



A clear solution for farmers

CATCHMENT SENSITIVE FARMING

Priority Catchment Targeting Summary March 2011 – March 2014

River Basin District: South East
Catchment: Downs & Harbours

Total Area: 1000 km²

Reasons for designation

Data continues to show rising levels of nitrate, threatening both drinking water supplies and the semi-enclosed harbours of the Eastern Solent, where large areas of coastal SSSI and Natura 2000 sites are in unfavourable condition, particularly related to excessive algal growth.

Observed sediment issues (invariably linked to phosphate losses) and the periodic detection of faecally-sourced pathogens (FIOs) also give rise for concern, although Portsmouth water has already installed membrane plants where cryptosporidium detection has been observed.

As a precaution, best pesticide handling practice is actively promoted, especially in view of the large number of swallow holes (dolines) and other solution features in the area, which can provide direct and very rapid access to groundwater.

It is important to note that groundwater is of great significance in the area: 85% of Portsmouth Water's supply is directly from boreholes and springs and many rivers and watercourses are predominantly fed by groundwater from chalk aquifers within the Downs & Harbours region.

Priorities

- Nitrate in groundwater
- Nitrate, sediment and phosphate in surface waters, focusing on river and harbour ecology
- Faecal pathogens (FIOs) and pesticides

Objectives

These are to:

- Reduce nitrate, soil and corresponding phosphate losses by better application techniques, greater understanding of soil and its management that includes nutrient balances, the importance of organic matter and reducing compaction;
- Offset the need for highly costly and carbon hungry nitrate removal plants for drinking water purposes;
- Reduce dirty water losses from yards and other farm areas, such as hard standing areas and farm tracks;
- Generate better understanding and practice of pesticide handling;
- Promote the holistic aims and benefits of catchment management and the gains (including financial) to farming and other land management businesses;
- Generate data directly and via direct measurement and modelling to determine problem areas in order to subsequently demonstrate the benefits of a catchment management approach;
- Gain greater integration with other bodies, including the EA, NE, South Downs National Park, Hampshire County Council and other focused and/or local organisations.

Delivery

Delivery will concentrate on Priority 1 and 2 farms within the catchments of the Rivers Meon, Lavant (Hants), Wallington and Lavant (Sussex) that also correspond to Capital Grant Scheme areas, but will not exclude others, especially where an engagement would offer an advantage to the programme.

On top of usual types of delivery, e.g. spreader/sprayer testing, soil testing etc. delivery comprises the following specialist work:

- Precision Nitrate (precision farming) programme expanded to 6 farms;
- Precision Phosphate (precision farming) introduced to 4 farms;
- Soil surveys including organic matter;
- Pasture, manure and yard infrastructure visits for equine establishments;
- Biobed/biofilter and pesticide handling advice;
- Yard and track infrastructure surveys.

Other delivery comprises:

- Promotion of Capital Grant Scheme and corresponding visits;
- Equine pasture management, precision farming, water quality and CGS workshops.

Additional work

- Piloting of real-time monitoring of the upper River Meon 3 month trial, initially focusing on nitrate.

Targeting Map

