

# EAST SUFFOLK CATCHMENT PARTNERSHIP NEWSLETTER

APRIL 2017

*In the last 12 months of the Catchment Partnership, many projects have been completed and new ones planned across the East Suffolk Partnership involving many of its partners. This newsletter aims to cover the great work being done by all involved.*



In the last 12 months Essex and Suffolk Rivers Trust have completed the East Suffolk Watershed Initiative; funded by Defra's Catchment Partnership Action Fund, successfully applied for EU Interreg funding to carry out a 3 year project in the Sandlings area and employed a Project Manager to take forward these projects and coordinate the catchment partnership.

**East Suffolk Watershed Initiative**—This project was completed last year and covered the Upper and Mid Deben, Bramford, Shottisham and Butley Creek. Landowner engagement, farm advice visits, river restoration and flood plain improvements took place.

In the Upper Deben a workshop was run, in partnership with the Holistic Water Management Project, which allowed us to engage with 23 landowners. From this a number of project opportunities were identified. This has since led to three 'slow the flow' schemes (natural flood defence opportunities) to be designed and developed. These schemes should be completed over the next year by the Environment Agency and the Holistic Water Management Project.

In the Mid Deben 650m of water meadow dyke were restored, reconnections made between the floodplain and the main rivers and improvements to fish and invertebrate refuges. Large woody debris was used to create variation in flow dynamics and improve in-channel habitats. This work took place in the Easton/Hoo area.



Brush installed in the River Deben to improve flows.



In Bramford; a dyke, which was the original channel, was desilted to create a refuge for invertebrates and other aquatic species. During the project it was not possible to reconnect the dyke to the main river but this is something that could be developed in the future to allow it to be used as a refuge for fish and improve fish passage along the channel.

Dyke Improvements-Bramford

At Shotisham an interception pond was created to collect silt runoff from a nearby farmyard and road. River restoration work also took place in Shottisham Stream to reprofile banks and open up areas of the channel to create improved habitat for amphibians and Water Voles.



Interception Pond—Shottisham

Farm visits took place in areas close to Butley Creek to offer advice on possible improvements such as fencing to reduce damage to the sea wall by animal poaching/trampling. Similar visits took place throughout the Sandlings area to give advice on soil and water management. These visits culminated in producing a plan with the landowners to offer practical recommendations to address water quality and soil erosion problems. We commissioned Suffolk FWAG to carry out these visits and were also given support by Catchment Sensitive Farming Officers.

**Topsoil – Sandlings**—This is a three year project that began last year. It aims to improve water availability and the quality of water stored in natural underground reservoirs. This will involve trialing Managed Aquifer Recharge (MAR); abstracting surface water when water levels are high and storing this in aquifers. This stored water can then be abstracted when surface water is low and used to irrigate crops or even transfer it back in to the rivers to improve water levels for ecological benefit. If successful this project demonstrates an alternative to reservoirs, which take land out of production and can offer little ecological value.



Map Showing the Sandlings Area

Another element of this project is to improve water quality by working with landowners to reduce soil loss from the land entering waterbodies as sediment. This soil carries substances such as nitrates, phosphates and pesticides into the water environment, which can be damaging to the habitat; also the soil or sediment smother gravels reducing habitats for invertebrates and fish fry. For more information please visit the Essex and Suffolk Rivers Trust Website:

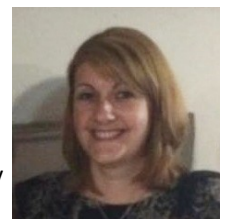


Typical crop for the Sandlings Area

<https://essexsuffolkriverstrust.org/>

**New Project Manager**—Jane Herbert has been employed by ESRT to manage all the trusts projects. Jane has been in post since September and during that time she has been working on the two Topsoil projects, one in Essex and one in Suffolk. Jane has support from Paul Bradford on the Suffolk Topsoil Project who is using his expertise to trial the MAR element of the project.

Jane will also be acting as coordinator for the Catchment Partnership and working with the Environment Agency to develop additional projects in the East Suffolk area.





The Suffolk Area Team, have been busy working to improve habitats and working with partners to help maintain populations of birds and other wildlife in the area. This includes maintaining their reserves and also the Suffolk Coast Futurescape area. Here are some of the work they have been involved in.

**Flybury Point Vision (Boyton)** - Since purchasing this new piece of land that was in arable production in 2015; they have been wetting up the area. This has already been successful in some of the site (as shown in the pictures) and has been a great benefit to the wildlife of the estuary.

This project aims to enhance Boyton marshes further and to create the UK's largest man-made scrape at 30 hectares. For more information on this project contact the RSPB.



Before and After

**Minsmere Reserve**—work has been done to restore two large pools. They were deepened to provide more freshwater for the scrape should the sea breach the north marsh, reducing freshwater habitats there. This work was funded by the Environment Agency. Reedbed restoration is also continuing to provide habitat for Bitterns, Bittern ledges were also added in the existing reedbeds and newly created pools. Work continues on the heathland restoration on this site and the work carried out on Dingle Marshes is going well. Monitoring of salinity levels (saline incursion occurred in 2013) has finally shown a return to freshwater measures needed to support fish, and therefore Bittern.



Suffolk Biodiversity Information Service is the one-stop-shop for biodiversity information on Suffolk. They have been continuing to improve the records available within the county and make this as accessible as possible. Please contact them for any Biological record needs you may have.

**Outstanding National Result for SBIS**—data holding are being viewed online and downloaded by larger numbers than before. The dataset has increased by approx. 200,000 records in the last year with a total of 2.5 million records. This puts Suffolk as the largest single county dataset open for public view.

**Suffolk Biodiversity Project Fund**—this fund is looking for projects to fund. These projects can be wide ranging, can include community groups, conservation bodies and Local Authorities and will fund up to £1,000. Projects that have realistic aims, achievable timelines and demonstrate partnership have the best chance of success. There are no deadlines for applications and an answer should be given within 4 weeks of submission. If you're interested email [gen.broad@suffolk.gov.uk](mailto:gen.broad@suffolk.gov.uk).



The Environment Agency are responsible for protecting the water environment and monitoring and maintaining the quality and quantity of surface and ground water. They are responsible for ensuring all works on watercourses will not have any adverse effects and will support those working to make habitat and water quality improvements.

**Natural Flood Management Funding Available**—Applications for projects using natural flood management are being sort by the Environment Agency. These applications need to be submitted by the 19th May and need to be sent, initially, to the Catchment Partnerships hosts. Up to £50K is available for individual projects and will need to be delivered by March 2021. More information can be found here: <http://www.catchmentbasedapproach.org/resources/tools-and-casestudies/deliver/nfm>.

If you would like to submit a project for this fund please send them no later than 5th May to Essex and Suffolk Rivers Trust so they can discuss the projects to be submitted.

**Bush Heritage Talk—London**—The event is being held at the Royal Geographical Society on the evening of May 25th. The evening will feature Chris Darwin, Charles Darwin's great great grandson, as the keynote speaker, Chris and Jody will share the story of how Bush Heritage created a network of Australian conservation reserves the size of Southern England. Guests will also have the opportunity to explore a curated display of historical Australian artefacts from the RGS-IBG Collection. More information and tickets are available here: <https://www.eventbrite.com.au/e/australias-natural-wonders-tickets-31277999338>



The Alde and Ore Estuary Partnership represents parishes and all local interests. They took on the responsibility for managing a sustainable future for river defences in the estuary. They have been established since 2012.

**Aldeburgh Wall**—Since the Estuary Plan was agreed last June there has been a great deal of activity on the flood defence front. The first phase of the Aldeburgh wall should be completed shortly. At the moment there is some ongoing additional work required to move water vole habitats prior to infilling a soke dyke to stabilise the new wall. We await further hydrodynamic modelling data for the whole estuary, due in June, before any further work can continue. Further work this year at Snape and Aldeburgh is dependent on gaining the necessary consents before Autumn. Phase II and III on the Aldeburgh Wall should be completed simultaneously in 2018.

**The Estuary Trust Fundraising Launch**—Since last September, Richard Davey, chairman of the Funding Group, has gathered a team who have agreed a strategy to raise about £12 million to help defend the estuary. This will involve **everyone** who lives, works and visits the area. The fundraising launch will be in the autumn when a recently made film, presented by Nick Robinson, will be shown. By then the results of the modelling data in the summer will have been received, be well on the way to an agreed programme of works and will have much more clarity on the final cost.



The Suffolk Disabled Anglers' Forum (SDAF) is a registered Charity that provides opportunities for people with disabilities to gain access to angling. They currently organise coarse fishing sessions twice a month from early May through to mid-October.

**Creating Access to Disabled Users**—At present they are using Woody's lake, Middle Farm at Barking Tye, near Needham Market, which offers excellent facilities for disabled anglers including easy access to swims, parking close to the lake, on-site toilet and a safe environment to fish in. The lake contains a large population of carp to 7lb with roach and perch also present. They are very grateful to Gipping Valley Angling Club (GVAC) for allowing them to use their waters for sessions.



They have experienced qualified Angling Trust coaches plus volunteers in attendance at all sessions throughout the year, who are on hand to offer help, support and assistance. All of them are registered and, where required, are DBS checked. All equipment & bait is provided for the session but participants are also welcome to use their own.

Angling is very therapeutic for people with disabilities, and the equipment provided makes it very easy to use.

Check out there website for further information: <http://sdaf.onesuffolk.net/>

### Other Activity

**Langmead Farms River Restoration Project**—Langmead Farms have been working with the **East Suffolk Catchment Partnership** and the **Environment Agency** to carry out river channel improvements on the River Fromus at Snape Watering.

Despite having healthy flows and reasonable water quality, the Fromus has a 'poor' WFD status for fish. The improvements, which include a gravel riffle, a large woody debris structure and a short back channel, are designed to enhance fish habitats and help reverse the decline in stocks. The work was carried out by staff from Langmead Farms with help and guidance from the Environment Agency and ESCP. For more information contact Sara Benstead at Langmead Farms.

(sara.benstead@langmeadgroup.co.uk)



**Slow the Flow Projects**—Several projects should be completed this year to try to intercept high flows from the River Deben and its tributaries to reduce the water rushing downstream towards Debenham, where it could result in flooding.

These projects are being carried out by the **Holistic Water Management Project** and the **Environment Agency**. These projects were helped in their development by **Essex and Suffolk Rivers Trust**.

The projects will consist of diverting water at high flows from the main channel and allowing the water be stored on the land until the water level subsides. The stored water can then slowly infiltrate back into the main water courses. This will also allow sediment to drop out of the water before it re-enters the water system, improving water quality. Techniques used will include attenuation ponds and silt traps, examples of which can be seen on the right.



**University of East Anglia's Involvement on the Wensum**— This is outside of this catchment but are interesting projects that could be solutions to East Suffolk catchment problems.



A two year study has been carried out on a 3 stage biobed and has been found to reduce total pesticide concentrations in waste machinery washings by 90%. The biobed consists of an enclosed wash down unit (stage 1), a lined compost straw-topsoil biobed (stage 2) and a drainage field with a trickle irrigation system (stage 3). Water samples were taken monthly over the two years and tested for pesticides and the average concentration reduction was 91.6%. Drainage field irrigation reduced the concentration further by up to 98.4%.

A three year study has been carried out to determine the effectiveness of cover crops and non-inversion tillage regimes to minimise farm-scale nutrient losses.

The trial area was split into three sections; winter fallow with mouldboard ploughing, shallow non-inversion tillage with a winter oilseed radish cover crop and direct drilling with a winter oilseed radish cover crop.

Results revealed that oilseed radish reduced nitrate leaching losses in soil water by 75-97% relative to the fallow block but had no impact on phosphorus losses. Average soil nitrate concentrations were reduced by 77% at 60-90cm depth beneath the cover crop, highlighting the ability of deep rooting oilseed radish to scavenge nutrients from deep within the soil profile.



Direct drilling and shallow non-inversion tillage (to <10cm depth) when employed alone were ineffective at reducing soil and water nitrate and phosphorus concentrations relative to conventional ploughing.

Richard Cooper and Kevin Hiscock at UEA carried out these studies and can be contacted for more information.