

Voluntary action-oriented water protection measures offered for implementation in autumn (no. 1-6 and 12-13) and spring (no. 7-11) in Lower Saxony, Germany

	Measure	Management conditions	Payment 2007/2008	Remarks
1	Catch cropping after harvest (winter-hardy, late ploughing)	Sow legume-free, winter-hardy ground cover (at least 30% of growing crop) by 5 Sept.; ploughing not earlier than 15 March, N fertiliser: max. 40 kg creditable N for green manure, max. 80 kg creditable N for use as fodder (with removal), after rape, maize and potatoes no N-fertilisation for catch crop; no grazing; N-fertilisation of the catch crop must be included in the crop rotation fertiliser plan, unless the growth is removed.	120 € / ha	In 2006/207 ploughing before maize not earlier than 1st April; payment: 100 €/ha
2	Catch cropping after harvest (standard)	Sow legume-free ground cover by 5 Sept.; existing fallow with legume-free ground cover without ploughing before spring also counts as catch crop; ploughing not before 1 Feb.; N fertiliser: max. 40 kg creditable N for green manure, max. 80 kg creditable N for use as fodder (with removal), after rape, maize and potatoes no N-fertilisation for catch crop; no grazing; N-fertilisation of the catch crop has to be included in the crop rotation fertiliser plan, unless the growth is removed.	80 € / ha	For further investigation: legume-free ground cover more or less rules out organic farming
3	Three-year fallow with active greening	Sow winter-hardy grasses as pure stand or as variety-mixtures by 5 Sept. 2006 on set-aside/ fallow land cropped in 2006; ploughing not before 01.02.2009. No N-fertilisation and no grazing.	120 € / ha * year	3 payments during project period; offered only in autumn 2006
4	Volunteer rye or triticale before summer crops	Immediately after harvesting, single shallow cultivation; no N-fertiliser; no grazing; N content of volunteer cereals has to be included in the crop rotation fertiliser plan; ploughing not before 1 Feb	30 € / ha	In 2006/2007 volunteer rape seedling included in no. 4, for 2007/2008 see no. 13
5	No soil tillage/ploughing in autumn after maize/sugar-beet	No soil management after harvesting of maize/ sugar-beet before 1 March; use of herbicides in spring is permitted.	25 € / ha	In 2006/207 ploughing before maize not earlier than 1st April
6	Restrictions for farm manure application in autumn	application of slurry, liquid manure, poultry droppings, fermentation substrates and secondary raw material fertilisers after harvesting on all cropped land only to catch crop or winter rape until 15 Sept. or on grasland until 31 Sept.; only for farms using more than 100 kg N of the specified farminternal organic fertilisers per hectare of agricultural land; contracts to supply third parties count as "farm-internal"	15 € / ha	In 2006/2007 payment for arable land with cereal production: 30 €/ha; in 2007/2008 only fellow excluded from payment



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7	Improved slurry application techniques	Application of slurry and fermentation substrates in spring/summer (from 01.02. to 15.07.) with drag hoses, trailing shoes or injection technique in growing winter cereals, winter rape and on grassland/ley farming; For application with contractors the evidence has to be present; for self-application a record about slurry quantities and surface has to exist.	25 € / ha for drag hoses, 35 € / ha for trailing shoes or injection	
8	Reduced row spacing for maize	Sowing of maize with reduced distance between maize rows (at most 45 cm); no N-fertilisation after maize harvesting until 01.03.; obligation for each farmer to saw maize with usual space (approx. 75 cm) in one part of a field plot with a maximum size of 2 ha to allowed to compare soil mineral N content in autumn); recommendation to limit the N-fertilisation up to 140 kg/ha	40 € / ha	
9	Use of ammonium based liquid fertilisers using injection technique in cereals	Application of the injection technique for liquid mineral nitrogen fertilisation before stem elongation of the cereals (once or twice); solely use of injection technique until 15.05.; P and K fertilisation can be done in the conventional way; no organic fertilisation from sowing until harvest, then only in autumn; an evidence for use of injection technique has to be provided	35 € / ha	In 2006/2007 payment: € 25 / ha
10	Application of stabilised mineral fertilizer in spring on winter cereals and potatoes	Use of stabilised mineral nitrogen fertiliser, for potatoes in the formula of ammonium; solely use of stabilised fertiliser in spring until 15.05.; if use of organic fertilisers, then only in autumn; purchase voucher as evidence	25 € / ha	
11	Undersown catch crops in maize	Sow grasses as pure stand or as variety-mixtures (legume-free) as undersown crops with silage maize; no N-fertilisation after maize harvesting until 01.02.; earliest ploughing in the following year from 01.02.; no grazing	125 € / ha	
12	Turnip (brassica rapa sylvestris) as catch crop before winter cereals	Sow cover crop by 15 August; use 10-12 kg of sowings; no N-fertilisers to the turnip and the following winter cereals in autumn; ploughing not before 10 October	60 € / ha	Only offered in 2007/2008
13	Reduced tillage of volunteer rape seedlings before winter cereals respectively summer crops	After harvesting no tillage or immediately after harvest single shallow cultivation; no N-fertiliser; no grazing; N content of volunteer rape has to be included in the crop rotation fertiliser plan; if summer crops are following ploughing not before 15 March; for winter cereals no ploughing before 1st October; before winter cereals use of herbicides from 10 Sept. allowed	40 € / ha	Only offered in 2007/2008