



# Farming for cleaner water and healthier soil

Make the most of Environmental Stewardship and the Campaign for the Farmed Environment

[www.naturalengland.org.uk/es](http://www.naturalengland.org.uk/es)



Farmers, land managers and farm advisers all have a part to play in ensuring a healthy natural environment which is essential for sustainable farming.

#### Your farm has environmental value

Your farm has wildlife, natural resources, farmland birds and historic features that need your protection.

#### You make a difference

By adopting the options in this leaflet you can improve the quality of water and soil on your farm by tackling soil erosion and runoff at the source, slowing the pathways and protecting watercourses and other receptors.

#### Right options, right location, right management

This leaflet helps you choose the right options and put them in the right places to make the biggest difference. If you need additional help locating or managing these options, please contact Natural England for further information.

Chalk stream, Hellhoughton Common



## Why is clean water and healthy soil important on your farm?

Soil is your farm's most valuable resource as the foundation for production. The most productive components of your soil lie in the top three to six inches of the profile – the layer most vulnerable to erosion. Erosion and runoff can result in valuable nutrients and, more importantly, environmentally damaging sediments, pesticides and dangerous disease organisms reaching water.

The water flowing over and through your farm can be almost as significant as the food you produce:

- Clean water is valuable for irrigation of your crops and drinking water for you and your livestock. Private sources of water can be particularly at risk from your farming practices.
- Agricultural pollution can cause harm to aquatic life including fish, water plants and invertebrates.
- Clean water and good quality wildlife habitats attract many people for outdoor activities such as fishing, boating and walking which are important for people and the rural economy.
- Other rural industries rely on clean water to ensure quality products and adherence to high standards.
- Localised flooding can cause damage to roads, houses and farmland.

Good agronomic practices are essential, but sometimes more is needed to avoid soil erosion and runoff of sediment and other pollutants into water.

## What can you do to ensure clean water and healthy soil?

Soil type, landscape and weather can't be changed. However, land use and management can be adjusted and can make a big impact on reducing the amount of soil erosion and runoff from your farm.

## What do you need to do?

### Tackle the source of soil erosion and runoff

For example:

- managing maize crops to reduce soil erosion by reducing the likelihood of compaction and establishing a winter cover crop to protect soils that would otherwise be left bare.
- sowing a winter cover crop to capture excess nitrogen, improve soil structure and reduce runoff. Cover crops can reduce nitrate leaching by 50 per cent, enabling you to reduce fertiliser application, increase organic matter and potentially save money.

### Slow the pathways of soil erosion and runoff

For example:

- grassing field corners to slow down overland flow of water or where runoff collects and makes it difficult to farm.
- grassing natural drainage pathways (eg valley bottoms) to reduce the channelling of runoff water that can produce rills and gullies.

The increased vegetation is also excellent for farm birds and other wildlife.

### Protect the receptor

For example:

- fencing watercourses to prevent livestock from causing direct contamination and erosion of river banks.
- establishing buffer strips to slow, filter and trap pollutants before they enter ditches or watercourses.

## What are the benefits for you?

### Regular farm income:

Financial incentives are available through Entry Level Stewardship (ELS) to provide a six-monthly income for environmentally friendly land management that supports healthy soil and water.


### Realise the wildlife potential of less productive areas:

Make awkward corners, small fields and wet areas of your farm work better for you by entering them into ELS options. The least productive areas of your farm are often (with the correct management) the best for protecting water and enhancing wildlife.

### Contribute to Climate Change mitigation:

Those options which involve creating grass buffers and field corners in arable fields will lead to reductions in greenhouse gas emissions. This is due to reduced nutrient inputs and increased temporary carbon storage within the created grassland.

### Work with the Industry's Campaign for the Farmed Environment:

Farming to protect soil and water using the options labelled  overleaf will help contribute to the Campaign for the Farmed Environment (CFE).

**Use the farm illustration overleaf to help you choose the best locations and ELS/CFE options to improve the quality of the water and soil on your farm.**

## Need further help and information?

**For details of farm events in your region or further information please contact:**

### Natural England

Tel: 0300 060 1695

Email: [farmevents@naturalengland.org.uk](mailto:farmevents@naturalengland.org.uk)

Website: [www.naturalengland.org.uk/farめvents](http://www.naturalengland.org.uk/farめvents)

### Campaign for the Farmed Environment

Tel: 024 7685 8892

Email: [cfeonline@nfu.org.uk](mailto:cfeonline@nfu.org.uk)

Website: [www.cfeonline.org.uk](http://www.cfeonline.org.uk)

### Environment Agency

Tel: 08708 506 506

Website: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

The publication 'thinksoils: Soil assessment to avoid erosion and runoff' is available from the Environment Agency.

### England Catchment Sensitive Farming Delivery Initiative

Website: [www.defra.gov.uk/foodfarm/landmanage/water/csf/delivery-initiative.htm](http://www.defra.gov.uk/foodfarm/landmanage/water/csf/delivery-initiative.htm)

If you are in an England Catchment Sensitive Farming Delivery Initiative priority catchment, you may also be eligible for free advice or capital grants.

Front cover: Chalk stream © Dougal McNeill.  
Page 2: Hellhoughton Common © Dougal McNeill.  
Fold out page: Maize field © Environment Agency; Infield grass area © Richard Smith;  
Livestock fencing © Environment Agency;  
White-clawed crayfish © Essex Ecological Services / Martin Paugh;  
Otter © Debbie Cousins; Brown trout © Dave Key;  
Fishing for trout © Martin Ryan; Sailing © T Baker;  
Water crowfoot © Gary Morris; Riparian grassland © Environment Agency;  
Buffer strip © ECSDFI.



**Campaign for the Farmed Environment partners** – NFU, CLA, FWAG, LEAF, AIC, GWCT, AICC and CAAV – working in partnership with Defra and its agencies, Natural England and the Environment Agency, as well as the RSPB and other wildlife representatives.



Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

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