

## Catchment Restoration Fund (CRF) Project Briefing Note

### River Rea Restoration Project

Many watercourses within the River Rea Catchment are failing to meet the required standards under the Water Framework Directive (WFD) due to failing fish numbers. The River Rea has long been known as a catchment in serious decline as a result of sedimentation, poor agricultural practices and fish migration barriers. The Severn Rivers Trust walkover surveys of the River Rea, confirmed that suspended sediment load is seen to be impacting on the ecological health of the river and a major cause of fish failure. Impacts such as agricultural run-off from fields and bank erosion caused by farm animals are major contributors to an excessive quantity of sediment entering the river system. Also good riparian habitats are in decline due to over shading and over mature and diseased alders dying and falling into the river causing excessive blockages and bank erosion scars.

The River Rea restoration Project is a partnership project that will use CRF funds to improve watercourses in areas of the Rea Catchment that are affected by sedimentation, diffuse pollution, degraded habitat and obstructions to fish passage. The restoration project on the Rea will help to remediate these issues, by working with farmers to encourage the installation of cost-effective and environmentally friendly alternatives. These include coppicing of riparian habitats, designating buffer strips between the fields and rivers and fencing

and re-establishing eroded banks. The Severn Rivers Trust aims to improve the habitat and connectivity in order to encourage a sustainable return to natural river processes and reduce diffuse pollution from farmland to ensure that the failing water bodies achieve Good Ecological Status under the WFD.

Key facts	
<b>River Basin District</b>	Severn
<b>Catchments</b>	River Rea (8 water bodies)
<b>Outcomes</b>	<p><b>Reduced agricultural run-off</b> - reduced the in-stream sedimentation and fertiliser contamination, improved farming practices</p> <p><b>Improved biodiversity</b> - improved in-stream habitats, re-established fish populations, improved invertebrate biodiversity, and control invasive species.</p> <p><b>Improved river water quality</b> - reduced diffuse and point source pollution. Work towards achieving GES.</p> <p><b>Improved fish migration</b> - removed un-necessary weirs, re-established spawning grounds.</p> <p><b>Reduced lateral river erosion and poaching</b> - installed revetments, reduce poaching by reducing livestock access to watercourses.</p> <p><b>Improved flow regime</b> - Reduced abstraction and or augmentation, plus wetland creation.</p> <p><b>Social</b> - improved environment for recreation, promote interest and local community involvement in river restoration and healthy environment.</p> <p><b>Economic</b> - improved fisheries, introduced farmers to the 'Passport Scheme', reduced farmer's expenditure on fertilisers, pesticides, fuel and top soil replacement.</p> <p><b>Flood Defence</b> - Create wetlands and wet woodlands and reduce sediment to mitigate flood risk. Raise flood risk awareness.</p>
<b>Start Date</b>	July 2012
<b>End Date</b>	March 2015
<b>Budget</b>	£935,570
<b>Project Partners</b>	Natural England, Catchment Sensitive Farming, Environment Agency, Shropshire County Council, Shropshire Hills AONB, Shropshire Wildlife Trust, Severn Trent Water, Cleobury Mortimer Environmental Impact Forum, White Swan Piscatorials, Sustainable Eel Group, Neen Savage Parish Council, Wild Trout Trust, Burwarton, Shakenhurst and Burwarton Estates, Forestry Commission, Burwarton Syndicate,

Through restoration work, the project will address issues including:

- Sediment which has a direct adverse effect on water quality.
- Barriers to fish migration, preventing fish from reaching habitat that they should be present in.
- Interrupted natural downstream movement of substrate which reduces spawning habitat for salmonids.
- Poor in-channel and riparian habitat for riverine species

## Description of Works

In order that we solve the problems in the Rea catchment, the River Rea Restoration aims to advise and assist farmers and land owners in applying the correct and relevant practices and tackle the issues by delivering the following measures:

**Fencing** - where agricultural practices have been identified to be causing the watercourse to fail to meet WFD standards, riparian fencing and associated drinking points will result in multiple benefits. The poaching of riverbanks by livestock will be reduced, as will the associated excess sediment inputs. Vegetation will become re-established along the riverbanks, therefore increasing riparian habitat and biodiversity. This will result in the establishment of a buffer zone that will reduce the amount of nutrient run-off that enters the watercourse from farmland and roads.

**Reconnecting habitat** - where an obstruction to fish passage exists within the river channel, the project will look to remove it, or at the very least, make it passable. This will not only open up more habitat to migratory fish, but where removal occurs it will also return the sediment movement to a more natural regime.

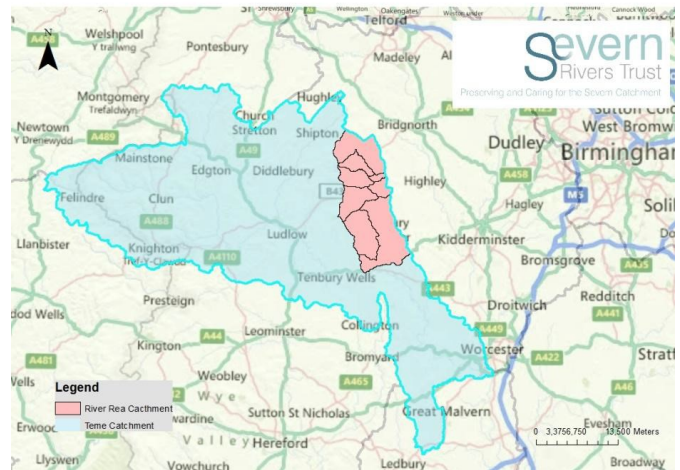
**Riparian Management** – Bankside trees that have not been cut or coppiced for several years and have been allowed to grow up can shade riverbanks, restricting sunlight to under-storey vegetation and result in bare ground under the trees which is then susceptible to erosion. The aim is to increase the amount of light getting through the canopy, promote natural re-growth of bankside plants and increase levels of bank stability and stabilise the spread of Phytophthora amongst the Alders, reducing bank side collapse (another main source of sediment).

**Community engagement** - this is essential to the long term success of the project as it encourages local ownership and support. It is seen as an integral part of an integrated catchment management approach. We will increase and improve community engagement and establish a sense of ownership and responsibility of their rivers through active groups for future improvements and monitoring.

## What will success look like?

As a charitable organisation, the Severn Rivers Trust want to work with farmers, landowners and other associated partner organisations to ensure that our priorities are aligned in order to achieve land management solutions that benefit both people and the environment. Through education, we hope that farmers and landowners will take ownership of the issues affecting their watercourses, ensuring that they understand their direct and indirect dependence on these natural resources and the services they provide. Our principal aim is to see watercourses in the Rea area achieve Good Ecological Status under the Water Framework Directive. This will mean a return to natural flow regimes, improved water quality, increased riverine habitat and reconnected habitat, ultimately resulting in a better river environment that can sustain greater biodiversity.

### River Rea Restoration Project Area



#### About the team

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#### Other contacts

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