A clear solution for farmers

CATCHMENT SENSITIVE FARMING

Priority Catchment Targeting Summary
March 2011 – March 2014

River Basin District: Anglian Catchment: River Wensum Total Area: 699km²

Reasons for designation

The Wensum catchment was one of the four pilots for Catchment Sensitive Farming (CSF) and was designated as a CSF priority catchment in 2006 when phase one of the CSF was initiated. Due to water quality issues of surface and groundwater, Public Water Supply abstractions fail to achieve prescribed drinking water standards. The river is also designated as SSSI and SAC and is failing to achieve favourable condition.

Priorities

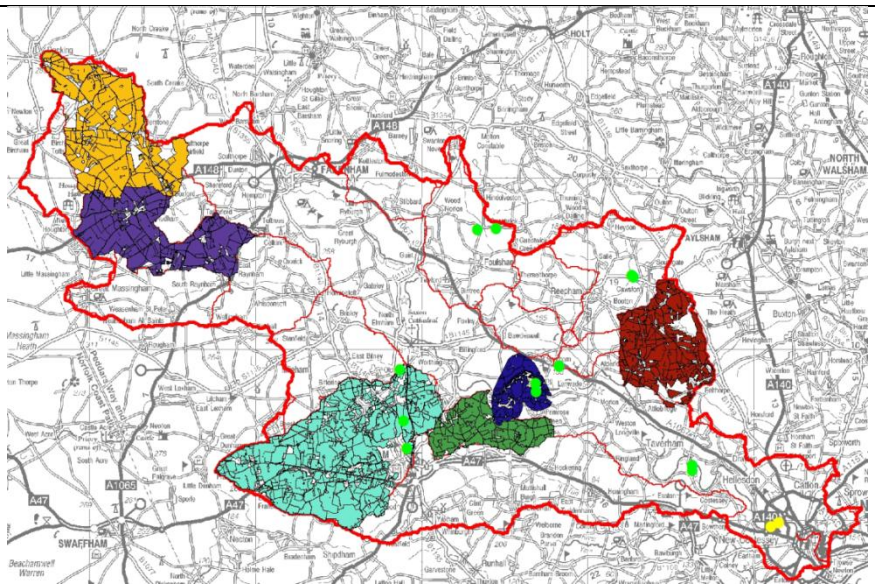
- **River Wensum SSSI/River Wensum SAC** – The River Wensum SSSI was notified for its chalk river habitats. The River Wensum SAC was designated for one Annex I habitat and populations of 4 Annex II species. The adverse condition reason of diffuse pollution has been addressed through CSF and through implementation of the Diffuse Water Pollution Plan for the River Wensum and Potter & Scarning Fens so as to achieve appropriate management in relation to agricultural sources, and pathways (such as drains and roads).
- **Drinking Water Protected Area (Ground water)** – Elevated levels of nitrate is an issue at the Lyng Forge borehole and water from this borehole is blended from water from the Sparham source in order to meet drinking water standards.
- **Drinking Water Protected Area (Surface water)** – The surface water abstraction at Costessey (one of the major abstractions that provides drinking water to Norwich) fails drinking water standards in terms of the autumn peak of metaldehyde.
- **Good Ecological Status** – The River Wensum and tributaries fail to meet Water Framework Directive (WFD) good ecological status. Where targets expressed in the SSSI Favourable Condition tables are more stringent than WFD targets, then the more stringent targets are adopted. Particular issues are the assemblages of diatoms and levels of phosphate, nitrate and turbidity.

Objectives

- **Raise awareness of DWPA across the whole catchment**, through newsletters, events, farmer discussion groups and on-farm specialist advice.
- **Reduce sediment loss to surface waters**, through promotion of a range of measures e.g. maintaining good soil structure, tillage across slopes.
- **Reduce phosphate and nitrate loss to surface waters** via a range of measures e.g. promoting regular soil & manure testing, ensuring phosphate applied in manure is taken into account when planning fertilizer applications and maintaining good soil structure.
- **Reducing the autumn flush of metaldehyde by** raising awareness and promoting best pelleting practice.
- **Reduce connectivity between the land and surface water** through promotion of good management practice.
- **Reduce sources of nitrate leaching to groundwater and run-off to surface waters** through a range of measures e.g. promoting best practices measures relating to manure and fertilizer use, promoting good soil management, and use of cover crops, etc..
- **Consolidation of evidence base** – Engagement with the Wensum Demonstration Test Catchment Project (and associated Sediment Fingerprinting Investigations) will provide the opportunity to consolidate our understanding of sources of diffuse pollution and its management.

Delivery

Six target sub catchments have been confirmed for phase III (see map below). All are surface water sub-catchments with the exception of the Lyng Forge PWS borehole Source Protection Zone II.



Overall, our approach will be:

- **Within Phase 3 target areas**: 1:1 farm visits (whole farm assessments, farm infrastructure audits, soils, nutrient management plans, manure and muck sampling, water management, biobed and pesticide handling areas), and group events to promote best practice (management of light soils, best practice application of metaldehyde and nutrient management).
- **Within the rest of the catchment**: A care and maintenance approach will be offered to farmers in the rest of the Wensum catchment meaning that farmers will be welcomed to group events and offered one to one farm visits where the need is identified by the CSF Officer and farmer.
- **Working with HLS advisors and ELS contractors**: Through working with ES advisors and contractors, the CSFO will ensure that resource protection issues are addressed in all schemes.
- **Capital Grant Scheme**: This will be promoted through newsletters, and the Capital Grant Scheme target area will be re-evaluated in preparation for the 2012 application window.
- **Partnership working:** To work closely with partner agencies and organisations such as the Wensum Demonstration Test Catchment Project, the River Wensum Restoration Working Group and the Norfolk Rivers Trust to consolidate our evidence base, and meet jointly held objectives.

Although the issues are broadly similar in each sub-catchment, each has its own particular priorities which need to be addressed through Phase III:

- **Lyng Forge**: Close liaison with the Environment Agency and Anglia Water regarding farms within Zone II Source Protection Zone to ensure that farming practices do not exacerbate the elevated levels of nitrate.
- **Swanington Beck**: A new target sub catchment, where farmers will be given priority in terms of 1:1 advice. With light soils, issues to address are reduction in turbidity and phosphate pollution.
- **Pennyspot Beck**: A Phase II Target Area, characterized by heavier soils. Particular issues to address are the autumn flush of metaldehyde, silt ingress and phosphate pollution.
- **Wendling Beck**: A Phase II Target Area. With three PWS boreholes and much of the sub-catchment regarded as Source Protection Zone II, there are concerns regarding nitrates. With heavier soils metaldehyde is used more frequently and best practice pelleting must be promoted. Reductions in phosphate pollution and turbidity will also be a priority in this sub catchment.
- **River Tat**: A Phase II Target sub-catchment, characterized by light soils. Particular issues to address are silt ingress and phosphate pollution.
- **Wensum Top Reaches**: A Phase II Target sub-catchment, characterized by light soils. Issues to address are turbidity, phosphate, nitrate and nitrous oxide pollution.