

## Policy and Scrutiny

### Open Report on behalf of the Environment Agency

Report to:	<b>Flood and Drainage Management Scrutiny Committee</b>
Date:	<b>11 December 2015</b>
Subject:	<b>Black Sluice Catchment</b>

#### Summary:

This report sets out the current arrangements for managing flood risk in the Black Sluice Catchment; explores the organisational remits of both the Environment Agency and the Black Sluice Internal Drainage Board; provides information on a recent consultation exercise; and sets out the way forward.

#### Actions Required:

To consider and comment on the content of the report.

## 1. Background

The Environment Agency (EA) carried out a six week formal consultation to look at how flood risk could be managed in the future between 17 August and 27 September 2015. A series of consultation events were jointly hosted by the EA and the Black Sluice Internal Drainage Board (BSIDB) in recognition of the critical roles that both organisations have in the catchment.

The EA and the BSIDB have provided a joint position statement on the future development of the Black Sluice Catchment flood risk management proposals.

#### Current Arrangements for Managing Flood Risk

The Black Sluice Catchment is drained and protected from flooding by a complex system of artificially embanked main rivers, lowland drainage ditches, gravity outfalls and pumping stations. In the higher areas of the catchment rivers have often been straightened and deepened to allow water to run away more quickly. The whole system flows out to sea via the Black Sluice – comprised of two gravity sluices (one of which is also a navigation lock) and the Black Sluice Pumping Station (BSPS) which currently needs a large investment to secure its operation into the future. This facility is currently owned and operated by the EA, who also own and operate the c120km of main river embanked channels in the catchment.

The BSIDB manage the large and complex network of c755km of drainage ditches, and the 34 pumping stations and gravity outfalls from these drainage catchments

into the main rivers. They also manage some ordinary watercourses in the highland area of the catchment, on behalf of the local authorities. BSIDB are dependent on the main river system to evacuate the majority of drainage water from the catchment. BSIDB offer additional protection to the South Forty Foot Drain (SFFD) main river from overtopping and possible breaching events by implementing an emergency strategy of reduced or no pumping into the SFFD during extreme events (holding the flood water within the catchments). There are no restrictions from the eight EA controlled main river highland carriers gravitating into the SFFD.

Work undertaken over a number of years, examining the effectiveness of the Black Sluice system has shown how important the structures and channels within the lowland area of the catchment are in reducing flood risk by providing land drainage for the purpose of growing food and other crops as well as for habitation within this area. The current EA operation of the BSPS itself does not reduce the risk of flooding to homes in the area whereas a more proactive approach from the BSIDB could, i.e. pumping the system down prior to a Met Office severe wet weather warning event. It does reduce the number of hectares of land that flood from 992 to 814 if the pumps operate using a scenario of a flood with a 10% chance of happening in any given year. The EA alone cannot attract funding to refurbish the pumping station, because the economic benefit falls far short of the treasury requirements for investment. However, there is a small economic benefit that other organisations may wish to realise through local investment in the pumping station.

#### Organisational Remit and Funding

Whilst both organisations have a role to play in flood risk management in the catchment, the remit, focus and funding arrangements for each are different. The EA has one main source of funding for flood risk management, known as Flood and Coastal Risk Management Grant in Aid (FCRMGIA). The application of these funds is weighted towards reducing flood risk to people and homes. The EA receive c£278k per annum additional funding from the BSIDB, known as the IDB precept, which is used to contribute to the up keep and maintenance of the SFFD main river to allow drainage water to flow out to sea.

The BSIDB is 51% funded through drainage rate payers (land owners and tenant farmers) and 49% funded collectively from Boston Borough Council, North Kesteven District Council, South Kesteven District Council and South Holland District Council, who pay to ensure the ongoing land drainage of the catchment. BSIDB are also able to claim FCRMGIA for work that reduces flood risk, and they are able to make bids to other funding sources, for example Local Enterprise Partnership funding. As a government body, the EA cannot apply for these other funds.

There are a number of options for sustaining and improving the flood risk management in the catchment, proposed by the consultation document. The consultation responses have shown a strong appetite for the BSPS to continue as a facility for the catchment. There are still ways in which this can move forward as an option; however the EA is unlikely to be able to continue to be the operator, due to the funding constraints described above. The consultation also revealed new

options and partners that may be able to contribute to future flood risk management. There are significant benefits available within the catchment, which would justify EA and BSIDB expenditure of FCRMGIA on sustaining and improving the current infrastructure (not including the BSPS). The consultation responses strongly supported further investment in both lower and upper catchments to improve flood risk management.

## **2. Conclusion**

### The Way Forward

Work on this project has produced the following key points:

- The Black Sluice Catchment currently benefits from a historical legacy of drainage works and infrastructure that reduce flood risk in the catchment.
- Current owners and operators of some of these watercourses and infrastructure are either not set up, or funded, to allow them to continue to operate these into the future. Others may be able to manage them to better effect.
- The EA is not able to deliver all the aspirations that partners and the community have for flood risk management and linked growth ideas, such as water resource security and navigational development, alone.
- There are many other projects that both BSIDB and the EA need to link with as the Black Sluice Catchment Works project is progressed. (for example the Fens Waterway Link and Anglian Water Services water transfer scheme).

The EA and the BSIDB have agreed to seek to move forward jointly in the following way:

### Creation of the South Forty Foot Catchment Steering Group

Robert Caudwell has been appointed as an independent chairman to ensure a continued dialogue between all risk management authorities (RMAs) and other organisations and individuals who have offered to assist in shaping the future flood risk management and sustainable development of the Black Sluice Catchment. This will allow the EA to act as an equal partner, instead of a lead, which better reflects the EA's funding position. The chairman will set up a strategic catchment partnership steering group. This group will include representation from the Black Sluice IDB, the Environment Agency, Lincolnshire County Council and the Greater Lincolnshire Local Enterprise Partnership. The Steering Group will focus on four areas for development:

- Catchment wide asset management for land drainage and flood risk management
- Water Resource
- Water Level Management for Navigation
- Water Framework Directive

Organisations will be able to bid for funding from sources other than FCRMGIA and coordinate development and risk management activities within the catchment.

## **1) Catchment wide asset management for land drainage and flood risk management**

### **A transitional arrangement for BSPS**

The EA and BSIDB will investigate how they can fund and facilitate a smooth transition of the BSPS to BSIDB. Provisionally, a two year transitional arrangement is proposed, where the EA continue to operate the BSPS, but with increasing involvement of the BSIDB, until their familiarity and competence in running the station is at a point where full hand over can be achieved. This time will allow other funding sources to be investigated and legal processes to be progressed, but is dependent on the necessary funding being in place.

### **Interim capital works undertaken by EA and BSIDB**

Both RMAs will continue to progress capital works that sustain and improve the flood risk management of the existing system - where these comply with treasury funding rules and meet the strategic approach that is being formulated by the catchment partnership. For example BSIDB land drainage pump station refurbishments, culvert replacements, protecting the low points along raised main river embankments, one off capital dredging works and the Swaton Flood Alleviation Scheme.

### **A joint operation and maintenance plan**

A detailed plan for operating and maintaining the flood risk infrastructure in the catchment will be jointly written by all RMAs involved in managing flood risk. It will outline each partner's roles and responsibilities and identify funding sources and arrangements, to ensure that the work is affordable and fully funded. Use would be made of the Public Sector Cooperation Agreement to allow the RMAs to undertake work on each other's behalf where they are better equipped or have resources to do so. This will allow the future transfer of watercourses between organisations to take place more smoothly if desired. The EA has a statutory duty to provide flood warnings to the public. The operational plan will describe how the EA and IDB will work together to put in place suitable communications that will allow the EA to continue with this responsibility.

## **2) Water Resource**

Opportunities will be sought to optimise the use of water within the catchment to generate economic growth.

**3) Water Level Management for Navigation**

Existing and new aspirations will be considered when developing works arising from the above to ensure Water Level Management for Navigation is incorporated or as a minimum, not precluded for the future.

**4) Water Framework Directive**

Opportunities will be sought across all works arising from the above to collectively deliver in accordance with the Water Framework Directive and enhance the environment where possible.

Detail to be agreed by Steering group for 2, 3 and 4.

**3. Consultation**

**Results from the formal consultation**

The formal consultation was promoted widely through traditional and social media as well as directly to locally elected members at county, borough, district, town and parish level, along with local MPs. Six events took place, providing opportunities for people to come and talk to both organisations – three at village halls in Rippingale, Bicker and Billingborough, and three at the BSIDB offices at Swineshead. In addition we attended a bespoke meeting for the Bourne branch of the NFU and the EA attended the Lincolnshire County Council Flood and Drainage Management Scrutiny Committee in September. More than 150 people attended these events.

An analysis of the 71 responses received reveals that:

- Most people support transferring the Black Sluice Pumping Station (BSPS) to the BSIDB followed by replacing two pumps to keep the current pumping capacity. The options least supported are do nothing and do minimum i.e. removing the pumps.
- For the Lower Catchment, most people support protecting low points along the raised river embankments from erosion, followed by making flood products available to homes most at risk. The options least supported are do nothing and do minimum i.e. continue with current maintenance. In addition to the options consulted upon responders also favoured increased maintenance of the South Forty Foot Drain (SFFD) channel and for this work to be carried out by the BSIDB.
- For the Upper Catchment, most people support increased channel maintenance downstream of villages, followed closely by 'slowing the flow' upstream to hold water back, and make flood products available to homes most at risk. The options least supported are do nothing and do minimum i.e. continue with current maintenance.
- Eighteen responses indicated a willingness on the part of both individuals and organisations, to help deliver some of the proposed options.

It must be noted that a 'do nothing' and 'do minimum' option are required when putting together a business case for funding. It has to be shown and quantified that it is worth doing something, rather than nothing, and also what the implications are if what happens currently just continues.

A full 'response to the consultation document' will be published by the 27 January 2016.

#### **4. Background Papers**

No background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report.

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