



## A clear solution for farmers

CATCHMENT SENSITIVE FARMING

### Priority Catchment Targeting Summary April 2012 – March 2014

**River Basin District: South West**  
**Total Area: 1725 km<sup>2</sup>**

**Catchment: Hampshire Avon**

#### Reasons for designation

The River Avon is considered one of the most biodiverse chalk rivers in Britain, supporting habitats and species that are rare or threatened on an international scale. The River Avon was designated as a Catchment Sensitive Farming (CSF) priority catchment in 2006 due to the failure of the Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) to meet Favourable Condition and because of elevated nitrate levels in drinking water supplies. Diffuse water pollution from agriculture (DWPA) is one of the reasons for these failures.

Phosphate and sediment levels within the river system remain high; this prevents many of the watercourses from reaching Good Ecological Status as required by the Water Framework Directive (WFD). The chalk and upper greensands geology of the River Avon catchment are classified as major aquifers. These support highly productive water supplies of regional importance. There are high nitrate levels within the groundwater and trends show a risk of breaching drinking water standards in some abstractions.

#### Priorities

Drinking Water Protected Areas (Groundwater) –

- Failing due to nitrates
  - Cholderton and District Water Company boreholes (Thruyton and Compton Corner); the concentration of nitrates in water abstracted from the borehole at Cholderton for public supply has been rising for several decades. Without any action, it is expected that the nitrate concentrations will breach standards set by the Drinking Water Inspectorate to protect human health by approximately 2017
  - Bulbridge
  - Deans Farm
  - Dunkerton Springs
  - Wylle
  - Chirton
- Possibly failing due to nitrates
  - Tidworth
- Failing due to nitrates and pesticides
  - Fonthill

SSSI units failing due to DWPA –

- River Avon western arm; unfavourable no change (units 1 and 2)

- Upper to Lower River Nadder and River Wylfe (tributaries of the Avon); unfavourable no change (units 5 to 9)

River Avon System SAC, Good Ecological Status needs to be achieved

### **Objectives**

In this catchment and specifically within the target areas, we aim to:

- Reduce the loss of sediment and associated soil-bound phosphate particles through appropriate changes in land management. Emphasis will be on alleviating soil compaction. This will be linked to work on run-off control along pathways.
- Improve management of fertiliser and organic manures (nitrates) to reduce leaching to groundwater and run-off from surface waters.
- Reduce connectivity between the land and surface water through promotion of track management.
- Reduce pesticide losses during sprayer loading and wash-down.

### **Delivery**

CSF will deliver the following types of training and advice:

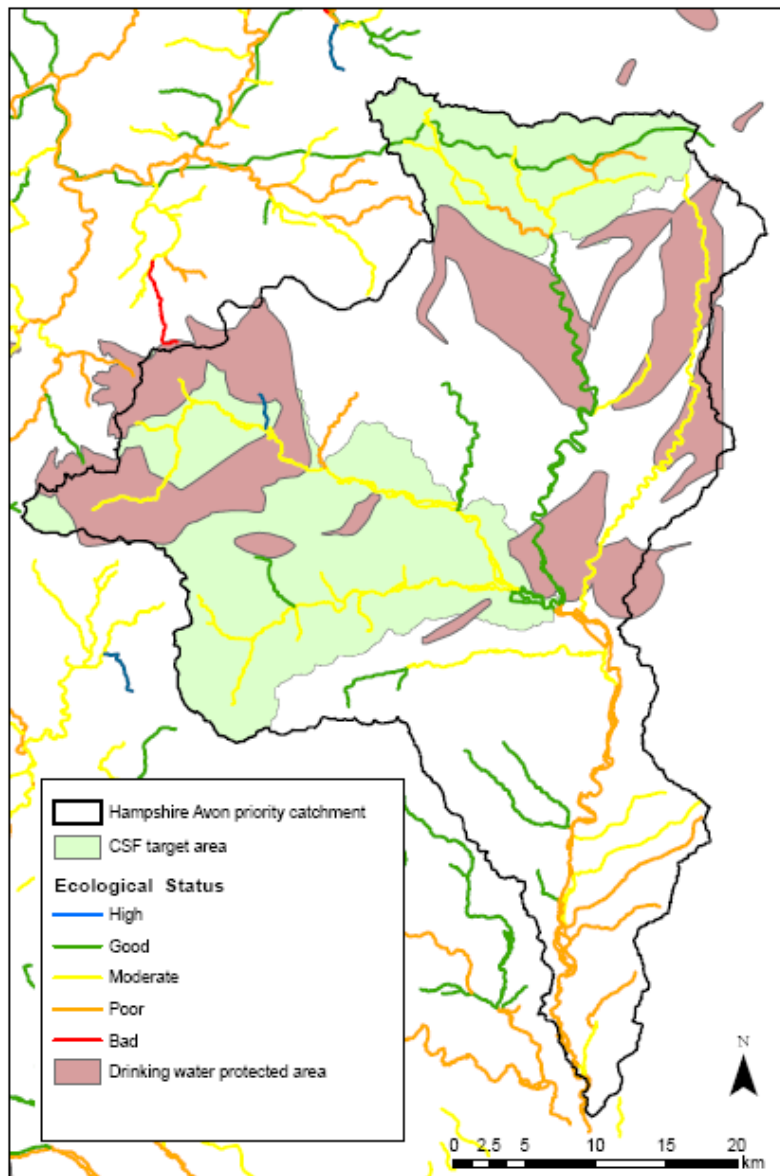
Infrastructure audits will be offered to dairy and beef farmers where required to improve slurry and dirty water management and silage facilities. Livestock farms will also be offered nutrient management training and advice and a nutrient management planning tool training will be available to all farmers (e.g. PLANET software or paper equivalent). Arable and livestock farms will be offered soil husbandry training and advice especially to tackle compaction issues associated with stocking and cropping. Surface water management will be offered to targeted farms to identify and recommend remedies for sources and pathways of diffuse pollution.

Specialist workshops will include post-cut silage nutrient management, over-wintering cattle, a cultivation demonstration showing different cultivation techniques to reduce DWPA without impacting yields, biobeds and biofilter workshop for managing pesticide washings, a track design and management event and rainwater harvesting and sustainable water use for livestock farms.

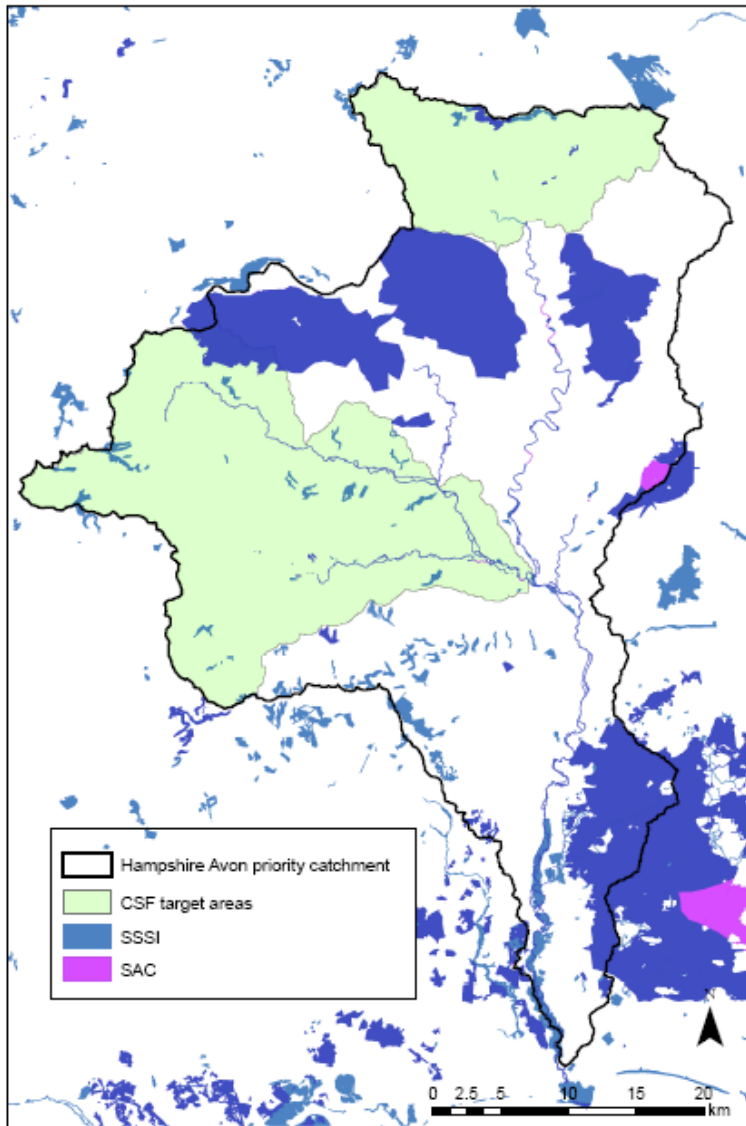
Riparian land owners will be targeted through Environmental Stewardship schemes where opportunities for resource protection options exist. Remedies through CSF will be sought where the Environment Agency identify issues. Farm tracks which currently deliver high silt loads into the watercourses will be targeted with advice on track management. Financial support for track improvements with associated grips and sediment traps will be provided through CSF's Capital Grant Scheme, WFD funding from the Environment Agency if available, and through the Demonstration Test Catchment Project.

Source Protection Zones – Wessex Water Catchment Advisers will operate throughout the Drinking Water Protected Areas in the River Avon catchment. CSF will work to support the Wessex Water project through provision of specialist training, advice and grants where applicable.

## Targeting Map



**Figure 1** WFD Ecological Status and Groundwater Drinking Water Protected Areas.



**Figure 2** SSSI and SAC (SSSI has a similar footprint to SAC)