Farming rules for water: are you on the right track?
From 2 April 2018
all farmers in England need to meet the farming rules for water to protect water quality
What does the farmer need to do?

All farmers should check the farming rules for water to satisfy themselves that they are complying with them in full.
What’s the issue?

What’s in it for the farmer?

What’s different about these rules?
What’s the issue?

• Diffuse pollution consists of numerous small sources of pollution which individually may have little impact but collectively can be very damaging
• Diffuse water pollution from agriculture:
  • can physically damage wildlife in our rivers and seas
  • can affect our economy by:
    – contributing to higher water bills from increased water treatment
    – impacting on our tourism and shellfish industries
What’s the issue cont……..

- Groundwater can also be impacted by diffuse pollution and should be considered alongside surface waters
- There can be high connectivity between surface waters and groundwater
- This is particularly where water tables are high; where there are leaky river beds, perhaps with sinkholes; where there are very shallow, free-draining soils overlying a vulnerable aquifer
- This is not an exhaustive list of scenarios
- Groundwaters feed / support wetlands, fens and watercourses, so pollution of groundwaters can have an effect anywhere that they connect with surface waters; this can lead to contamination of the whole water cycle.
- Groundwaters are an important source for public water supplies in many parts of England, and maintaining good quality is vital.
What’s in it for the farmer?

- You can **save money** by using fertilisers more efficiently.

- Through **good farming practice** you can **avoid polluting the environment** as well as meeting the rules.

- Many farmers already meet these standards, but now **all farmers** have to meet the new rules which puts everyone onto a **level playing field**.
What’s different about these rules?

• The farming rules for water are designed to address diffuse pollution in a proportionate and collaborative way.

• They have been drawn up with farming and environment representatives so that they are practical, risk based and will prevent and reduce agricultural pollution.

• They include the concept of ‘reasonable precautions’ which encourage the farmer to decide what actions are needed to reduce the risk of water pollution, to keep valuable topsoil on fields and to apply fertilisers only when it is appropriate to do so.
The rules

Additional context

Considerations for assessing compliance
Rule 1: Planning use of manures and fertilisers

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

- Plan each application of manure/fertiliser in advance to meet crop needs
- Take into account the results of soil testing (on cultivated land only) which must be no more than 5 years old at the time of application, to accurately plan nutrient applications
Plan each application, taking into account the results of soil testing
  • the soil test can be **no more** than 5 years old **at the time of application**

Soil testing on **cultivated land** only needs to include pH of your soil and the levels of nitrogen (N), phosphorus (P), potassium (K) and magnesium (Mg)
  • these are the statutory minimum required

Farmers could get the best out of their soil by also testing for other macro and micronutrients e.g. sulphur, boron etc. depending upon their soil and crop needs
  • these other nutrients are not inspected
  • farmers are also encouraged to measure soil organic matter

**Nitrogen levels** can be determined by assessing the **soil nitrogen supply (SNS)** rather than a soil test
  • this could be done through using tools such as RB209, Tried & Tested etc.
  • this should be done annually in line with industry best practice
Rule 1: Additional context – cultivated land

Soil testing is required on ‘cultivated agricultural land only’

In this context, cultivated agricultural land is defined as land which has been cultivated by:

- physical means (including ploughing or sowing) at least once in the previous year, or
- chemical means (including applying organic manure or manufactured fertiliser) at least once in the previous 3 years

Both temporary grassland and permanent pasture are included here if they fall under this definition.

Uncultivated grassland which is not included could include traditional orchards where no fertiliser is spread, hay meadows, species rich pasture where no inputs are spread, moorland, rush pasture etc.

‘Excreta from grazing livestock directly onto the land is excluded from ‘application’.
Rule 2: Storing organic manures

Do not store organic manures:

- within 10m of inland freshwaters or coastal waters
- within 50m of a spring, well or borehole
- where there is significant risk of pollution/runoff entering a watercourse
Additional context: significant risk of pollution or runoff

Farmers must take into account any factors which mean there is “significant risk of pollution or runoff”, including but not limited to:

- 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, and the proximity to wetlands
- the weather conditions and forecasts
- the soil type and condition of the land
- the presence and condition of agricultural land drains
Rule 3: Applying manures or fertilisers

Do not apply manure or fertiliser:

- if the soil is waterlogged, flooded or snow covered
- if the soil has been frozen for more than 12 hours in the previous 24 hours
- If there is significant risk of causing agricultural diffuse pollution from the application
Rule 4: Where not to apply organic manures

Rule 4: **Organic manures** must not be applied:

- within **10m** of inland freshwaters or coastal waters
- within **50m** of a spring, well or borehole

Rule 5: Where not to apply fertiliser

Rule 5: **Manufactured fertiliser** must not be applied within **2m** of inland freshwaters or coastal waters, or a spring, well or borehole
Rule 6a: Reasonable precautions to prevent soil erosion and runoff

You must take reasonable precautions to prevent significant soil erosion and runoff from:

- the application of organic manure and manufactured fertiliser
Rule 6a: Additional context – reasonable precautions for application of manures and fertiliser

When planning and carrying out an application of organic manure or manufactured fertiliser, farmers must take reasonable precautions to prevent diffuse pollution occurring.

- Examples of reasonable precautions include but are not limited to:
  - Checking spreading equipment for leaks and correct calibration
  - Incorporating organic manure and manufactured fertiliser into the soil within 12 hours of its application
Rules 1 to 6a
Considerations for assessing compliance

1. Is there evidence that manures have runoff and entered a watercourse (including ditches and road drains)?

2. Is there high risk of runoff causing pollution? Have ‘no spreading distances’ been followed?

3. Have reasonable measures been implemented? Can the farmer provide soil test results, crop nutrient requirements and evidence of nutrient application rates.
1. Is there evidence that manures have runoff and entered a watercourse (including ditches and road drains)?

- Is there contaminated runoff from manure heaps?
- Is there evidence of runoff from manures applied to land?
- Is there evidence that contaminated runoff has entered the nearest watercourse?
- Is there evidence that contaminated runoff has washed onto nearby roads?
2. Is there a high risk of runoff causing pollution?

- Is the land used for manure spreading on very steep slopes in particular where greater than 12 degrees near watercourses?

- Have manures been stored or spreading been carried out within 10m from a watercourse and 50m from a spring, well or borehole? Have manufactured fertilisers been applied within 2m of a watercourse or spring, well or borehole?

- Has used manure storage and spreading been carried out on compacted land which has a high risk of runoff causing pollution? Is there any ground cover?

- Is the soil too wet for spreading causing wheel ruts with high risk of runoff causing pollution? Is pollution likely to occur via land drains?
3. Have reasonable measures been implemented?

- Has land been used to dispose of manures for example along headlands where runoff may occur?
- Have any measures been carried out dealing with soil compaction to reduce risk of runoff causing pollution?
- Has the soil been tested to measure nutrient content? Is the soil anaerobic and compacted due to manure applications in poor conditions?
- Have crop nutrient requirements been calculated correctly? Have manures and fertilisers been over-applied?
Rule 6b: Reasonable precautions to prevent soil erosion and runoff

You must take reasonable precautions to prevent significant soil erosion and runoff from:

- **land management and cultivation practices** (such as seedbeds, tramlines, rows, beds, stubbles (including harvested land with haulm), polytunnels and irrigation)

- **poaching** by livestock
Rule 6b: Additional context - reasonable precautions for land management and cultivation practices

Reasonable precautions must be taken to **prevent soil loss caused by soil degradation or soil runoff** over a single area of **1 or more hectares** caused by **cropping or livestock**.

- **Reasonable precautions** can include, but are not limited to:
  - Planting the **correct crop** for the **inherent field risk** and minimising pollution risks from cultivations by taking appropriate steps to minimise soil pollution.

- Carrying out **high risk activities** such as harvesting crops and out-wintering livestock on **low risk level ground** away from water.

- **Avoiding high risk activities** on **steep erodible** and **wet land** prone to compaction and runoff.

- **Addressing soil compaction** by appropriate cultivation and establishing crops in a timely fashion to ensure good soil structure.

- **Moving livestock** regularly
Rule 6b
Considerations for assessing compliance

1. Is there evidence of soil loss?
2. Is soil loss related to degraded soil structure caused by compaction and capping over an area greater than 1ha?
3. Is there evidence that soil has entered or is at risk of entering a watercourse (including ditches & road drains where these are connected to watercourses)?
4. Have reasonable precautions been implemented, and was soil erosion foreseeable?
1. Is there evidence of soil loss?

- Are there erosion channels in the soil (also known as rills and gulleys)?

- Is there evidence of muddy runoff?

- Is there evidence of soil wash and scouring of soil?

- Is there evidence of sediment deposition?

Soil erosion with channels in the soil occurs on erodible soil types such as sandy loam.

Soil wash and muddy runoff tend to occur on heavier clay loam soils, which often do not cause erosion channels in the soil. Nevertheless this can lead to large losses of soil suspended in runoff causing water pollution.
2. Identify problems with soil structure that cause soil loss

- Is the soil sealed by a surface cap over an area greater than 1ha?

- Is the soil compacted over an area greater than 1ha? Has an adjacent compacted field (possibly a neighbour’s field) caused soil loss?

- Is the soil poached and trampled by livestock causing compaction over an area greater than 1ha?

- Is the soil saturated due to wheelings causing compaction over an area greater than 1ha?

Compaction and capping reduce the ability of the soil to accept rainfall which can lead to soil saturation, unnatural ponding of water and runoff. Enhanced runoff can scour the soil, particularly on slopes, causing soil erosion and water pollution.
3. Is there evidence that soil has entered or is at risk of entering a watercourse (including ditches and road drains where these are connected to watercourses)?

- Is there mud on roads that has been washed from fields?
- Is there a direct discharge of muddy runoff to a watercourse?
- Is there a discharge to a ditch which is connected to the nearest watercourse?
- Is there a discharge to a road drain and/or culvert connected to a watercourse?

A breach in the rules can be where there is high risk that soil erosion will occur causing pollution, and where no reasonable measures have been implemented.
4. Have reasonable precautions been implemented and was soil erosion foreseeable?

- Have high risk practices been carried out on high risk soils (such as on steep erodible land >12 degrees, or on inherently wet soils)? Has there been a history of soil erosion?

- Have crops (including grass reseeds) been established late in the year in poor conditions causing soil compaction with a likelihood of runoff and erosion?

- Have reasonable precautions been implemented to deal with soil compaction?

- Has stock been out-wintered on unsuitable land such as on steep slopes, or on wet land next to watercourses?

Soil erosion can occur due to exceptional circumstances which are outside a farmer’s control in spite of all due care and attention where good practice has been carried out. This may occur during heavy or prolonged rainfall, or due to runoff from neighbouring land, tracks and roads. This would be taken into account in the event of an inspection – providing evidence through photos, rainfall measurements etc. would certainly be beneficial.
How to recognise minor soil erosion (compliant with the rules)

- Compacted soil and runoff in areas less than 1 ha e.g. gateways and wet areas
- Out-wintered stock causing soil compaction over 1 ha but with no soil erosion and where muddy runoff is minimal and contained, e.g. using buffer areas and fields on level ground
- Stubbles with soil compaction but with no erosion and where muddy runoff is minimal and contained, e.g. using buffer areas and fields on level ground
- Saturated land with no evidence of soil erosion muddy runoff on relatively level fields
- Trampling and compaction of soil caused by livestock less than 1 ha
- Soil runoff restricted to compacted tramlines
Rule 7: Bankside erosion caused by livestock

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

Significant bankside erosion is deemed as being a continuous stretch of eroded bankside by agricultural activity measuring at least 20m x 2m.

Fencing off water courses is a reasonable precaution that might be appropriate in some circumstances although it is for the farmer to decide the most effective action to take to prevent bankside erosion.
Livestock feeders must not be positioned:

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

A livestock feeder causing significant risk of pollution caused by poaching to a nearby watercourse (beyond the trackway).
Rule 7 and 8
Considerations for assessing compliance

• Does the distance of any livestock poaching (identified along a continuous stretch of a watercourse) exceed 20m long and 2m wide? Any poaching measuring this distance within 5m of any inland freshwater or coastal waters is a breach.

• Consider the distance of livestock feeders. They must not be positioned with 10m of a watercourse.

• Consider if the location of livestock feeders pose a risk of causing runoff and pollution, for example on steep, compacted land that is further than 10m from a watercourse but is still at risk of causing pollution.
How the rules will be implemented
How the rules will be implemented

The Environment Agency (EA) is the regulator for these rules. It will check compliance through its existing programme of work with farmers.

Collaborative and advice led

- The farming rules for water will ensure that all farmers in England meet a basic standard of good practice, underpinned by legal requirements.

- The emphasis will be advising farmers what they must do to meet the standard before any enforcement action is considered.

Enforcement will be treated on a case by case basis. Where problems are encountered, the emphasis from the Environment Agency will be advisory in the first instance.

However for serious or persistent pollution, further enforcement action is likely to be considered.
Enforcement

Enforcement action that could be taken if required

- The Environment Agency can use both civil and criminal sanctions in a manner that is appropriate to any offences under the Farming rules for water, as described in their Enforcement and Sanctions Guidance. There are a broad range of enforcement and sanctions available to address non-compliance and the following could be applied:

  - Warning letters
  - Civil sanctions such as compliance notices; restoration notices; stop notices; fixed monetary penalties; variable monetary penalties, the acceptance of enforcement undertakings
  - They may also pursue a criminal prosecution

- Further information can be found at https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy
Advice, support and further information
Advice and support – Defra projects

There are three Defra projects under which farmers can get advice and support that will help them address pollution and adjust to the new rules.

Catchment Sensitive Farming

- Under Catchment Sensitive Farming (CSF), Defra, Natural England and the Environment Agency offer farmers in priority areas across England free advice from CSF Officers, as well as support for
- *Countryside Stewardship grants* - to help them implement improvements in farming practices and infrastructure.

Catchment Based Approach

- Under the Catchment Based Approach (CaBA), catchment partnerships covering the whole of England develop and deliver catchment plans to improve the water environment for the benefit of people and wildlife. The *CaBA Partnerships* will be able to advise farmers in light of the new farming rules for water and on opportunities to realise both environmental and farm business benefits.

Farming Advice Service

- The *Farming Advice Service* (FAS) is a service funded by Defra to help farmers understand and meet the requirements of Cross Compliance, Greening (the Basic Payments Scheme) and the European Directives on both water protection and sustainable pesticide use.
Advice and support – Industry initiatives

There are several industry-led initiatives, which offer advice and guidance:

FACTS Registers of Professionally Qualified Advisers – FACTS
• The Register of Professionally Qualified Advisers – FACTS are qualified advisors throughout the UK who help to maintain the standard of excellence in farm management and advice.

Campaign for the Farmed Environment (CFE)
• Campaign for the Farmed Environment helps farming businesses, by signposting to best practice in soil management, crop nutrition and pesticide use.
• CFE helps farmers support the natural environment, whilst farming productively.
• CFE gives farmers the opportunity to demonstrate their ‘green credentials’ to the rest of the industry and the general public
• CFE is a partnership approach, supported by organisations engaged in agriculture and the environment and voluntary industry-led initiatives.

Tried and Tested
• Tried & Tested is an initiative of the agricultural industry with support from Catchment Sensitive Farming (CSF). They aim to help farmers to improve nutrient management planning through a toolkit.

Nutrient Management Guide (RB209)
• Agriculture and Horticulture Development Board
• The Nutrient Management Guide (RB209) provides guidelines for crop nutrient requirements and the nutrient content of organic materials.
Where to look online for further information

• Policy page - [www.gov.uk/defra/farmingrulesforwater](http://www.gov.uk/defra/farmingrulesforwater)


Further information

Environment Agency’s National Customer Contact Centre:

- Email: enquiries@environment-agency.gov.uk
- Telephone: 03708 506 506
- Minicom (for the hard of hearing): 03702 422 549
- Monday to Friday, 8am to 6pm