



Department
for Environment
Food & Rural Affairs

Farming rules for water – getting full value from fertilisers and soil

Policy paper

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Contents

Farming Rules for Water.....	1
The final set of rules	1
Organic manures and manufactured fertilisers	2
Soil management	3
The rules in context	3
25 year environment plan	3
River Basin Management Plans	4
Water quality and agriculture	4
Approach to implementation.....	4
Managing compliance.....	5
Future review.....	8

Farming Rules for Water

We are putting in place some new rules for all farmers in England to tackle diffuse water pollution from agriculture, called the Farming Rules for Water (previously the 'basic rules'). We will introduce these rules to take effect from April 2018.

The Farming Rules for Water are a first step towards a new approach to regulating the agriculture sector that might be adopted more widely in the future, with rules that are outcome focussed and risk based. They will set a consistent baseline of good practice across the agricultural industry in England.

The rules fulfil obligations on diffuse pollution under the Water Framework Directive. On 23 June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation in future once the UK has left the EU. Once we leave the EU we will develop a holistic approach to protecting water quality and these new rules will be a first step towards that process.

These arrangements follow a consultation from 29 September to 24 November 2015. We have published separately a summary of the responses we received, together with the changes we will be making as a result.

The final set of rules

Based on feedback from the consultation, the final set of rules has been improved and seek to provide benefits to farmers such as increased productivity through better resource efficiency. The aim is to help the farming industry make optimal use of their manures and soils whilst continuing to protect our natural environment and conserve sensitive areas.

We have revised the rules to align more clearly with other established rules to keep things clear and simple for farmers. The Farming Rules for Water are designed to work with farmers to address pollution risks in a proportionate and collaborative way. Part of the prevention approach is to encourage land managers to take reasonable precautions to prevent diffuse pollution from occurring. Reasonable precautions are actions that a land manager might be expected to do where it is practical and reasonable to do so in order to prevent runoff or soil erosion.

The final set of rules are described on the next page. Further details of definitions will be included in the legislation.

Organic manures and manufactured fertilisers

1 a) Application of organic manures and manufactured fertilisers to cultivated land must be planned in advance to meet soil and crop nutrient needs and not exceed these levels

b) Planning must take into account where there is a significant risk of pollution* and the results of testing for Phosphorus, Potassium, Magnesium, pH and Nitrogen levels in the soil, which must be done at least every 5 years. You may determine soil Nitrogen levels by assessing the soil Nitrogen supply instead of testing the soil.

2. Organic manures must not be stored on land:

- a) within 10 metres of inland freshwaters or coastal waters,
- b) where there is significant risk of pollution entering inland freshwaters or coastal waters
- c) within 50 metres of a spring, well or borehole

3. Organic manures or manufactured fertilisers must not be applied:

- a) if the soil is waterlogged, flooded, or snow covered
- b) if the soil has been frozen for more than 12 hours in the previous 24 hours
- c) if there is significant risk of causing pollution

4. Organic manures must not be applied:

- a) within 10 metres of any inland freshwaters or coastal waters, except, if precision equipment is used, within 6 metres of inland freshwaters or coastal waters¹
- b) within 50 metres of a spring, well or borehole

¹ There are some exceptions to this rule, namely where:

- 1. precision equipment is used, then organic manure must not be applied closer than 6 metres from inland freshwaters or coastal waters (precision equipment includes a trailing hose band spreader, a trailing shoe band spreader, a shallow injector which injects the organic manure no deeper than 10 centimetres below the surface, a dribble bar applicator, or other equipment designed to apply organic manures or manufactured fertilisers in an accurate manner.)
- 2. it is livestock manure, which can be applied within 10 metres of inland freshwaters or coastal waters if: the agricultural land is managed for breeding wader birds or as a species-rich semi-natural grassland or the agricultural land is in an agri-environment scheme or notified as a Site of Special Scientific Interest (SSSI); the manure is not applied directly onto the surface of the water; and, the total annual amount applied is not more than 12.5 tonnes per hectare.

5. Manufactured fertiliser must not be applied within 2 metres of inland freshwaters or coastal waters

Soil management

6. Reasonable precautions to prevent significant soil erosion and runoff from:

- a) the application of organic manure or manufactured fertiliser
- b) land management and cultivation practices (such as seedbeds, tramlines, rows, beds, stubbles (including harvested land with haulm), polytunnels and irrigation)
- c) poaching by livestock

7. Any land within 5 metres of inland freshwaters and coastal waters must be protected from significant soil erosion by preventing poaching by livestock

8. Livestock feeders must not be positioned:

- a) within 10 metres of any inland freshwaters or coastal waters
- b) within 50 metres of a spring, well or borehole
- c) where there is significant risk of pollution from poaching around the feeder entering any inland freshwaters or coastal waters

* In assessing whether there is “significant risk of pollution” a person must take into account the following factors: the slope of the agricultural land, especially if the slope is greater than 12 degrees; any ground cover; the proximity to inland fresh waters and coastal waters; the proximity to wetlands; the weather conditions and weather forecasts; the soil type and condition; and the presence and condition of agricultural land drains.

The rules in context

This work is not happening in isolation. A lot has happened since we consulted on the rules. This section explains how the rules fit into our wider work on improving water quality and the environment as a whole. A theme running through this is the need to make best use of the tools available to us so that we can protect the water environment whilst supporting a competitive and sustainable agricultural industry.

25 year environment plan

The government is developing a 25 year plan for the environment in line with its manifesto commitment of being the first generation to leave the environment in a better state than we inherited. A number of stakeholders have helped to shape the plan and there will be

further opportunities to contribute to the government's environmental strategy following publication.

River Basin Management Plans

In February 2016 we published the latest River Basin Management Plans (RBMPs) updating the first plans from 2009. The RBMPs set out how organisations, stakeholders and communities will work together to improve the water environment. They update our water quality objectives for the next six-year cycle of the Water Framework Directive including a Programme of Measures describing how we intend to deliver these objectives. RBMPs also link into the Marine Strategy Framework Directive which seeks to achieve good environmental status in UK seas.

Water quality and agriculture

Stakeholders have told us that they want all environmental rules to be brought together, including these rules and those for nitrates, slurry storage and possibly pesticides. We are assessing all opportunities for agriculture and we intend to continue to design affordable new policies which specifically benefit agriculture, countryside and the environment. This first step recognises the good work that most farmers already perform by introducing these new farming rules to address diffuse water pollution and bring any remaining farmers up to the same good practice standard.

Approach to implementation

Since consultation we have revised the rules to make them more streamlined and practical to follow. The new Farming Rules for Water will be implemented through clear communications and guidance for farmers. The rules include a requirement to test soils at least every 5 years to inform planning for applying manures and fertilisers - this will be introduced in a phased way so that soil testing that has been undertaken during the four years before the rules come into effect can be taken into account.

Some detailed definitions will follow in the legislation and guidance that accompanies it. We will work with farming industry partners and existing advice channels, so that everyone is given the opportunity to understand the rules and the timetable for complying. When the regulations come into force they will apply to all farmers and all farmers will be expected to comply with them.

The farming rules for water will be introduced through an advice-led approach. This means the Environment Agency will provide advice on how to comply with the new regulations and help farmers to understand them. Enforcement will be proportionate and fair with the emphasis on working with farmers to achieve compliance. The majority of cases are

expected to be dealt with by issuing advice and if necessary, through the imposition of civil sanctions, with prosecution reserved for where other enforcement actions have failed.

The civil sanctions available to the Environment Agency will comprise: compliance notices; restoration notices; stop notices; fixed monetary penalties; variable monetary penalties and enforcement undertakings. As the regulator, the Environment Agency is expected to choose the most suitable sanction for a particular offence, taking into consideration the circumstances relating to it.

Managing compliance

It is important that all farmers follow the rules to ensure a level playing field. The final rules are better aligned with rules for farm payments and nitrates regulations so that compliance with these other rules may mean that a farmer already complies with the new farming rules for water already.

The Environment Agency will carry out any checks against the rules as part of its existing risk-based, targeted farm inspections.

In line with government policy, the Environment Agency will make best use of the data and technology available to them to build upon and refine their risk-based approach to enforcement. This means that the Environment Agency can focus on catchments where agriculture is known to be having an environmental impact, associated higher risk farming activities and non-compliant farmers. Farmers who have demonstrated good environmental practice through a farm accreditation schemes, for example, are less likely to receive a compliance visit.

Where a suspected breach is visited and confirmed by the Environment Agency or found during inspection, the Environment Agency will work with the farmers to agree which changes need to be made to come into compliance and the timescale to achieve them. A follow up visit or evidence provided by the farmer, such as photographic evidence of a change, may then be used to verify compliance. If there is a high risk of pollution or if pollution is already occurring then the Environment Agency may immediately initiate enforcement action in line with its enforcement and sanctions policy.

In refining the final list of rules we have worked closely with the Environment Agency to ensure that actions required can be checked for compliance. The table on the next page illustrates how we intend to verify compliance.

Rule	Proving and checking compliance
<p>Organic and manufactured fertiliser management, storage and management</p> <p>1a) Application of organic manures and manufactured fertilisers to cultivated land must be planned in advance to meet soil and crop nutrient needs and does not exceed these levels</p>	<p>Compare farm fertiliser records with crop nutrient requirements. Farmers can demonstrate compliance after visit by providing soil test results, cropping plans and evidence of nutrient application.</p>
<p>1b) Soil testing must be carried out for Phosphorus, Potassium, Magnesium, pH and Nitrogen levels at least every 5 years, for cultivated land.</p>	
<p>2. Organic manures must not be stored on land:</p> <p>a) within 10 metres of inland freshwaters or coastal waters,</p> <p>b) where there is significant risk of runoff* entering inland freshwaters or coastal waters</p> <p>c) within 50 metres of a spring, well or borehole</p> <p>3. Organic manures or manufactured fertilisers must not be applied:</p> <p>a) if the soil is waterlogged, flooded, or snow covered</p> <p>b) if the soil has been frozen for more 12 hours in the previous 24 hours</p> <p>c) if there is significant risk of causing environmental pollution from soil erosion and run-off</p>	<p>Verify distances from stores to surface waters, springs, wells or boreholes.</p> <p>Check area around stored organic manures for potential pathways where runoff could flow into inland freshwaters and coastal waters.</p> <p>Check the condition of the soil and current and previous weather conditions. Assess the risks in a field of run off and soil erosion should anything be applied (slope, soil conditions such as compaction, soil structure etc). Check for any signs that polluted soil erosion and/or run off has occurred.</p>
<p>4. Organic manures must not be applied:</p> <p>a) within 10 metres of any inland freshwaters or coastal waters, except, if precision equipment is used within 6 metres of inland freshwaters or coastal waters</p> <p>b) within 50 metres of a spring, well or borehole</p>	<p>Check calibration records. Verify any buffer strips. Check distance from any spread material to water and look for signs of associated water pollution. Check for any signs of manures deposited onto the surface within restricted distances.</p>

<p>5. Manufactured fertiliser must not be applied within 2 metres of inland freshwaters or coastal waters</p> <p>Soil management</p> <p>6. Take all reasonable precautions to prevent significant soil erosion and runoff from: (a) seedbeds, tramlines, rows, beds, stubbles (including harvested land with haulm), polytunnels and irrigation, and (b) poaching by livestock</p> <p>7. Any land within 5 metres of inland freshwaters or coastal waters must be protected from significant soil erosion by preventing poaching by livestock.</p>	<p>Check for obvious visual signs of fertiliser prills (pellets) or granules within the restricted zone. Excessive growth of marginal vegetation may indicate fertiliser encroachment. Soil may be tested for nutrients in the 2 metre zone and the remaining field if appropriate.</p> <p>Check to see that reasonable precautions to prevent erosion and runoff over a single area of 1 or more hectares caused by cropping or livestock have been taken. Take into account that the correct crop for the inherent field risk has been planted and that pollution risks from the activity have been minimised by taking appropriate steps to minimise soil pollution.</p> <p>Where soil erosion or soil runoff causes pollution and evidence of erosion is found to be coming from an area over 1 hectare or more, the source, pathway and receptor need to be identified.</p> <p>Verify the distance of any livestock poaching identified along a continuous stretch of a watercourse to see if it exceeds 20 or more metres long and 2 or more metres wide.</p> <p>Any poaching measuring this distance within 5 metres of any inland freshwater or coastal waters is a breach.</p>
<p>8. Livestock feeders must not be positioned:</p> <p>a) within 10 metres of any inland freshwaters or coastal waters,</p>	<p>Verify the distance of livestock feeders from an inland freshwater or coastal water. Also check to see if livestock feeders pose a risk to</p>

b) where there is significant risk of runoff from poaching around the feeder entering any inland freshwaters or coastal waters

water quality by being located in high risk areas that will act as a pathway.

* In assessing whether there is “significant risk of runoff” a person must take into account the following factors: the slope of the agricultural land, especially if the slope is greater than 12 degrees; any ground cover; the proximity to inland fresh waters and coastal waters, proximity to wetlands; the weather conditions and weather forecasts; the soil type and condition; and the presence and condition of agricultural land drains.

Future review

The new farming rules for water will be reviewed in three years to establish how well they are delivering against their expected outcomes, the impact on farmers and how farmers are working with the new approach. We will monitor improvement in water quality through the existing Environment Agency water quality monitoring programme. The Environment Agency samples around 7,000 river and canal sites 12 times a year and tests the water chemistry, biology and nutrient levels. We may also call on other water data, for example, that collected by water companies or the Drinking Water Inspectorate to detect any trends in phosphate and sediment concentrations. Depending on resources, we will seek to monitor uptake of the rules, model the expected environmental benefits including savings from good business practice, and validate the model with additional water quality monitoring.

Record of changes

30 November 2017

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9 March 2018

More detail added on the soil testing rule in relation to Nitrogen levels.