

Suffolk Holistic Water Management Project

www.greensuffolk.org/hwmp

Project Update December 2015

The aim of this pilot project is to consider water holistically, looking to manage this valuable resource so as to maximise its economic and environmental benefits and minimise flood risk.

We now have five working groups taking forward various aspects of the Holistic Water Management Project (HWMP). The sub groups and their key contacts are listed at the end of the relevant section and more information, meeting notes, and past newsletters are available on the website www.greensuffolk.org/hwmp. A brief outline of the progress of each group since our last update in August is summarised below.

In November, thanks to the NFU, we were given the opportunity to discuss the project with Sarah Hendry, Director of Water and Flood Management at Defra, particularly focussing on the issues raised by the Felixstowe Peninsula project. She was very impressed with the way we all worked in partnership and the determination to succeed even if legislation and policy aren't always as helpful as they could be! Her visit to the area included farm visits to view practical local approaches to water management, including how farmers are working with water companies to share available water resources.

1. Felixstowe Peninsula Project:

This project focuses on using IDB drainage water, which is currently pumped out into the Deben Estuary, for irrigating crops and/or public water supply. The water would be held in a large balancing reservoir (approximately 4 Ha) and then piped inland to smaller farm irrigation reservoirs or possibly held for public water supply.

Eight farmers have already expressed an interest in using up to 850 Ml of water a year - enough to grow crops worth £2.4 million. The proposal could also reduce the environmental impact of abstraction on the Bucklesham Mill River and help provide a cost effective solution to alleviating the predicted public water supply deficit in East Suffolk over the next 20 to 30 years.

The East Suffolk IDB and Environment Agency have been metering the water pumped into the Estuary since June. Although we still need a few more months of data, we think that there is likely to be sufficient water to make the project viable. We are now talking to landowners and others with a view to carrying out an options appraisal of initial scheme designs and also working out how a shared water management scheme would work.

The location and size of the balancing reservoir is critical to the project as it will determine pump and pipeline routes and capacities for the rest of the scheme and the sizing requirements for the on-farm irrigation reservoirs. Landowners have already suggested a number of potential locations. Once we have a shortlist we will be able to carry out an options appraisal to assess the costs and merits of each. Anglian Water, a key member of the project team, has offered financial support and expertise next year to carry out options design and costing.

We have started conversations with the County Archaeological Services team, conservation bodies and East Anglia One about possible opportunities (or conflicts) linked to the project. For example, we may be able to construct the water mains alongside the East Anglia One onshore cable or build priority habitats into the reservoir design. One of the key benefits of the project should be to reduce the current degradation of saltmarsh at the King's Fleet pump.



King's Fleet pump outfall

The Environment Agency's Science team, East Suffolk Water Abstractor Group (ESWAG) and the IDB have been helping us look into suitable templates for Water User Associations (WUAs) to manage the funding, construction and operation of the scheme. Although the details are not confirmed, the IDB appears to be the most appropriate host for the WUA due to its experience in water management, access to public funding, statutory position and public accountability. The IDB has confirmed that it would be prepared to host a Felixstowe Peninsula Water Users Association and that there are no legal obstacles to prevent it from doing this.

We aim to hold a meeting for landowners and irrigators involved in this project in early February to discuss all aspects of this project further.

FELIXSTOWE PENINSULA SUB GROUP CONTACTS:

Tim Darby, ESWAG, (Landowner group lead)

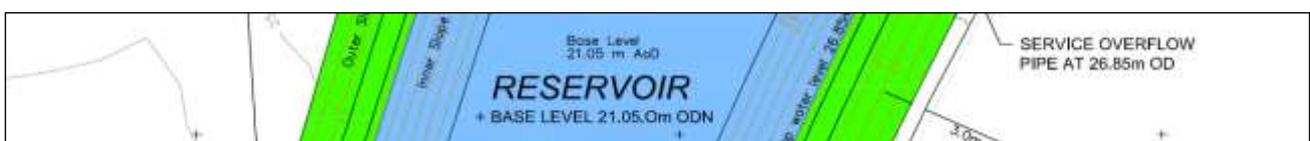
Karen Thomas, East Suffolk IDB

eswag@btinternet.com

KarenT@wlma.org.uk

2. Reservoir Planning & Consents Streamlining Project:

The aim of this group is to make the process of creating storage reservoirs more streamlined for both regulators and applicants.



We are looking forward to testing the consenting process with the Felixstowe Peninsula proposals. This will address multiple issues including; multiple linked reservoir proposals, potential impacts on Habitats Regulations sites, the EIA (water resources) regulations and archaeology.

One of the key frustrations for irrigation reservoir construction is the current inability to access European funding as this requires a project to demonstrate a reduction in water use – whereas the aim of our project is to ensure a more secure supply of water and encourage expansion of economic activity in the area. We are supporting the NFU in lobbying politicians and Defra to try to find a way through this issue.

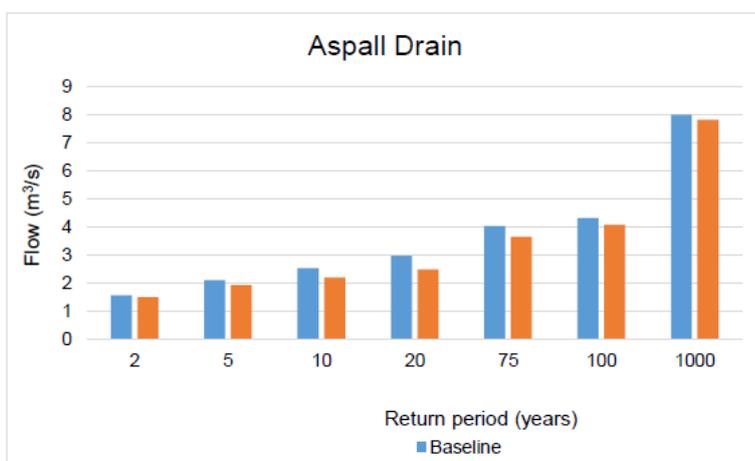
SUB GROUP CONTACT: Jane Burch, SCC

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3. Debenham Flood Risk Management Project:

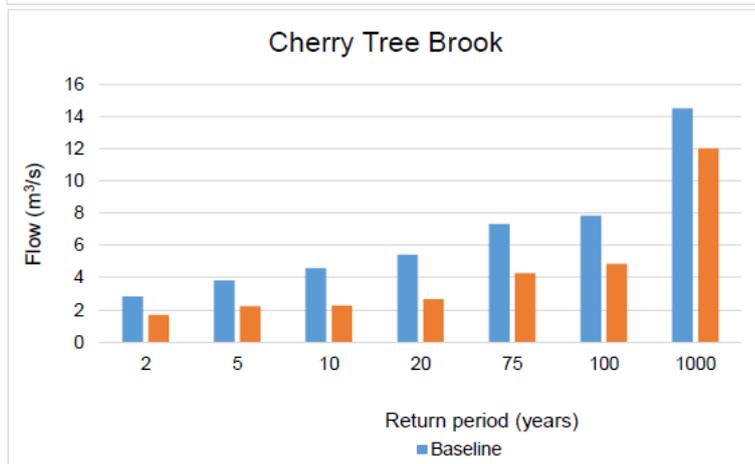
The management of flood risk to Debenham is complex due to the three tributaries of the river Deben meeting in the village and the costs of many traditional flood management measures are prohibitive. Thus we are exploring a combination of several different ways to reduce risk – by slowing the rate of flow down the catchment into the river and getting the water away fast beyond the confluence of the tributaries.

Working with landowners, the Essex and Suffolk Rivers Trust and CSF, we identified a range of measures over the summer which could help reduce flooding in Debenham and also provide water quality and habitat benefits. These included Natural Flood Management (NFM) features (such as small flood storage areas and ponds) and larger ‘in channel’ structures. We incorporated the most promising 10 NFM features into a hydraulic model to assess their potential benefits and to ensure that they wouldn’t have any adverse flood effects on other properties.



The model showed that together, the NFM proposals could significantly reduce flood risk in Debenham, particularly within the smaller tributaries of the Cherry Tree Brook and Aspall Drain.

We are now engaged in detailed discussions with landowners to check the estimated storage characteristics of the features and to agree designs, funding and management principles. We will shortly be drawing up initial specs. and seeking consents for some of the smaller features.



Work on the first of these is likely to start early next summer when the land is dry enough to take heavy machinery.

LEFT: Modelled impact of NFM features on peak flows

We are still investigating the benefits of larger 'on-stream' flood storage features and we expect that these will be included in further hydraulic models in the new year.

RIGHT: Derry Brook ford at Stony Lane. Potential 'in-stream' flow attenuation site.



Investigations into creating a two stage channel to help improve the flow of water away from the village are also continuing. The main obstacle to this proposal is the high cost of disposing of the excavated material. A number of local landowners have expressed an interest in using some of the spoil and the reduced costs will be built into our options appraisal. Continued local support will be very important to this project and we would encourage anyone who would like to be involved to get in touch with the project group contacts.

DEBENHAM SUB GROUP CONTACTS:

Will Todd, EA

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4. Water Framework Directive (WFD) and Channel Improvement Project:

WFD investigations show that the middle sections of the River Deben suffer from poor morphology, water quality problems and reduced fish populations. The river is also disconnected from its floodplain.

Working with the Essex and Suffolk Rivers Trust and sympathetic landowners, we have restored almost 1 km of back channels at Easton along with a silt trap to intercept road runoff. The work will continue in the spring with the installation of 'large woody debris' structures within the river channel and level control structures in the back channels. Together, these works will provide refuges and nursery areas for juvenile fish, improve water quality and enhance summer water retention within the floodplain.

The HWMP group is continuing to discuss potential river enhancement opportunities at Ufford and Wickham Market, working closely with relevant landowners. Landowners wishing to consider other opportunities should make contact with us.



Back channel enhancements on the River Deben at Easton (already frequented by otters).

SUB GROUP CONTACTS:

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Mary Norden, ESRT

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5. Abstraction Reform (licence trading) Project:

The aim of this group is to work alongside the Environment Agency's licence trading and reform agenda to make better use of existing abstraction licences in the Deben catchment.

Progress is difficult due to the strict WFD requirement to avoid the 'risk of deterioration'. However, discussions are continuing to take place between the Environment Agency and ESWAG. The Environment Agency is keen to find opportunities to improve abstraction licensing in the area and would welcome any new water sharing proposals from landowners or ESWAG.

SUB GROUP CONTACT:

Jonathan Thompson, EA

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6. Funding

The Holistic Water Management pilot is currently funded by 'ad hoc' and 'in kind' contributions from Suffolk County Council and the Environment Agency, with further 'in kind' contributions from Essex and Suffolk Rivers Trust (ESRT), the East Suffolk IDB, and ESWAG. Significant additional funding will be required to carry out the detailed assessments required for a number of the projects, particularly the Felixstowe Peninsula proposals. Funding for the development of the Debenham Flood Management Project is coming from flood grant in aid and local flood levy.

Anglian Water has also agreed to contribute funding and expertise to the HWMP in early 2016, as part of the company's commitment to the Water Resources East Anglia programme set out in the 2014 Water Resources Management Plan.

A potential source of funding is the [LEADER programme](#). Applications were expected to open in late November but we are still waiting! Funding of up to £40k (match funded) will be awarded in 2016.

Additional sources of funding may be available from the New Anglia LEP (with applications expected to be open in November) and the European Agriculture Fund for Rural Development (EAFRD) for agricultural business development and cooperation and infrastructure (eg. irrigation mains) development.

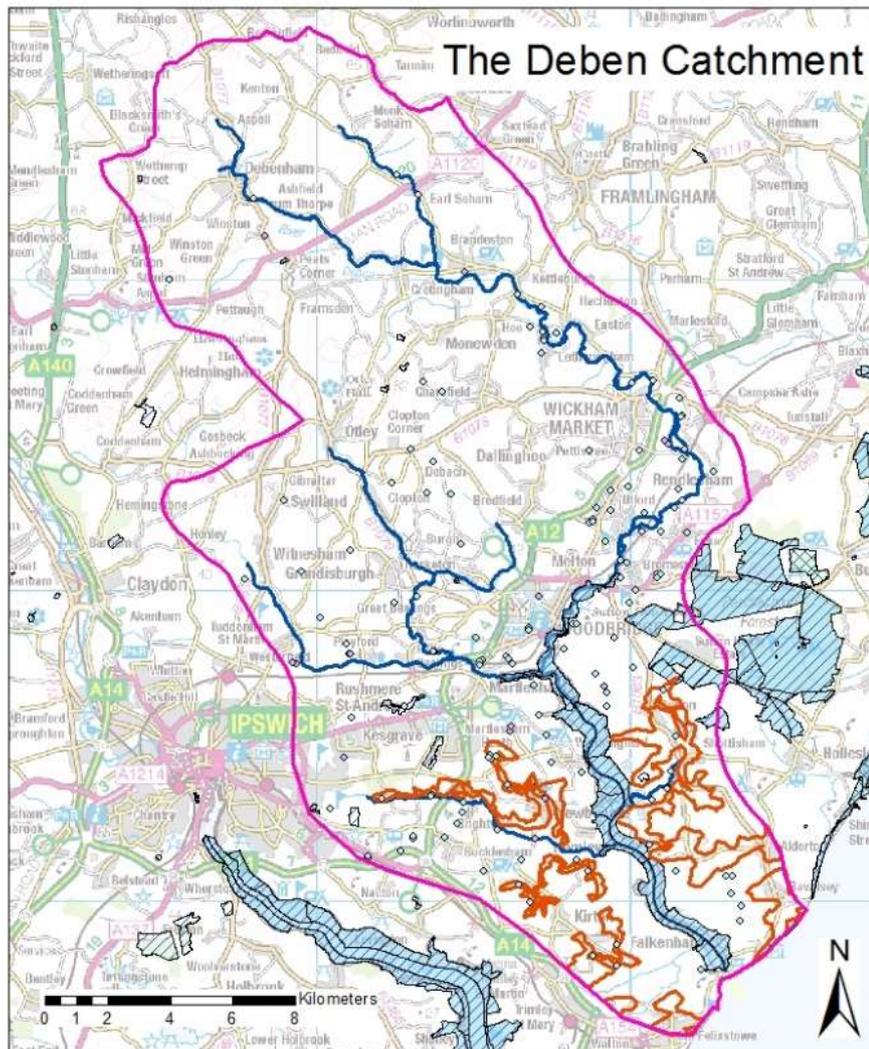
SUB GROUP CONTACTS:

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Legend

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|  | Deben_catchment | Licensed Abstractions |
|  | SAC | ◇ Agriculture |
|  | SSSI | ◇ Environment |
|  | SPA | ◇ Industry |
|  | Exposed crag | ◇ Water supply |