

# River Wensum

Restoration Strategy

Issue 9 June 2012

## Welcome to our summer newsletter

### Restoration schemes being progressed in 2012

This year, working with landowners, we are planning two major restoration schemes on the Wensum.

The first of these is located downstream of Swanton Morley weirs and will involve improvements to 880 metres of river channel. This section of river has been considerably widened and deepened by past engineering works, and lacks in-channel habitat diversity and tree cover. Despite this, it retains a good bed gradient, and is free-flowing because it remains outside of the backwater caused by the downstream mill at Elsing.

We are aiming to recreate sinuosity to promote physical and biological diversity within the existing river by installing a series of berms (shelves) along each side of the channel. A number of shallow gravel glides and deeper pools will be created to restore some of the natural features that would have been present prior to historical modification of the channel. Woody debris will be inserted into the channel, and existing ditches will be re-connected to the river providing valuable backwater habitat for fish fry.

A small meander loop will be reinstated with a plug placed in the existing channel to direct flows round the restored meander. The plug will be set at such a height that it can be overtopped during high flows, increasing the overall channel capacity during flood events.

Sections of the spoil embankments will be removed on the north side of the river to provide better connection between the river and an isolated section of the floodplain. This will enable high flows to spill over onto the grazing marsh, improving the local habitat biodiversity. This restoration scheme commenced in June.

Later in the year we are planning to restore a substantial length of channel upstream of the Fakenham bypass at Hempton. This project involves similar principles to the Swanton Morley scheme and we hope to start work in September.

### A few words on woody debris

We recognise that retaining trees and fallen timber (woody debris) within the channel can be beneficial because it helps to vary the flow and shape of the channel, creating physical habitat for many species of plants, invertebrates and fish. Nationally, the Environment Agency has recently adopted a new policy, whereby we will retain woody debris in rivers when carrying out maintenance provided that flood risk to people and property is not increased.

## Catchment Restoration Fund: Bids welcome for Wensum restoration

The Department for Environment, Food and Rural Affairs (Defra) has created the Catchment Restoration Fund for England (CRF). This will provide a funding route for civil society organisations to undertake projects that improve the condition of rivers and other waterbodies and so achieve the objectives of the Water Framework Directive.

It is recognised by Government that, whilst many rivers and other wetland systems have been modified in the past, often there is scope for more natural sections to be reintroduced that will restore habitats, bring people closer to nature and still allow effective use of the land beside water.

This fund will support work that aims to:

- Restore more natural features in and around waters;
- Reduce the impact of man-made structures on wildlife in water; or
- Reduce the impact of small, spread-out (diffuse) sources of pollution that arise from rural and urban land use.

The lead applicant for funding must be a charity or an organisation with charitable, benevolent or philanthropic purposes under the Charities Act 2006. For three years from 2012/13 to 2014/15 inclusive the CRF will make available up to £9m each year for such projects. Projects have a minimum bid size of £50,000 and there is a series of submission dates for applications.

Please visit the following web page to find out how to apply: <http://www.environment-agency.gov.uk/research/planning/136182.aspx>

If anybody would like to submit a bid for the Wensum we would be very keen to hear from you as we can provide help and technical advice to support any application.

## A new approach to maintenance on the Wensum

During a recent meeting at Elsing village hall, attended by local parish councils, landowners and interested organisations, a number of people expressed their concerns regarding a reduction in the level of maintenance work we are now undertaking on the Wensum.

In the past, extensive vegetation clearance and de-silting works were routinely completed and this practice cannot be readily justified. We are required to focus our maintenance activities on areas where people and property are at risk of flooding. The Wensum is an important chalk fed river and this is recognised through its statutory environmental designation as a Site of Special Scientific Interest and Special Area of Conservation. We have to ensure any work we undertake does not cause any damage to this important habitat, and we have a legal duty to improve the conservation status of the river.

In the last few months we have completed some light touch maintenance work between the Wendling Beck confluence and Swanton Morley weirs. At a small number of locations the tree cover had encroached to such an extent that any floating debris could be held up causing a blockage. We have selectively trimmed tree branches and in-channel vegetation to provide a clear central channel which improves conveyance of high flows.

We have been careful not to remove all the vegetation or unnecessarily widen the channel as this would result in habitat simplification and reduce the natural features that we are seeking to encourage through river restoration.

At Worthing we have installed woody debris flow deflectors to stabilise an eroding bank between the river and a fishing lake. This has been undertaken as a precautionary measure, as without remedial action there was a risk of a breach occurring between the lake and river.

Whilst working along this section of the river we carried out two enhancement schemes. Firstly, we cleared vegetation from in front of the fishing platforms at Burgh Common. This had encroached to such an extent that fishing from the platforms had become difficult, and the maintenance work has now restored them to full usage.

Secondly, we have cleared out a number of fish refuge areas, created in 2006 as part of a previous restoration scheme on land owned by Dereham and District Angling Club. These had become overgrown, but now that they are restored they provide areas of shallow open water which are ideal as nursery areas for fish fry, as well as providing general refuge areas for fish in times of high river flow.

Between Hellesdon Mill and Costessey point we have completed selective branch trimming and removed two fallen trees from the river. The objective is to improve conveyance of high flows and provide boat access for future maintenance work should it be required.

Image below: Woody debris deflectors installed at Worthing to stabilise the bank.



Image above: Fishing platforms at Burgh Common, Swanton Morley

#### **Get in touch**

If you are interested in partnership working or would like further information, please contact us at the following email address: [river.restoration@environment-agency.gov.uk](mailto:river.restoration@environment-agency.gov.uk) or contact us by post: River Wensum Restoration Project Team, Environment Agency, Dragonfly House, 2 Gilders Way, Norwich, NR3 1UB.

To save resources we would very much like to keep as many people informed by email as possible. Please email us at the address above to be updated this way. Please add your name and postal address in the body of the email so we can identify you.

Thank you.

