





Essex Healthy Headwaters River Restoration Project

Essex Healthy Headwaters is a partnership project targeting the headwaters of the River Pant and Upper Chelmer. Any improvement upstream will have benefits throughout the catchment and ultimately the Blackwater estuary and coast. Much of the area is in arable production. Low flows and abstraction means that headwater streams are dry for significant periods of the year and extensively modified drainage patterns and loss of in-channel features leads to 'flashy' streams with increased sediment and

agro-chemical load and poor water holding within the wider landscape. River corridors and riparian habitats tend to be neglected, in places either heavily shaded or denuded of trees and with former wet woodland and meadows degraded and dry. Under the standards set out by the EU Water Framework Directive (WFD) these rivers are failing to meet 'Good ecological and Chemical Status'. The most common reasons for failure across the catchment are phosphorus and morphology.

Essex Wildlife Trust and the Essex Biodiversity Project have undertaken a series of river corridor 'walkover' surveys within North West Essex in partnership with the Environment Agency. This work has identified specific projects to improve sediment load, ecology and hydro-morphology across the catchments/landscape addressing the problems leading to WFD failures. From this baseline all proposed activities can be monitored and critically assessed over the project lifetime.

The Healthy Headwaters Project has a number of integrated components. These are broadly split into:

- Changes to agricultural land management including arable reversion to extensively managed permanent grassland and broadleaved woodland
- Creation of temporary flood storage 8 improvements to water retention areas on farmland
- Enhancing and maintaining river channel morphology
- Upgrading ditches
- Improvements to agricultural soil management
- Awareness-raising for communities, farmers and landowner
- Monitoring to demonstrate positive change
- · Reporting and disseminating best practice

Key facts	
River Basin District	Anglian
Catchments	Combined Essex - Upper Chelmer & Pant
Outcomes	Increased peak flow capacity – reconnection of old meanders.
	Water quality improvement – reduction in silt, sediment and chemical inputs through bank improvements and agricultural land-use advisory visits.
	Morphology and Biodiversity gains – woody debris installation, capturing in-channel silt, invertebrate and fish habitat creation and improvement, new meander creation, wet woodland and grassland creation and restoration.
	Public awareness – education of local communities about the effects of drinking water and sewage demands on local rivers.
Start Date	July 2012
End Date	March 2015
Budget	£481,286
Project Partners	Essex Wildlife Trust, Essex Biodiversity Project, Essex & Suffolk Water (Northumbrian Water), Chelmer and Blackwater Catchment Partnership, Natural England, Chelmer & Blackwater Navigation - Essex Waterways Ltd, FWAG (Farming & Wildlife Advisory Group), Essex County Council

Description of Works

Problems of fragmentation of riparian habitats and deterioration in water quality within the headwaters of the rivers Chelmer and Pant will be addressed through the delivery of 27 projects identified from the surveys targeted at delivering WFD objectives.

Of the 27 sites, 9 are core areas where conservation action can achieve the most significant gains addressing morphological failures through the restoration, creation or enhancement of wetland features including back channels, scrapes and offline ponds.

A series of 18 smaller 'stepping stone' areas of high priority have also been identified where further wetland restoration or enhancement including wet woodland creation, woody debris installation and fencing to prevent poaching and sedimentation of riparian corridors will address diffuse pollution where these issues have been identified.



In total, 21 km of river corridor across 74km of the River Pant and Chelmer catchments and 5 Local Wildlife Sites [LoWS] covering 48 hectares will be improved.

The Healthy Headwater Project will manage delivery of the following activities:

- Changes to agricultural land management including arable reversion to extensively managed permanent grassland and broadleaved woodland and wet woodland, hedgerow and buffer strip creation and the installation of stock fencing.
- Wetland habitat creation through temporary flood storage & water retention areas on farmland including scrape, offline pond and grassland restoration and creation.
- Enhancing and maintaining river channels through bank reprofiling, back channel creation and restoration, woody debris installation and the application of natural bank revetment techniques.
- Upgrading channels and ditches including restoration, creation and installation of board walks
- Improvements to agricultural soil management through the establishment of a functioning 'one stop shop' advice service and agronomist / farm visits over three years
- Awareness raising for communities including a functioning River Warden scheme, a series of school visits over three years, dissemination of water resource information to communities, Walk and talks programmes and workshops and the creation of a one stop Essex Rivers Website.

About the team

Project Manager: Mark Iley

Admin, finance, Publicity: Michele Kench

Director: John Hall

Other contacts

Environment Agency: Matt Butcher

What will success look like?

A stable water supply of better quality held in a wildlife rich landscape benefits everyone. As a charitable organisation, the Essex Wildlife Trust has established an effective dialogue with landowners and local communities within each catchment to maximise the overall success and long term legacy of work that will further these goals.

The Healthy Headwaters project will actively promote changes to a more sympathetic and coordinated management of river corridors and adjacent land and provide an online forum to promote and explain best practice options, including those that can sometimes seem counter-intuitive. By working with landowners, partner organisations and local residents this work should inspire and educate local communities to regard their rivers, and the water flowing through them, as precious, finite resources that without care may be easily degraded.

By the end of the project we should have moved further towards our joint aspirations for; improvements to water quality to meet WFD objectives; delivery of landscape scale conservation for wildlife and people and supplying a clean and sustainable water supply to communities and business.







