 0.275 | 0.307 | 2.25 |
| 26. | 0.099 | 1.33 | 0.998 | 0.462 | 0.147 | 0.170 | 0.079 | 0.115 | 0.092 | 0.303 | 0.164 | 0.252 | 0.333 | 2.42 |
| 27. | 0.105 | 0.919 | 0.935 | 0.306 | 0.148 | 0.171 | 0.079 | 0.093 | 0.087 | 0.278 | 0.163 | 0.212 | 0.316 | 2.19 |
| 28. | 0.111 | 0.727 | 0.665 | 0.304 | 0.144 | 0.166 | 0.078 | 0.093 | 0.101 | 0.236 | 0.180 | 0.180 | 0.277 | 1.16 |
| 29. | 0.109 | 0.725 | 0.448 | 0.312 | 0.142 | 0.175 | 0.078 | 0.083 | 0.113 | 0.223 | 0.171 | 0.179 | 0.194 | 0.824 |
| 30. | 0.109 | 3.48 | 0.289 | | 0.144 | 0.151 | 0.078 | 0.072 | 0.105 | 0.214 | 0.170 | 0.316 | 0.155 | 0.600 |
| 31. | | 2.33 | 0.200 | | 0.144 | | 0.079 | | 0.108 | 0.180 | | 0.328 | | 0.497 |
| Tag | 13.+ | 1. | 31. | 12. | 29. | 6. | 28.+ | 21.+ | 5.+ | 2. | 13. | 2.+ | 30. | 2. |
| NQ | 0.089 | 0.114 | 0.200 | 0.065 | 0.142 | 0.129 | 0.078 | 0.069 | 0.062 | 0.105 | 0.141 | 0.169 | 0.155 | 0.149 |
| MQ | 0.100 | 2.44 | 2.01 | 0.238 | 0.238 | 0.203 | 0.102 | 0.078 | 0.115 | 0.180 | 0.157 | 0.329 | 0.319 | 1.09 |
| HQ | 0.133 | 5.92 | 6.20 | 1.31 | 1.10 | 0.786 | 0.207 | 0.150 | 0.614 | 0.339 | 0.222 | 1.07 | 0.906 | 4.44 |
| Tag | 1. | 10. | 5. | 25. | 8. | 13. | 9. | 25. | 20. | 22. | 11. | 6. | 7. | 23. |
| $h_N$ mm | | | | | | | | | | | | | | |
| $h_A$ mm | 5 | 137 | 114 | 13 | 13 | 11 | 6 | 4 | 6 | 10 | 9 | 19 | 17 | 61 |

## Hauptwerte

| | 1980/2011 | | 1981/2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 32 Jahre | | | | | |
| Jahr | 1985 | 1985 | 1986 | 2010 | 2008 | 2007 | 1992 | 1999 | 1999 | 1999 | 1999 | 1998 | 1985 | 1985 |
| NQ | 0.044 | 0.050 | 0.026 | 0.020 | 0.012 | 0.038 | 0.020 | 0.000 | 0.000 | 0.000 | 0.013 | 0.000 | 0.044 | 0.050 |
| MNQ | 0.179 | 0.202 | 0.272 | 0.251 | 0.229 | 0.144 | 0.104 | 0.076 | 0.080 | 0.085 | 0.091 | 0.112 | 0.177 | 0.200 |
| MQ | 0.626 | 0.836 | 1.08 | 0.772 | 0.734 | 0.282 | 0.199 | 0.168 | 0.177 | 0.159 | 0.232 | 0.299 | 0.611 | 0.844 |
| MHQ | 3.04 | 3.75 | 4.19 | 3.30 | 3.51 | 1.19 | 0.951 | 0.860 | 1.05 | 0.558 | 0.985 | 1.64 | 2.92 | 3.74 |
| HQ | 5.99 | 7.10 | 9.15 | 6.25 | 7.23 | 4.34 | 4.05 | 6.56 | 6.50 | 2.94 | 4.30 | 5.24 | 5.99 | 7.10 |
| Jahr | 1984 | 2007 | 2008 | 2002 | 1981 | 1994 | 1992 | 1981 | 1981 | 1998 | 1994 | 1988 | 1984 | 2007 |
| $Mh_N$ mm | | | | | | | | | | | | | | |
| $Mh_A$ mm | 34 | 47 | 61 | 41 | 41 | 15 | 11 | 9 | 10 | 9 | 13 | 17 | 33 | 47 |

| | Abflußjahr (*) 2012 Jahr | Datum | Winter | Sommer | Kalenderjahr 2012 Jahr | Datum |
|---|---|---|---|---|---|---|
| NQ $m^3/s$ | 0.062 | am 05.07.2012 | 0.065 | 0.062 | 0.062 | am 05.07.2012 |
| MQ $m^3/s$ | 0.522 | | 0.887 | 0.161 | 0.426 | |
| HQ $m^3/s$ | 6.20 | am 05.01.2012 bei W= 709 cm | 6.20 | 1.07 | 6.20 | am 05.01.2012 bei W= 709 cm |
| Nq $l/(s km^2)$ | 1.30 | | 1.37 | 1.30 | 1.30 | |
| Mq $l/(s km^2)$ | 11.0 | | 18.6 | 3.38 | 8.95 | |
| Hq $l/(s km^2)$ | 130 | | 130 | 22.5 | 130 | |
| $h_N$ mm | | | | | | |
| $h_A$ mm | 347 | | 293 | 54 | 283 | |
| | 1981/2012 (*) 32 Jahre | | | | 1981/2012 | |
| NQ $m^3/s$ | 0.000 | am 06.10.1998 | 0.012 | 0.000 | 0.000 | am 06.10.1998 |
| MNQ $m^3/s$ | 0.043 | | 0.099 | 0.049 | 0.045 | |
| MQ $m^3/s$ | 0.463 | | 0.724 | 0.206 | 0.463 | |
| MHQ $m^3/s$ | 5.56 | | 5.56 | 2.79 | 5.73 | |
| HQ $m^3/s$ | 9.15 | am 22.01.2008 bei W= 720 cm | 9.15 | 6.56 | 9.15 | am 22.01.2008 bei W= 720 cm |
| $HQ_1$ $m^3/s$ | | | | | | |
| $HQ_5$ $m^3/s$ | | | | | | |
| MNq $l/(s km^2)$ | 0.903 | | 2.08 | 1.03 | 0.945 | |
| Mq $l/(s km^2)$ | 9.73 | | 15.2 | 4.33 | 9.73 | |
| MHq $l/(s km^2)$ | 117 | | 117 | 58.6 | 120 | |
| $Mh_N$ mm | | | | | | |
| $Mh_A$ mm | 308 | | 239 | 69 | 308 | |

## Extremwerte

| | Niedrigwasser $m^3/s$ | $l/(s km^2)$ | Datum | Hochwasser $m^3/s$ | $l/(s km^2)$ | cm | Datum |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | | 25.06.1999 | 9.15 | 192 | 720 | 22.01.2008 |
| 2 | 0.000 | | 06.10.1998 | 7.23 | 152 | 715 | 12.03.1981 |
| 3 | 0.008 | 0.168 | 30.06.1993 | 7.10 | 149 | 713 | 07.12.2007 |
| 4 | 0.011 | 0.231 | 10.08.1983 | 6.95 | 146 | 716 | 07.03.1988 |
| 5 | 0.012 | 0.252 | 18.03.2008 | 6.77 | 142 | 713 | 06.01.1988 |
| 6 | 0.014 | 0.294 | 30.09.1982 | 6.57 | 138 | 720 | 06.01.1987 |
| 7 | 0.016 | 0.336 | 10.09.1991 | 6.56 | 138 | 710 | 30.06.1981 |
| 8 | 0.020 | 0.420 | 18.02.2010 | 6.50 | 137 | 716 | 06.01.1982 |
| 9 | 0.020 | 0.420 | 31.05.1992 | 6.46 | 136 | 707 | 13.03.1992 |
| 10 | 0.024 | 0.504 | 30.05.2004 | 6.45 | 136 | 715 | 23.01.1995 |

## Dauertabelle

Unterschrittene Abflüsse $m^3/s$

| Unterschreitungsdauer in Tagen | Abflußjahr (*) 2012 | Kalenderjahr 2012 | 1981/2012 32 Kalenderjahre Obere Hüllwerte | Mittlere Werte | Untere Hüllwerte |
|---|---|---|---|---|---|
| (365) | 5.65 | 5.60 | | | |
| 364 | 5.60 | 5.40 | 7.66 | 5.24 | 2.19 |
| 363 | 5.42 | 5.33 | 7.38 | 4.87 | 2.04 |
| 362 | 5.40 | 5.12 | 6.63 | 4.43 | 2.02 |
| 361 | 5.33 | 4.93 | 6.25 | 4.12 | 1.75 |
| 360 | 5.28 | 4.04 | 6.07 | 3.74 | 1.63 |
| 359 | 5.12 | 3.22 | 5.86 | 3.51 | 1.63 |
| 358 | 4.93 | 3.21 | 5.36 | 3.28 | 1.34 |
| 357 | 4.63 | 3.19 | 5.24 | 3.05 | 1.27 |
| 356 | 4.46 | 3.19 | 5.18 | 2.90 | 1.18 |
| 350 | 3.21 | 2.42 | 4.23 | 2.29 | 0.853 |
| 340 | 2.34 | 1.24 | 2.88 | 1.54 | 0.669 |
| 330 | 1.63 | 0.847 | 2.28 | 1.16 | 0.480 |
| 320 | 0.902 | 0.666 | 1.96 | 0.908 | 0.368 |
| 300 | 0.464 | 0.462 | 1.42 | 0.633 | 0.248 |
| 270 | 0.281 | 0.307 | 0.940 | 0.410 | 0.195 |
| 240 | 0.213 | 0.248 | 0.694 | 0.303 | 0.161 |
| 210 | 0.179 | 0.193 | 0.530 | 0.242 | 0.117 |
| 183 | 0.157 | 0.171 | 0.423 | 0.194 | 0.088 |
| 150 | 0.142 | 0.153 | 0.329 | 0.153 | 0.061 |
| 130 | 0.129 | 0.147 | 0.294 | 0.132 | 0.048 |
| 120 | 0.117 | 0.143 | 0.279 | 0.123 | 0.045 |
| 110 | 0.111 | 0.135 | 0.279 | 0.116 | 0.043 |
| 100 | 0.106 | 0.129 | 0.266 | 0.109 | 0.040 |
| 90 | 0.098 | 0.115 | 0.265 | 0.101 | 0.040 |
| 80 | 0.094 | 0.108 | 0.253 | 0.092 | 0.033 |
| 70 | 0.091 | 0.094 | 0.245 | 0.084 | 0.015 |
| 60 | 0.086 | 0.086 | 0.229 | 0.075 | 0.001 |
| 50 | 0.082 | 0.082 | 0.212 | 0.067 | 0.001 |
| 40 | 0.079 | 0.079 | 0.188 | 0.060 | 0.001 |
| 30 | 0.072 | 0.072 | 0.180 | 0.050 | 0.001 |
| 25 | 0.071 | 0.071 | 0.180 | 0.046 | 0.001 |
| 20 | 0.071 | 0.071 | 0.173 | 0.041 | 0.001 |
| 15 | 0.069 | 0.069 | 0.173 | 0.036 | 0.001 |
| 10 | 0.066 | 0.066 | 0.173 | 0.028 | 0.001 |
| 9 | 0.066 | 0.066 | 0.173 | 0.026 | 0.001 |
| 8 | 0.066 | 0.066 | 0.165 | 0.024 | 0.001 |
| 7 | 0.065 | 0.065 | 0.165 | 0.023 | 0.001 |
| 6 | 0.065 | 0.065 | 0.165 | 0.021 | 0.001 |
| 5 | 0.065 | 0.065 | 0.165 | 0.017 | 0.001 |
| 4 | 0.063 | 0.063 | 0.165 | 0.014 | 0.001 |
| 3 | 0.063 | 0.063 | 0.165 | 0.013 | 0.001 |
| 2 | 0.063 | 0.063 | 0.159 | 0.001 | 0.001 |
| 1 | 0.063 | 0.063 | 0.159 | 0.001 | 0.001 |
| 0 | 0.062 | 0.062 | 0.153 | 0.000 | 0.000 |

(*) Abflußjahr: 1.11. des Vorjahres bis 31.10.

Repräsentativ für die Hydrologische Landschaft Friesische Geest

NLWKN

# Q

$A_{Eo}$ : 2078 $km^2$ — $m^3/s$ — Pegel : Leer — Nr. 38951019

PNP : NN - 5,00 m — aus Tidedurchflußmessungen — Gewässer : Leda

Lage : 3,7 km oberhalb der Mündung links — Gebiet : Ems/Leda — GKZ 3895000

| | | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Wi | So | Jahr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Monatswerte | | | | | | | | | | | | | | | | |
| Tiden | n u | 49 | 14 | 20 | 41 | 51 | 55 | 59 | 56 | 57 | 56 | 47 | 50 | 230 | 325 | 555 |
| Tiden | n b | 9 | 46 | 40 | 15 | 9 | 3 | 1 | 2 | 3 | 3 | 11 | 10 | 122 | 30 | 152 |
| $MV_e$ | $10^3\ m^3$ | 4893 | 3945 | 4316 | 3412 | 3117 | 4297 | 4528 | 4719 | 4629 | 4743 | 4454 | 4329 | 3997 | 4567 | 4282 |
| $MV_f$ | $10^3\ m^3$ | 4702 | 1336 | 1167 | 2382 | 2282 | 3737 | 4153 | 4341 | 4326 | 4454 | 3979 | 3817 | 2601 | 4178 | 3390 |
| Datum | | 13. | 01. | 27. | 22. | 11. | 26. | 01. | 08. | 06. | 19. | 16. | 05. | 13.11. | 01.05. | 01.05. |
| $NV_t$ | $10^3\ m^3$ | -1638 | -779 | -322 | 94 | -119 | -289 | -2309 | -48 | -289 | -338 | -2189 | -401 | -1638 | -2309 | -2309 |
| $MV_t$ | $10^3\ m^3$ | 191 | 2609 | 3149 | 1030 | 835 | 560 | 375 | 378 | 303 | 289 | 475 | 512 | 1396 | 389 | 892 |
| $HV_t$ | $10^3\ m^3$ | 1953 | 4382 | 5269 b | 2977 | 2396 | 1560 | 2532 | 1814 | 1977 | 1435 | 2193 | 2276 | 5269 b | 2532 | 5269 b |
| Datum | | 30. | 31. | 09. | 22. | 09. | 07. | 02. | 26. | 20. | 08. | 19. | 06. | 09.01. | 02.05. | 09.01. |
| Tideabfluß $MQ_{tM}$ | $m^3/s$ | 4,3 | 58,4 | 70,5 | 23,0 | 18,7 | 12,5 | 8,4 | 8,5 | 6,8 | 6,5 | 10,6 | 11,5 | 31,2 | 8,7 | 20,0 |
| Abflußspende Mq | $l/skm^2$ | 2,1 | 28,1 | 33,9 | 11,1 | 9,0 | 6,0 | 4,0 | 4,1 | 3,3 | 3,1 | 5,1 | 5,5 | 15,0 | 4,2 | 9,6 |
| Gebietsniederschl. $h_N$ | mm | 3 | 181 | 111 | 23 | 14 | 44 | 51 | 78 | 98 | 56 | 52 | 70 | 376 | 405 | 781 |
| Abflußhöhe $h_A$ | mm | 5 | 75 | 91 | 28 | 24 | 16 | 11 | 11 | 9 | 8 | 13 | 15 | 239 | 66 | 305 |
| Hauptwerte 2003 – 2012 10 Jahre | | | | | | | | | | | | | | | | |
| $N\text{-}Q_{Mon.}$ | $m^3/s$ | 16,6 | 15,5 | 20,2 | 27,0 | 23,0 | 9,7 | 5,0 | 2,1 | 3,1 | 1,7 | 1,9 | 1,4 | 22,8)[1] | 4,4 )[1] | 13,6 )[2] |
| $MQ_{tM}$ | $m^3/s$ | 30,4 | 28,3 | 38,7 | 35,0 | 32,3 | 17,0 | 15,1 | 11,5 | 11,0 | 12,0 | 12,8 | 13,5 | 30,3 | 12,7 | 21,5 |
| $H\text{-}Q_{Mon.}$ | $m^3/s$ | 44,6 | 40,1 | 65,2 | 61,8 | 47,2 | 25,7 | 26,6 | 19,5 | 20,0 | 22,0 | 21,7 | 20,0 | 37,0 )[1] | 18,0 )[1] | 26,6 )[2] |
| M q | $l/skm^2$ | 13,4 | 15,1 | 20,4 | 16,1 | 14,5 | 8,0 | 6,9 | 5,4 | 5,1 | 5,5 | 6,1 | 6,4 | 14,6 | 5,9 | 10,2 |
| $Mh_N$ | mm | 66 | 78 | 76 | 45 | 49 | 32 | 64 | 61 | 95 | 86 | 64 | 63 | 346 | 433 | 779 |
| $Mh_A$ | mm | 30 | 40 | 55 | 40 | 39 | 21 | 19 | 14 | 14 | 15 | 16 | 16 | 225 | 94 | 319 |

$MV_e$ = arithmetische Mittel der Ebbewasservolumina — u = unbeeinflusst durch Ledasperrwerk — )[1] Halbjahresmittelwert

$MV_f$ = arithmetische Mittel der Flutwasservolumina — b und # = beeinflusst durch Ledasperrwerk — )[2] Jahresmittelwert

$V_t$ = $V_e$ - $V_f$ — * teilweise ergänzt nach Nortmoor — NLWKN-BSt. Norden

# Q

$A_{Eo}$ : 1327 $km^2$ — $m^3/s$ — Pegel : Nortmoor Nr. 3889102

PNP : NN - 5,00 m — aus Tidedurchflußmessungen — Gewässer : Jümme

Lage : 4,95 km oberhalb der Mündung rechts — Gebiet : Leda GKZ 3889000

| | | Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Wi | So | Jahr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Monatswerte | | | | | | | | | | | | | | | | |
| Tiden | n u | 49 | 14 | 20 | 41 | 51 | 55 | 59 | 56 | 56 | 57 | 47 | 50 | 230 | 325 | 555 |
| Tiden | n b | 9 | 46 | 40 | 15 | 9 | 3 | 1 | 2 | 3 | 3 | 11 | 10 | 122 | 30 | 152 |
| $MV_e$ | $10^3$ $m^3$ | 1418 | 1802 | 2089 | 1341 | 1650 | 1644 | 1668 | 1694 | 1698 | 1662 | 1595 | 1599 | 1657 | 1653 | 1655 |
| $MV_f$ | $10^3$ $m^3$ | 1263 | 354 | 356 | 805 | 1233 | 1344 | 1475 | 1498 | 1511 | 1520 | 1411 | 1370 | 893 | 1464 | 1178 |
| Datum | | 13. | 02. | 27. | 06. | 11. | 06. | 01. | 16. | 12. | 29. | 16. | 04. | 06.04 | 01.05 | 01.05 |
| $NV_t$ | $10^3$ $m^3$ | -215 | -56 | 200 | 154 | -222 | -315 | -714 | -128 | -69 | -280 | -591 | -412 | -315 | -714 | -714 |
| $MV_t$ | $10^3$ $m^3$ | 155 | 1448 | 1733 | 536 | 417 | 300 | 193 | 196 | 187 | 142 | 184 | 229 | 765 | 189 | 477 |
| $HV_t$ | $10^3$ $m^3$ | 623 | 2395 b | 2547 b | 1062 | 1369 | 1025 | 996 | 516 | 719 | 565 | 853 | 970 | 2547 b | 996 | 2547 b |
| Datum | | 02. | 13. | 11. | 25. | 09. | 07. | 02. | 05. | 20. | 27. | 19. | 06. | 11.01 | 02.05 | 11.01 |
| Tideabfluß $MQ_{tM}$ | $m^3/s$ | 3,5 | 32,7 | 38,4 | 12,0 | 9,3 | 6,7 | 4,3 | 4,4 | 4,2 | 3,2 | 4,1 | 5,1 | 17,1 | 4,2 | 10,7 |
| Abflußspende Mq | $l/skm^2$ | 2,6 | 24,6 | 29,0 | 9,0 | 7,0 | 5,1 | 3,3 | 3,3 | 3,2 | 2,4 | 3,1 | 3,9 | 12,9 | 3,2 | 8,0 |
| Gebietsniederschl. $h_N$ | mm | 3 | 181 | 111 | 23 | 14 | 44 | 51 | 78 | 98 | 56 | 52 | 70 | 376 | 405 | 781 |
| Abflußhöhe $h_A$ | mm | 7 | 65 | 78 | 23 | 19 | 13 | 9 | 9 | 8 | 6 | 8 | 10 | 205 | 50 | 255 |
| Hauptwerte 2003– 2012 10 Jahre | | | | | | | | | | | | | | | | |
| $N\text{-}Q_{Mon.}$ | $m^3/s$ | 2,5 | 8,5 | 8,1 | 10,9 | 3,5 | 1,4 | 0,2 | 1,4 | 0,1 | -0,6 | 1,0 | 0,7 | 9,9[1] | 1,9)[1] | 6,4)[2] |
| $MQ_{tM}$ | $m^3/s$ | 11,1 | 13,7 | 19,7 | 15,6 | 12,1 | 5,3 | 4,2 | 2,7 | 3,3 | 3,6 | 4,3 | 4,6 | 12,9 | 3,8 | 8,3 |
| $H\text{-}Q_{Mon.}$ | $m^3/s$ | 20,0 | 32,7 | 38,4 | 30,0 | 23,1 | 10,3 | 8,8 | 4,4 | 9,4 | 7,1 | 6,7 | 7,4 | 18,7)[1] | 5,5)[1] | 11,0)[2] |
| M q | $l/skm^2$ | 7,5 | 9,3 | 13,3 | 10,6 | 8,2 | 3,6 | 2,8 | 1,9 | 2,2 | 2,4 | 2,9 | 3,2 | 8,8 | 2,6 | 5,7 |
| $Mh_N$ | mm | 68 | 79 | 77 | 46 | 51 | 32 | 64 | 62 | 97 | 85 | 65 | 63 | 353 | 436 | 789 |
| $Mh_A$ | mm | 16 | 25 | 29 | 23 | 19 | 13 | 13 | 10 | 10 | 11 | 12 | 13 | 125 | 69 | 194 |

$MV_e$ = arith. Mittel der Ebbewasservolumina — u = unbeeinflusst durch Ledasperrwerk — )[1] Halbjahresmittelwert

$MV_f$ = arithmetische Mittel der Flutwasservolumina — b = beeinflusst durch Ledasperrwerk — )[2] Jahresmittelwert

$V_t$ = $V_e$ - $V_f$ — NLWKN-BSt. Norden

# Grundwassermeßstellen

## Stammdaten

| Meßstelle | | | Lage | | Höhe (NN+m) | | Stock- | Druck- | Geologie | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nummer | Bezeichnung | Art | TK 25 | Rechtswert Hochwert | Gelände Meßunkt | UK- Filter | werk | verhält- nisse | Gestein Formation | Grundwasser- Landschaft | Land | Daten verfügbar bei |
| 26124531 | Groß Oldendorf | R | 2612 | 3415295<br>5913004 | 10,90<br>11,53 | 12,00 | 1 | f | Feinsand<br>Quartär | Oldenburg-Ostfriesische Geest | NI | NLWKN-BSt. Aurich<br>NLWKN |
| 30114082 | Esterwegen | R | 3011 | 3408280<br>5874370 | 16,90<br>17,23 | 1,53 | 1 | f | Mittelsand<br>Quartär | Vechte- Ems-Niederung | NI | NLWKN-BSt. MEP<br>NLWKN |
| 33145761 | Langwege | R | 3314 | 3440110<br>5832240 | 29,40<br>29,56 | 24,46 | 1 | f | Talsande<br>Quartär | Baw.-, Quak.-, Kor-, Bar.-Becken | NI | NLWKN-BSt. CLP<br>NLWKN |
| 20104054 | Senne 205 flach | R | 4017 | 3466000<br>5756080 | 105,85<br>106,80 | 97,80 | 1 | f | Vorschüttsande<br>Quartär | Senne | NW | StUA Bielefeld<br>LUA Essen |

$A_{Eo}$ : 3.740 km²

Lage : 153,0 km Lauflänge ab Quelle

Messstelle: **Rheine** Nr. **33906105**
Gewässer: Ems
Gebiet: Obere Ems

| Bezeichnung | Zeitspanne | Kalenderjahr 2012 / Abflussjahr * 2012 Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 12 | 18 | 18 | 11 | 8 | 17 | 11 | 15 | 12 | 19 | 17 | 19 | 5 | |
| | 1965/2012 | 19 | 21 | 24 | 29 | 27 | 34 | 32 | 39 | 33 | 36 | 28 | 20 | 19 | 21 |
| größte g/m³ | 2012 | 30 | 111 | 36 | 61 | 21 | 65 | 55 | 74 | 40 | 94 | 79 | 164 | 23 | |
| | 1965/2012 | 459 | 470 | 1103 | 1052 | 840 | 924 | 870 | 1362 | 610 | 2340 | 1280 | 810 | 459 | 470 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 8,09 | 45,9 | 102 | 35,3 | 33,0 | 19,5 | 14,8 | 14,1 | 17,4 | 6,73 | 6,03 | 13,2 | 12,5 | |
| MQ | 1965/2012 | 37,9 | 58,6 | 72,9 | 64,4 | 59,8 | 41,1 | 26,6 | 18,8 | 18,3 | 15,3 | 17,3 | 23,3 | 37,9 | 59,4 |
| S-Transport kg/s | 2012 | 0,10 | 0,90 | 1,93 | 0,42 | 0,24 | 0,33 | 0,16 | 0,21 | 0,20 | 0,12 | 0,10 | 0,18 | 0,06 | |
| | 1965/2012 | 0,89 | 1,36 | 1,94 | 1,95 | 1,86 | 1,88 | 1,01 | 1,01 | 0,65 | 0,54 | 0,53 | 0,55 | 0,89 | 1,39 |
| S-Fracht t | 2012 | 247 | 2407 | 5181 | 1053 | 635 | 861 | 429 | 540 | 547 | 324 | 260 | 469 | 153 | |
| | 1965/2012 | 2296 | 3655 | 5184 | 4762 | 4978 | 4866 | 2718 | 2565 | 1713 | 1448 | 1363 | 1485 | 2297 | 3636 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 15 | | 14 | |
| | 1965/2012 | 28 | | 28 | |
| größte g/m³ | 2012 | 164 | 02.10.2012 | 164 | 02.10.2012 |
| | 1965/2012 | 2340 | 07.08.1969 | 2340 | 07.08.1969 |
| Messungen | | 259 | | 237 | |
| Abfluss mł/s MQ | 2012 | 26,5 | | 25,0 | |
| MQ | 1965/2012 | 37,8 | | 37,8 | |
| S-Transport kg/s | 2012 | 0,41 | | ** | |
| | 1965/2012 | 1,18 | | 1,17 | |
| S-Fracht t | 2012 | 12952 | | ** | |
| | 1965/2012 | 37390 | | 37015 | |
| S-Abtrag t/km² | 2012 | 3,46 | | ** | |
| | 1965/2012 | 9,99 | | 9,90 | |

Bezugspegel: Rheine UP Nr. 33900200
$A_{Eo}$ = 3.740 km²
PNP = NN + 24,19 m
Lage : 153 km Lauflänge ab Quelle rechts

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1965/2012 | Kalenderj. 1965/2012 |
|---|---|---|---|---|
| NQ | 3,80 | 3,80 | 2,62 | 2,62 |
| MNQ | | | 6,37 | 6,63 |
| MQ | 26,5 | 25,0 | 37,8 | 37,8 |
| MHQ | | | 239 | 236 |
| HQ | 163 | 163 | 403 | 403 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

** aufgrund fehlender Messwerte können hier keine Angaben gemacht werden (Datenlücke im Dezember)

Bundesanstalt für Gewässerkunde

$A_{Eo}$ : 8.686 km²

Lage : 253,3 km Lauflänge ab Quelle

Messstelle: **Lathen** Nr. **37306100**
Gewässer: Ems
Gebiet: Obere Ems

| Bezeichnung | Zeitspanne | Kalenderjahr 2012 / Abflussjahr * 2012 Nov | Dez | Jan | Feb | Mrz | Apr | Mai | Jun | Jul | Aug | Sep | Okt | Nov | Dez |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 11 | 32 | 19 | 25 | 18 | 16 | 15 | 13 | 14 | 7 | 7 | 9 | 4 | 21 |
| | 1965/2012 | 16 | 18 | 18 | 21 | 20 | 21 | 23 | 21 | 21 | 19 | 17 | 13 | 16 | 18 |
| größte g/m³ | 2012 | 17 | 49 | 32 | 40 | 33 | 26 | 21 | 18 | 44 | 27 | 18 | 25 | 18 | 86 |
| | 1965/2012 | 155 | 129 | 374 | 156 | 85 | 264 | 320 | 165 | 104 | 83 | 100 | 136 | 155 | 129 |
| Messungen | | W | W | W | W | W | W | W | W | W | W | W | W | W | W |
| Abfluss m³/s MQ | 2012 | 30,9 | 109 | 206 | 92,3 | 77,2 | 54,4 | 40,0 | 39,6 | 43,4 | 29,5 | 29,6 | 45,6 | 38,2 | 106 |
| MQ | 1965/2012 | 82,6 | 115 | 147 | 133 | 128 | 91,0 | 59,9 | 44,3 | 41,4 | 35,9 | 41,8 | 54,9 | 81,4 | 111 |
| S-Transport kg/s | 2012 | 0,34 | 3,69 | 4,03 | 2,53² | 1,24² | 0,87 | 0,61 | 0,53² | 0,58² | 0,21 | 0,20 | 0,37 | 0,16 | 2,49 |
| | 1965/2012 | 1,55 | 2,44 | 3,04 | 2,93 | 2,80 | 2,17 | 1,45 | 1,05 | 0,93 | 0,67 | 0,74 | 0,82 | 1,54 | 2,42 |
| S-Fracht t | 2012 | 873 | 9892 | 10783 | 2844² | 2365² | 2255 | 1638 | 549² | 1458² | 553 | 529 | 998 | 416 | 6664 |
| | 1965/2012 | 4019 | 6503 | 8153 | 7083 | 7478 | 5615 | 3853 | 2633 | 2425 | 1760 | 1923 | 2198 | 3985 | 6452 |

| | | Abflussj. | Datum | Kalenderj. | Datum |
|---|---|---|---|---|---|
| S-Konzentration mittlere g/m³ | 2012 | 15 | | 13 | |
| | 1965/2012 | 19 | | 19 | |
| größte g/m³ | 2012 | 49 | 29.12.2011 | 86 | 19.12.2012 |
| | 1965/2012 | 374 | 11.01.1981 | 374 | 11.01.1981 |
| Messungen | | 257 | | 252 | |
| Abfluss mł/s MQ | 2012 | 66,6 | | 67,0 | |
| MQ | 1965/2012 | 81,1 | | 80,7 | |
| S-Transport kg/s | 2012 | ** | | ** | |
| | 1965/2012 | 1,77 | | 1,77 | |
| S-Fracht t | 2012 | ** | | ** | |
| | 1965/2012 | 55896 | | 55954 | |
| S-Abtrag t/km² | 2012 | ** | | ** | |
| | 1965/2012 | 6,43 | | 6,44 | |

Bezugspegel: Versen Nr. 37300103
$A_{Eo}$ = 8.369 km²
PNP = NN + 6,71 m
Lage : 234,8 km Lauflänge ab Quelle rechts

| Abfluss-Hauptwerte m³/s | Abflussj. 2012 | Kalenderj. 2012 | Abflussj. 1965/2012 | Kalenderj. 1965/2012 |
|---|---|---|---|---|
| NQ | 23,6 | 23,6 | 10,4 | 10,4 |
| MNQ | | | 18,9 | 19,5 |
| MQ | 66,6 | 67,0 | 81,1 | 80,7 |
| MHQ | | | 340 | 334 |
| HQ | 277 | 277 | 643 | 643 |

* Abflussjahr: 1.11. des Vorjahres bis 31.10.
W = Messungen werktäglich (Mo - Fr)
TA = Messungen täglich
S-Konzentration = arithmetisches Mittel der Tageswerte

** aufgrund fehlender Messwerte können hier keine Angaben gemacht werden (Datenlücke im Dezember)
² diese Werte basieren auf einer unvollständigen Messreihe (Datenlücke im Feb, Mrz, Jun, Jul)

Bundesanstalt für Gewässerkunde

# Änderungen, Korrekturen und Nachträge

**Deutsches Gewässerkundliches Jahrbuch 1990**

Keine Nachträge und Änderungen

**Deutsches Gewässerkundliches Jahrbuch 1991**

Der Pegel 420110 Dorndorf 1 (Werra) wurde durch den Nachfolgepegel 420120 Vacha (Werra) ersetzt.

**Deutsches Gewässerkundliches Jahrbuch 1992**

Der Pegel 420010 Grimmelshausen (Werra) wurde durch den Nachfolgepegel 420011 Ebenhards (Werra) ersetzt.

**Deutsches Gewässerkundliches Jahrbuch 1993**

Die Pegel 56201003 Voßheide (Bega) und 56001004 Ehrentrup (Werre) entfallen ab der Jahrbuchausgabe 1993.

**Deutsches Gewässerkundliches Jahrbuch 1994**

Keine Nachträge und Änderungen.

**Deutsches Gewässerkundliches Jahrbuch 1995**

Als Nachträge werden die folgende Meßstellen veröffentlicht: Pegel Rheda (40002008) 1992 und 1993, Pegel Welda (54008002) 1993, Pegel Ottbergen (55202000) 1993.

Die Grafiken der Tidewasserstände der Pegel Bremerhaven und Emden entfallen ab der Jahrbuchausgabe 1995.

Veränderung von Einzugsgebieten

Die Richtlinie für die Gebietsbezeichnung und die Verschlüsselung von Fließgewässern, LAWA 1993, sieht bei Gewässerüberleitung eine fiktive Trennung der Gewässer am Ausleitpunkt vor.

Nach einer jetzt durchgeführten konsequenten Anwendung dieser Richtlinie werden ausschließlich topographische Einzugsgebietsgrößen an Pegeln angegeben, übergeleitete Wassermengen erscheinen als Zusatzinformationen, sofern diese mehr als 5% des jeweiligen MQ des Pegels betragen.

Aus der Überarbeitung folgender Überleitungen in Niedersachsen ergeben sich veränderte Einzugsgebietsgrößen:

Überleitung aus der Aller in den Mittellandkanal bei Grafhorst

- alle Pegel an der Aller ab Brenneckenbrück sowie der Pegel an der Weser ab der Aller +245 km²

Bifurkation Hase/Else

- alle Pegel an der Hase ab der Bifurkation +20km².
- alle Pegel an der Else, Werre, Weser ab der Werre -20km²

Überleitung aus Speller Aa in die Gigel Aa

- Pegel Plantlünne -101 km²

**Deutsches Gewässerkundliches Jahrbuch 1996**

Keine Nachträge und Änderungen.

**Deutsches Gewässerkundliches Jahrbuch 1997**

Die Pegel in Nordrhein-Westfalen haben neue Messstellennummern erhalten.

Der Pegel Bredelar (4427000000100) wurde neu aufgenommen.

Die folgenden Pegel werden nicht mehr veröffentlicht: Espeln - Q (40001005), Gütersloh - Q (21201101) , Versmold - Q (41603003), Huntlosen - W (4965142), Meppen - S (36906101)

**Deutsches Gewässerkundliches Jahrbuch 1998**

Die Hessische Landesanstalt für Umwelt (HlfU) wurde mit dem Hessischen Landesamt für Bodenforschung zum Hessischen Landesamt für Umwelt (HLUG) zusammengelegt.

Die Schwebstoffmessstelle Versen (37300103) wurde 1998 durch die Messstelle Lathen (37306100) ersetzt.

**Deutsches Gewässerkundliches Jahrbuch 1999**

Als Nachtrag wird der Pegel Ziegenhagen 1 (41980355) von 1995 bis 1998 veröffentlicht.

Die Grundwassermeßstelle Voßbarg I wurde durch die Meßstelle Groß Oldendorf ersetzt.

# Änderungen, Korrekturen und Nachträge

**Deutsches Gewässerkundliches Jahrbuch 2000**

Als Nachtrag werden die Quellschüttungsangaben von 1999 mit korrigierten Werten veröffentlicht.

Die Neukonzeption des Niedersächsischen Pegelmessnetzes hatte auch Auswirkungen auf das Gewässerkundliche Jahrbuch des Weser-und Emsgebietes. So wurden zahlreiche Pegel ausgetauscht.

Es entfallen die Pegel:

| | |
|---|---|
| 3439103 | Plantlünne |
| 3615104 | Lüstringen |
| 3637101 | Bersenbrück |
| 3881127 | Kampe |
| 3882106 | Bad Zwischenahn |
| 4781106 | Wilhelmstein |
| 4821112 | Okertal |
| 4841104 | Heerte |
| 4872128 | Wieckenberg |
| 4882101 | Rhumspringe |
| 4882152 | Scharzfeld |
| 4882196 | Elvershausen |
| 4886122 | Hohenrode |
| 4961130 | Dümmer-Ost |
| 4965142 | Huntlosen |

Neu hinzugekommen sind die Pegel:

| | |
|---|---|
| 3633101 | Bramsche |
| 3647101 | Uptloh |
| 3655101 | Bunnen |
| 3676106 | Lotten |
| 3723105 | Apeldorn |
| 3749101 | Walchum |
| 3895101 | Leer |
| 3926104 | Bagband |
| 4364106 | Steimke A |
| 4821103 | Altenau O |
| 4845103 | Peine |
| 4854112 | Aligse |
| 4872119 | Meitze |
| 4882161 | Pionierbrücke |
| 4882176 | Riefensbeek |
| 4882198 | Northeim |
| 4885150 | Mehle |
| 4888139 | Wunstorf |

**Deutsches Gewässerkundliches Jahrbuch 2001**

Keine Nachträge und Änderungen.

**Deutsches Gewässerkundliches Jahrbuch 2002**

Aufgrund der Umstellung der Klimastation Kassel auf automatische Messwerterfassung kam es zu einigen Fehlwerten bei der Niederschlags- und Schneehöhenerfassung. Die Klimastation Kassel wird im Jahrbuch 2003 durch die Station Göttingen ersetzt.

**Deutsches Gewässerkundliches Jahrbuch 2003**

Der Pegel Holtland (3888104) entfällt ab der Jahrbuchausgabe 2003.

**Deutsches Gewässerkundliches Jahrbuch 2004 bis 2008**

Keine Nachträge und Änderungen.

**Deutsches Gewässerkundliches Jahrbuch 2009**

Als Korrektur wird der Pegel Harzburg (4821122) von 2004 bis 2008 veröffentlicht.

**Deutsches Gewässerkundliches Jahrbuch 2010**

Die Einarbeitung der Niederschlagsdaten des Deutschen Wetterdienstes konnte für 2010 wegen fehlender Daten zum jetzigen Zeitpunkt nicht durchgeführt werden. Sie werden später nachgereicht.

**Deutsches Gewässerkundliches Jahrbuch 2011**

Die Einarbeitung der Niederschlagsdaten des Deutschen Wetterdienstes konnte für 2011 wegen fehlender Daten zum jetzigen Zeitpunkt nicht durchgeführt werden. Sie werden später nachgereicht.

**Deutsches Gewässerkundliches Jahrbuch 2012**

Die Einarbeitung der Niederschlagsdaten des Deutschen Wetterdienstes konnte für 2012 wegen fehlender Daten zum jetzigen Zeitpunkt nicht durchgeführt werden. Sie werden später nachgereicht.

Die Klimastation Clausthal-Zellerfeld, deren Messbetrieb eingestellt wurde, wird ab 2012 durch die Station Braunlage ersetzt.

# Gebietsdarstellung für die Gliederung des Deutschen Gewässerkundlichen Jahrbuches

**D** Donaugebiet *Hrsg.: Bayerisches Landesamt für Umwelt*

**R I** Rheingebiet, Teil I, Hoch- und Oberrhein *Hrsg.: Landesanstalt für Umwelt, Messungen und Naturschutz Baden-Württemberg*

**R II** Rheingebiet, Teil II, Main *Hrsg.: Bayerisches Landesamt für Umwelt*

**R III** Rheingebiet, Teil III, Mittel- und Niederrhein mit deutschem Issel- und Maasgebiet
*Hrsg.: Landesamt für Natur, Umwelt und Verbraucherschutz Nordrhein-Westfalen*

**W/E** Weser- und Emsgebiet *Hrsg.: Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz*

**E I** Elbegebiet, Teil I, von der Grenze zur CR bis zur Havelmündung *Hrsg.: Landesbetrieb für Hochwasserschutz und Wasserwirtschaft Sachsen-Anhalt*

**E II** Elbegebiet, Teil II, Havel mit deutschem Odergebiet *Hrsg.: Landesamt für Umwelt, Gesundheit und Verbraucherschutz, Brandenburg*

**E III** Elbegebiet, Teil III, Untere Elbe *Hrsg.: Freie und Hansestadt Hamburg, Hamburg Port Authority*

**KN** Küstengebiet der Nordsee *Hrsg.: Landesamt für Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein*

**KO** Küstengebiet der Ostsee *Hrsg.: Landesamt für Umwelt, Naturschutz und Geologie Mecklenburg-Vorpommern*

Übersicht über das Deutsche Gewässerkundliche Jahrbuch

## Weser- und Emsgebiet

| Titel, Gebiet | Abflußjahr | Herausgeber | Vertrieb |
|---|---|---|---|
| Jahrbuch für die Gewässerkunde Norddeutschlands | 1901-1936 | Preußische Landesanstalt für Gewässerkunde und Hauptnivellements in Berlin | vergriffen |
| Jahrbuch für die Gewässerkunde des Deutschen Reiches | 1937-1939 | Landesanstalt für Gewässerkunde und Hauptnivellements in Berlin | vergriffen |
| Jahrbuch für die Gewässerkunde des Deutschen Reiches | 1940 | Bundesanstalt für Gewässerkunde in Koblenz | vergriffen |
| Deutsches Gewässerkundliches Jahrbuch Wesergebiet | 1941/1945 | Der Niedersächsische Minister für Ernährung, Landwirtschaft und Forsten in Hannover | vergriffen |
| " Ergänzungsheft | 1941/1945 | | Nds. Landesamt für Ökologie, Postfach 31110 Hildesheim |
| " | 1946 | | |
| " | 1947 | " | " |
| " | 1948 | " | " |
| " | 1949 | " | " |
| " | 1950 | " | " |
| " | 1951 | " | " |
| " | 1952 | " | " |
| " | 1953 | " | " |
| " | 1954 | " | " |
| " | 1955 | " | " |
| " | 1956 | " | " |
| Emsgebiet | 1941/1945 | Min. f. Ern., Landw. u. Forsten des Landes Nordrhein-Westfalen | Fa. Laserich Corneliusstraße 72 40215 Düsseldorf |
| " | 1946 | | |
| " | 1947 | Minister für Wirtschaft und Verkehr des Landes Nordrhein-Westfalen in Düsseldorf | " |
| " | bis | | " |
| " | 1949 | | " |
| " | 1950 | Ministerium für Ernährung, Landwirtschaft und Forsten des Landes Nordrhein-Westfalen in Düsseldorf | " |
| " | bis | | " |
| " | | | " |
| " | 1956 | | " |
| Weser- und Emsgebiet | 1957 | Der Niedersächsische Minister für Ernährung, Landwirtschaft und Forsten in Hannover | Nds. Landesamt für Ökologie, Postfach 31110 Hildesheim |
| " | bis | | |
| " | | | |
| " | 1982 | " | |
| " | 1983 | Niedersächsisches Landesamt für Wasserwirtschaft, Hildesheim | " |
| " | bis | | " |
| " | 1986 | " | " |
| " | 1987 | Niedersächsisches Landesamt für Wasser und Abfall, Hildesheim | " |
| " | 1988 | Niedersächsisches Landesamt für Ökologie, Hildesheim | vergriffen |
| " | 1989 | | " |
| " | 1990 | " | Nds. Landesamt für Ökologie Postfach 31110 Hildesheim |
| " | 1991 | " | |
| " | 1992 | " | |
| " | 1993 | " | |
| " | 1994 | " | " |
| " | 1995 | " | " |
| " | 1996 | " | " |
| " | 1997 | " | " |
| " | 1998 | " | " |
| " | 1999 | " | " |
| " | 2000 | " | " |
| " | 2001 | " | " |
| " | 2002 | Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz Betriebsstelle Hannover-Hildesheim | NLWKN BSt. Hannover-Hildesheim Göttinger Chaussee 76 30453 Hannover |
| " | | | |
| " | bis | | |
| | 2012 | " | " |

Deutsches Gewässerkundliches Jahrbuch

# Weser- und Emsgebiet 2012

Übersichtskarte 1 : 500 000

# Deutsches Gewässerkundliches Jahrbuch
# Weser- und Emsgebiet 2012

Digitale Ausgabe - Version 4.0

Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz

Hildesheim 03/2015

Bearbeitung:
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Die digitale Ausgabe des Deutschen Gewässerkundlichen Jahrbuches ist eine Übertragung der Druckausgabe in das digitale PDF-Format (Portable Document-Format). Layout und Inhalt der digitalen Ausgabe sind mit der Druckausgabe identisch. Die digitale Ausgabe des Jahrbuches ist mit einer **interaktiven Navigationsfunktion** ausgestattet.

Um zur **Online-Hilfe** zu gelangen, klicken Sie auf **„Hilfe“**. Dort erhalten Sie Hinweise zur **Installation** und den **Navigationsfunktionen** des digitalen Jahrbuches.

Um zum **Anfang des Jahrbuches** zu gelangen, klicken Sie auf **„Jahrbuch“**

**Weitere Infos erhalten Sie beim NLWKN (Hildesheim) bzw. der Firma Woköck Geotechnik.**

Jahrbuch  Hilfe  weiter

# Online - Hilfe
# Deutsches Gewässerkundliches Jahrbuch

Zu folgenden Themen erhalten Sie Hilfe. Klicken Sie dazu einfach auf das auszuwählende Thema:

**Installations-Hinweise**

**Navigationsfunktion des digitalen Jahrbuchs (DGJ)**

**Hinweise zur Bedienung des Acrobat Readers**

**Allgemeine Funktionen des Acrobat Readers (Menüzeile)**

Jahrbuch Info weiter

# Installations-Hinweise

Auf der CD-ROM befinden sich folgende Verzeichnisse und Dateien:

| | | |
|---|---|---|
| | - LIESMICH.TXT | Installationshinweise |
| - ACROREAD | - Adbe_Rdr_910_de_DE.EXE | Installationsprogramm Acrobat Reader |
| - DGJ | - DGJ2012WE.PDF | digitale Version des Jahrbuches |
| - INTERNET | - DGJ2012WE_InternetKarte.PDF | digitale Internet-Version des Jahrbuches |

**Zum Aufruf des digitalen Jahrbuches benötigen Sie den Acrobat Reader !**

Wenn sich der Acrobat Reader bereits auf Ihrem System befindet, starten Sie den Acrobat Reader und öffnen die entsprechende Jahrbuchversion von der CD-ROM. Sie können die Dateien auch auf Ihre Festplatte kopieren und anschließend von dort öffnen.

Wenn sich der Acrobat Reader noch nicht auf Ihrem System befindet, starten Sie das Installations-programm im Verzeichnis ACROREAD und öffnen anschließend das digitale Jahrbuch.

Jahrbuch Hilfeauswahl weiter

# Navigationsfunktion des digitalen Jahrbuchs (DGJ)

**Lesezeichen (linker Bildschirmrand):**
- durch Anklicken der **Lesezeichen am linken Bildschirmrand** gelangen Sie zu einzelnen Abschnitten
- die **Lesezeichen enthalten Unterverzeichnisse**, die sich beliebig öffnen und schließen lassen

**Verzeichnisse (alphabetisch, hydrographisch):**
- durch Anklicken der Pegel in den Verzeichnissen gelangen Sie zu den einzelnen Q- bzw. W-Seiten

**Tabellen (Q- und W-Seiten):**
- durch Anklicken des „großen Q's“ gelangen Sie zur W-Seite des Pegels (soweit vorhanden)
- durch Anklicken des „großen W's“ gelangen Sie zur Q-Seite des Pegels (soweit vorhanden)
- durch Anklicken des Pegelnamens gelangen Sie zum alphabetischen Verzeichnis
- durch Anklicken der Pegelnummer gelangen Sie zum hydrographischen Verzeichnis
- durch Anklicken der Lagebeschreibung gelangen Sie zur Übersichtskarte (Ausschnitt)
- durch Anklicken des Tabellenkopfes (Jahre, Monate) gelangen Sie zur Grafik (soweit vorhanden)

**Grafiken:**
- durch Anklicken der Grafik gelangen Sie zur Q-Seite des Pegels
- durch Anklicken der Zeitachse der Grafiken wechseln Sie zwischen aktuellem Jahr und langer Reihe
- durch Anklicken des Pegelnamens gelangen Sie zur „kleinen Übersichtskarte“
- durch Anklicken der Pegel in der „kleinen Übersichtskarte“ gelangen Sie zur Grafik des Pegels

**Übersichtskarte:**
- durch Anklicken der Pegel gelangen Sie zur Q-Seite des Pegels

Jahrbuch | Hilfeauswahl | weiter

# Hinweise zur Bedienung des Acrobat Readers:

- immer wenn sich das **Handsymbol** in das **Zeigefingersymbol** wandelt, ist ein Aktion möglich
- die **Lesezeichen** am linken Bildschirmrand lassen sich ein- bzw. ausblenden
- die **Lesezeichen** enthalten Unterverzeichnisse, die sich öffnen und schließen lassen
- durch Anklicken der **Lesezeichen** gelangen Sie zu einzelnen Abschnitten des Jahrbuches
- durch Anklicken des **Lesezeichen „Hilfe“** gelangen Sie zur Online-Hilfe
- eine **Freitextsuche** ist mit dem Fernglassymbol des Acrobat Readers möglich, wodurch Pegel nach Namen bzw. Nummer leicht gefunden werden können
- mit den **Pfeiltasten** des Acrobat Readers der Menüzeile können Sie durch das Dokument **blättern** (Anfang, Ende, vorherige Seite, nächste Seite, vorherige Ansicht, nächste Ansicht)
- mit der **Lupe** lassen sich einzelne Abschnitte vergrößern
- mit den **Seitensymbolen** kehren Sie zur Orginalgröße, Seitengröße bzw. Fensterbreite zurück

**Weitere Hilfen erhalten Sie über die Hilfefunktion des Acrobat Readers.**

Jahrbuch | Hilfeauswahl | Info