Meeting to discuss an holistic approach to Water Management in Suffolk, held on 4 October 2013 Melton.

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The following are part of the group but sent apologies to this meeting:

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Key abbreviations used:

- **AW**  Anglian Water
- **ESW**  Essex & Suffolk Water
- **EA**  Environment Agency
- **IDB**  Internal Drainage Board
- **LEP**  Local Enterprise Partnership
- **NE**  Natural England
- **WFD**  Water Framework Directive
1. **Introductions and Aims:**

MH opened the meeting explaining the aims of the meeting.

CMcA from the Essex and Suffolk Rivers Trust was welcomed to the group. He explained the group is part of a national network. It had recently been awarded funding to take forward WFD improvements at a local level in East Suffolk.

TAR advised the group that the River Deben has been named as a Natural England ‘healthy estuary pilot’. She agreed to provide more information to the group via email.

2. **Catchment details and high level options:**

Prior to the meeting the catchment information provided by PB, together with a long list of possible options for the project was circulate (see [www.greensuffol.org/HWMP](http://www.greensuffol.org/HWMP) for details)

PB outlined the geology, land use, water resources available and abstractions/license details and the Water Companies’ future plans.

At high flows resources are generally available and reliable throughout the catchment although there are some restrictions in the lower catchment related to protected habitat (SPA) requirements.

In the future irrigators will require more water – but their primary request is for greater reliability. In 2012, the area of irrigate crop areas planted was reduced in the expectation of lack of water having an effect on the local farming economy and national food production.

WFD is key consideration with channel morphology, low flows leading to low dissolved oxygen levels, siltation and nutrient levels being of concern. As well as a minimum flow, there is a need to keep flushing flows in order to keep channels clear of silt.

PB then outlined the range of high level options that he considers to be possible. These were discussed in some detail. The following summarises the decisions on which options to take further and relevant issues needing further consideration:-

The general principle agreed was to take forward options that deliver benefits for flood alleviation and water resources and the environment/WFD. Costs were not a major consideration at this stage. Several options could and should be delivered in combination.

1. **HIGH FLOW STORAGE RESERVOIRS**

1.1 Medium - Large (c. 100,000 cu m) reservoir in upper catchment (above Debenham). Multi-ownership?

1.3/1.6 Large or multiple small reservoirs in IDB pumped areas. Particularly look at original proposal nr Shingle Street to assess if this can be re-started. Another possible site could be looked at in Falkenham area.

1.5 Small, single user reservoirs in lower catchment – likely to be instigated and funded by the user and thus not directly relevant to the project.

Issues to consider/investigate further:

- requirement for lining = additional costs
- capacity to take flood waters plus store water for use
• cost of big reservoir plus more piping vs more smaller ones nearer to point of use
• farmers may not be keen on multi-users because of concern that public water supply/environment would take priority in event of shortages. Would need clear agreements in place so all investors get equal treatment.
• would there be sufficient water captured in the upper catchment to keep the river flowing all year and supply water downstream for abstractors?

1.8 New option for the future: Very large multi-user reservoir at top of half of the catchment with new infrastructure to deliver to areas of need. Would require Water Company to lead.

2. RIVER SUPPORT
1. Groundwater (borehole) support options were excluded as unsustainable and not delivering FRM benefits. River support from reservoirs remains a viable option.
NB. The trigger for support is dissolved oxygen rather than flows.

2.4 Discharge from reservoir stored water – linked with upper catchment flood storage.

Issues to consider:
• May need river channel improvements to increase capacity to move water from upper to lower catchments.
• Reconnecting river to flood plain might naturally recharge crag delivering flood and habitat benefits. However, lack of evidence may mean no reliable benefit to abstractors.
• Would removal of in-channel structures increase flows and thus need for support?

3. ACQUIFER STORAGE & RECOVERY (ASR)
3.2 Crag ASR worth further consideration – perhaps linked to reservoirs in IDB areas. reduce need for piping.
3.4 Bankside/floodplain storage and infiltration – linked to restoration of flood plains/WFD improvements.
3.5 Alternative could be to take water from IDB area and support the Anglian Water borehole at Bucklesham – thus potentially releasing license capacity elsewhere.

4. FLOOD ATTENUATIONS/CATCHMENT MANAGEMENT
4.1/4.2 Headwater /floodplain storage (1.1) linked with river support (2.4) and wider land management to reduce silt and run off.
4.3 Natural Flood Management – highly desirable. Most suitable areas will be downstream of Brandeston. Will be led by WFD considerations and as such should be part of any HWMP project.

The recent CIRIA report shows ‘natural flood management’ (land management) to be very effective in the upper catchment. Floodplain storage/recharge on the other hand may be more feasible further downstream because suitable floodplain is more likely to be present there.

5. CHANNEL MORPHOLOGY IMPROVEMENTS
5.1/5.2/5.3/5.4 – all worthy of consideration in order to deliver FRM and WFD improvements – but unlikely to help water resources, so will be as a secondary benefit of any project. Work is needed to establish which structures/barriers can be removed for beneficial effect – mostly in the middle reaches of the river between Crettingham and Ufford.
5.5 Two stage channel construction coupled with bankside storage – variation of 1.1/3.4
6. REGULATORY FRAMEWORK

6.1 Financial incentives.
   a) Key issue is cost of up-front costs/bureaucracy before reservoirs can be constructed.
   b) Charging regime does not encourage abstraction during summer high flows. The project could be key
      test for proposed changes in Abstraction Reform, particularly around licensing for ‘high flows’.

6.2 Efficient use – whilst important message, not key target as being taken forward by others.

3. Next Steps agreed:

   a) Landowner and Community Engagement

   Engagement with landowners and the wider community is now needed to gauge views on viability
   and acceptability of the above proposals.

   JB to circulate list of potential stakeholders to contact about the project. Everyone should add to
   this list.

   WT outlined the work being done around flood management in Debenham. This has also identified
   upstream storage as a possible option and may attract flood partnership funding. He and JB have
   arranged a community drop-in session on 20 November to share the flood modelling and early
   options data.

   It was agreed that this project will piggy back on this event and any other relevant events.
   JB will circulate spreadsheet to be populated by ALL with suitable events.

   JB/PB will draft suitable presentation plus short leaflet about the project and the high level options
   and provide suitable maps/feedback forms to be used at any relevant events. This will need to be
   ready before 20 November. The maps will not show any particular locations for reservoirs and
   make clear the early stage of these discussions and lack of secure funding to deliver the project.

   WA/GB will provide suitable pictures to illustrate what is meant by river restoration/WFD type
   improvements.

   PY invited PB/JB to attend the ESWAG AGM to discuss the project with abstractors. PY to
   organise event.

   BK agreed to invite relevant landowners from the upper catchment to an informal meeting discuss
   this further. BK/PB to arrange before Christmas.

   CMcA will discuss with the Essex & Suffolk Rivers Trust to establish their interest in working with
   this project and how they might be able to assist in sourcing funds to take the project further.

   TAR will discuss how this could link to the proposed community engagement around the Deben
   Estuary Plan.

   GB will utilise suitable IDB meetings to share the information.

   A question was raised about how best to ‘badge’ this partnership project. JB will discuss with
   comms teams in EA.
b) Funding and further work

Having sought wider views the next stage will be to seek funding to take the project forward. PB’s work to date has been funded by EA and SCC (£5000 each).

The next stage of project development will require significant funds to engage with landowners and others and develop feasible options into realistic and costed proposals.

The project development will probably require some £150k in order to fund project manager/consultants to undertake the work. **MH** will discuss with the LEP and SCC Funding Team ideas for other sources of funding to cover this work, and report back at next meeting. **CMcA** will discuss with the Rivers Trust to see what help they might be able to provide.

GB suggested discussions with East Anglia One who might be willing to contribute as part of mitigating impacts of their project.

It was agreed that once realistic proposals have been developed it should be easier to seek funding from beneficiaries, the LEP, Water Companies, flood grant, etc as relevant.

4. Any Other Business

As WFD improvements will be a key part of this project, WA offered the opportunity to view projects where river restoration and other improvements have already been done. Anyone interested should contact Will.

The next meeting will be held in early February to review the views and ideas from the landowner/community engagement and discussions about funding the next stage of the project. **JB to fix date.**