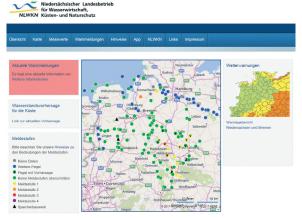
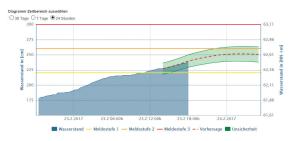
# Gauge Portal of Lower Saxony: www.pegelonline.nlwkn.niedersachsen.de



Internet portal with access to current gauge data, forecasts and flood information, screenshot of the representation from 24.02.2017 with a flood situation in the catchment area of southeastern Lower Saxony.

On <a href="https://www.pegelonline.nlwkn.niedersachsen.de">www.pegelonline.nlwkn.niedersachsen.de</a> the current water levels in the inland of Lower Saxony and the North Sea region can be retrieved. During a flood event flood reports and forecasts of selected gauges will be published by the Flood Forecast Center. In a flood situation, the water level forecasts are updated several times a day. The forecasts include a range of uncertainty that can result from the uncertainties of weather prediction models of the German Weather Service, the uncertainties of the input data as well as the flood forecast model uncertainty. In the published forecast chart, this uncertainty is indicated by a green range



Flood forecasting with uncertainty range at gauge Peine (Fuhse), retrieved on the 23.02.2017 on the website NLWKN peaelonline

#### Contact

Flood Forecast Center (HWVZ)

Lower Saxony Water Management, Coasta Defence and Nature Conservation Agency (NLWKN)

Betriebsstelle Hannover-Hildesheim An der Scharlake 39, 31135 Hildesheim E-mail: HWVZ@nlwkn-hi.niedersachsen.de

### **NLWKN Press Office**

E-mail: pressestelle@nlwkn-dir.niedersachsen.de Tel.: 04931/947-173 + -228

Internet: www.nlwkn.niedersachsen.de

For further information about the HWVZ of Lower Saxony, current water levels, general gauge information and forecasts, please follow the links below:

### Water levels & forecasts:

www.pegelonline.nlwkn.niedersachsen.de

### **Transnational Flood Portal for Germany:**

www.hochwasserzentralen.de

### Flood Portal of the NLWKN:

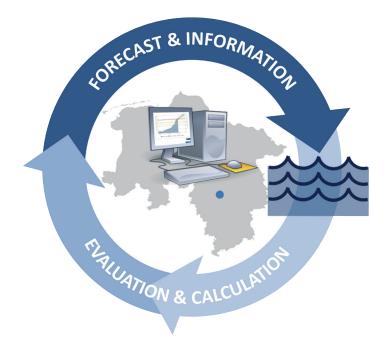
www.nlwkn.niedersachsen.de

- → Hochwasser- & Küstenschutz
- → Hochwasserschutz

Status: Juni 2017 photos and images: NLWKN



Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz



# **HWVZ**

Flood Forecast Center of Lower Saxony



## Flood Forecast in Lower Saxony



Flood situation in Brunswick (Mittelriede), May 2013

The Flood Forecast Center (HWVZ) of the NLWKN informs the population early and targeted against floods.

As part of the natural water cycle floods are a natural phenomenon that can occur on all rivers in Lower Saxony due to heavy or continuous rainfall or snow melt. The technical flood protection can not provide absolute protection against flooding.

The early warning system in Lower Saxony is well positioned with the HWVZ and the flood warning services. It provides information about an upcoming flood and the development of an incurred flood event. Stakeholders may therefore timely be warned as well as emergency personnel can be mobilized in time.

### **Flood Forecast:**

► Extends the warning time



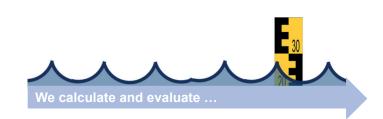
► Reduces flood damage



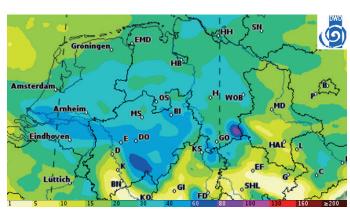
All potential flood victims must take their own precautions to protect themselves and their endangered property values!

### How to calculate a flood forecast?

The basis for flood forecasts are fallen and predicted rainfall and other indicators. Using a high resolution computer model that is adapted to the river basin, the expected water levels within the next few hours or days are calculated.



For predicting the future the measured water depths are used to convert them into discharge data. Other input data such as temperature, humidity, rainfall and the weather prediction of the German Weather Services are included in the flood calculations.



ICON-EU: predicted precipitation (in mm) from the 22.02.2017, DWD

... perform predictions and inform.

In case of predicted exceeding flood warning levels all flood warning services in Lower Saxony are directly informed by the  $\mbox{HWVZ}$ .

The collaboration and close coordination of all stakeholders – such as the flood warning services, the Hydrological State service, the operators of dams and reservoirs, other federal states, the Waterways and Shipping Administration (WSV) and the German Weather Service (DWD) – is essential.

# Flood warning services



In case of a flood event the flood warning services of the NLWKN inform the emergency authorities about the current situation in the concerned watercourses and the further development using flood warning faxes.

The **Regional flood warning service (RHWD)** is represented by responsible NLWKN branches in the affected river catchments in Lower Saxony.

The **State-wide flood warning service (ÜHWD)**, consisting of the NLWKN and the WSV is responsible for the catchment area of the river Weser.

For the river Elbe **the flood warning service Elbe**, based in the NLWKN branch Lüneburg is responsible.

### Flood warning levels

The main flood information delivers the gauges of the rivers. Each gauge is determined individually, which water level during a flooding belongs to the respective warning level.

