

Holistic Water Management, Felixstowe Peninsula Project Meeting, 31 July 2015. Felixstowe Ferry Sailing Club

Attendees:

Rob Wise	NFU
Andrew Williams	Landowner/Manager
Mike Hollingsworth	Landowner/Manager
Michael Paul	Landowner/Manager
Peter Youngs	ESWAG (Chair)
Tim Darby	ESWAG
Sarah Hollingsworth	Environment Agency
Paul Bradford	HWM Project Consultant
Jane Burch	SCC
David Adams	Landowner/Manager
John Kerr	Landowner/Manager
Karen Thomas	East Suffolk IDB

Apologies:

Bruce Kerr
James Foskett

1. Introductions

PY explained the aim of the meeting: To inform members of progress and the decisions and actions which will be required of them over the next few months.

2. Holistic Water Management Project Update (JB)

JB provided an update on the Holistic Water Management (HWM) project:
Project conceived, 2012 post drought to take a joined up approach to best manage water taking account of all aspects, flood risk management, water resources and environment.

HWMP strands include:

- Upper Deben – Working with landowners to help reduce flooding in Debenham by constructing small water storage (natural flood management) features upstream of Debenham and improving channel conveyance downstream.
- Middle Deben – Working with landowners to make flood management more sustainable, to improve habitats and water quality through river restoration and removal of redundant structures.
- Felixstowe Peninsular – This project.
- Regulatory Improvements – including the changes to the abstraction licensing and planning systems.

The HWM project has high level support at ministerial level. Funding is being sought to carry out background/feasibility work. SCC continues to lead the project with support from the Environment Agency, other organisations and landowners.

Further information about the project is available on the Green Suffolk website

www.greensuffolk.org/hwmp

PY thanked JB for her work as facilitator and (SCC) funder .

3. Minutes of the Previous Felixstowe Peninsula Group Meeting (5 June 2014).

The minutes (which are available on the Green Suffolk Website) were agreed.

Updates

- All irrigators on the peninsula to the south of Waldringfield have been informed of the Felixstowe Peninsula project and given the opportunity to register an interest.
- The fishing club in Kings Fleet has an agreement with David Adams (landowner). – Water levels in the Kings Fleet are currently agreed with the IDB at 14" below datum (summer) and 18" below datum (winter). This is higher than the Marsh level. The south marsh level is lower than north of Fleet.

Anglian Water continue to support the project and wish to be kept informed. Continued dialogue with the water co's. was welcomed by the group.

JK suggested looking at industry in the area (particularly gravel washing) as potential project beneficiaries/additional water users. PB to investigate.

4. Summary of Felixstowe Project Proposal Paper (PB).

Water Supply/Demand Balance

Groundwater and surface water resources in the Felixstowe Peninsular are currently exploited to their sustainable limit. The Bucklesham Mill River is over-abstracted and the EA may be looking to claw back direct summer licences to comply with Water Framework Directive (WFD) obligations.

There is an additional unmet demand for water for spray irrigation (SI) and for public water supply. Eight landowners have expressed an interest an additional 650 MI/a of new water for SI and a further 200 MI/a to replace existing surface water licences.

The total registered demand is 850 MI/a, or 190 M.gals.

Anglian Water has forecast a deficit of up to 2.3 MI/d (840 MI/a) in their East Suffolk resource zone. (Anglian Water, Water Resource Management Plan, 2014).

The IDB discharges about 1,500 MI of fresh water to tide each year via the Kings Fleet and Falkenham pumps, mostly during the winter. This water could be held in a balancing reservoir and pumped to individual farm storage reservoirs for summer SI.

Environmental benefits:

- Safeguarding salt marsh currently at risk of erosion from IDB discharge (SPA)
- Reducing abstraction pressure on the Bucklesham Mill river (currently identified as being at risk of not complying with WFD obligations).

Economic benefits:

- Reduced maintenance costs on sea walls – increased saltmarsh would offer greater erosion protection.
- The value of crops produced using SI in East Suffolk is calculated to be £2.88/m³ contributing £1.33/m³ to the local economy (Cranfield University, 2011). The total value attributable to the project would therefore be £2.4M/a. contributing £960/a. to the local economy.
- The capital cost of sourcing an additional 2.3 MI/d for public water supply (from Cliff Quay WwTW for example) is estimated at £65M with revenue costs of £1.4M/a. (Anglian Water WRMP, 2014) It may be possible that some of these costs could be avoided if water could be sourced from this project.
- There could be positive economic implications for the replacement of IDB pumps at Kings Fleet and Falkenham as water management within the peninsula could lead to a lower demand for pumping and potential savings on capital and maintenance investment.

Outstanding Issues:

- Insufficient data about water quantity and quality,
- Timing of project delivery and water demand (SI and pws)
- Consents and permits, (planning, abstraction, appropriate assessment, etc.)
- Financial and operational management

5. Update from IDB. KT

Two flow meters have been installed; one at the Kings Fleet pump (mid- May) and the other at the Falkenham pump (mid-July). Data is now streaming from both flowmeters. The EA is downloading this in order to model likely flows from the catchment to make a more accurate assessment of the available resource. Ideally, a years' worth of data is required, but the EA will be able to provide some initial modelled flows soon.

Actions: IDB to update the project group as soon as flow estimates are available. SH to check that the data is getting to the EA.

It is expected that full planning permission will be required for the balancing reservoir. The IDB is talking to planners and will start to get a planning application together on behalf of the group. PY and KT to discuss making a presentation to planners.

An IDB level survey was carried out to ascertain the feasibility of using the ditch system to transport drainage water to a new pumping station/abstraction point higher up the estuary.

Action: KT to pull together a report on levelling survey. The IDB will also ascertain clay availability and ensure archaeology team is available during trial digs.

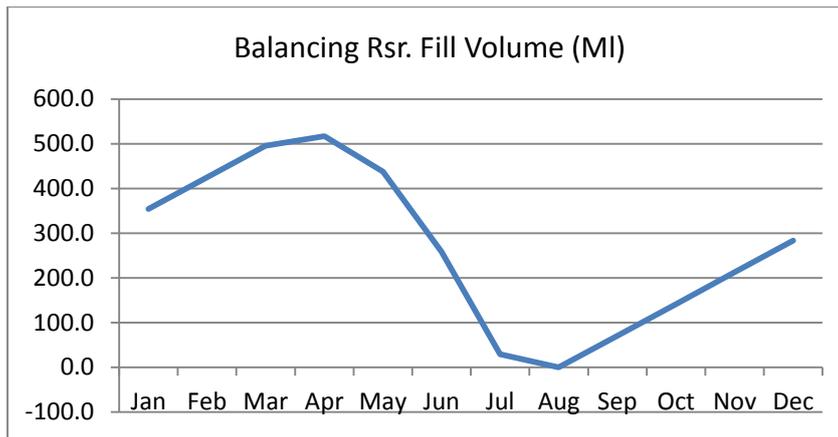
Natural England (NE) has provided support to this project 'in principle'.

6. Next Steps (discussion item).

On farm reservoirs: It is very likely that landowners will need to provide their own reservoir and irrigation mains. It is important that they start looking at potential plans now as it would be useful to have these in hand in for quick submissions for grant applications. Small reservoirs are usually consented under permitted development prior notification with an archaeological condition to undertake site survey before construction (partly as a result of HWM discussions with planners). The IDB will support landowner applications as similar information will be needed for both the balancing reservoir and the on-farm reservoir. IDB will also ascertain from SCDC planners whether a joint application would be preferable than individual applications.

Balancing Reservoir: Action: PB to provide details of initial work to clarify scale/size of potential balancing reservoir.

Post meeting note (PB): A reservoir capable of accepting 850MI during the winter months and delivering this to on-farm reservoirs throughout the year would need a minimum capacity of 520 MI. (See graph overleaf). With a mean water depth of 12.5m, this would cover an area of about 4.1 Ha.



The owner of the potential reservoir site confirmed that he is not adverse to the proposal in principal although the new offshore windfarm cable run will reduce the area available for reservoir construction and limit possible pipe runs.

The proposed site is in an area of alluvium overlying London Clay although the project still needs to establish if there will be sufficient clay on site for construction. The option of exporting excess for flood defence was discussed but, the reservoir design will probably be 'cut and fill' using spoil for banks and exporting from site is likely to lead to issues with waste and minerals consents. However, should there be any clay arising from the project as surplus the preference would be to store that for flood defence repairs locally. The Project will need to approach potential contractors, which would also include the IDB.

The EA Science Team is currently undertaking research (national and international literature review) into possible models for a suitable 'water user association'. Most are non-profit making and independent of individual landowners/irrigators, with the landowners/beneficiaries making up the board. Difficult issues include, raising capital, ongoing maintenance and ensuring the equitable distribution of water. Benacre Estates is an example of a successful local shared water resource scheme for SI. M Horton, who helped set up the scheme has offered to meet interested parties.

A potential model is for the IDB to set up or become a water company, responsible for funding for the scheme, managing operations and holding the abstraction licences/consents on behalf of landowners/irrigators. The EA confirmed that as operator of the pump, the IDB would be the licence holder (abstraction licences would not be required for onward transfer of the water). Water would be sold on a non-profit basis to farmers to cover capital and operational costs.

Another model is for the landowner (or a consortium of landowners) to finance, operate and manage the scheme (similar to the Benacre Estates scheme)) with the IDB as main contractor.

There are funding/legal implications for both models and this is likely to drive the final choice of model.

The IDB can take out public works loan and potentially LEP funding. There would be significant natural capital, and IDB may be able to secure other flood risk management benefits. Project need to check that EU funding is available for IDBs. There are also legal limitations on IDB's responsibilities and questions regarding lines of reporting, make up of Board etc.

Post-meeting note (KT). The IDB does have statutory powers to undertake this type of work under our Recharge policy.

There would be benefits to having a separate farmer group to access different funding streams as a 'working group' to support the project.

7. Action: PB, EA, KT to further develop a range of models to put to the group. KT to take to the IDB board.