

Open Report on behalf of Environment Agency

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| Report to: | Flood and Water Management Scrutiny Committee |
| Date: | 26 February 2018 |
| Subject: | Environment Agency Update |

Summary:

To update the Flood and Water Management Scrutiny Committee on Environment Agency activities, including progress on key capital schemes.

Actions Required:

Members of the Flood and Water Management Scrutiny Committee are invited to consider and comment on the update provided and highlight any future actions for consideration.

1. Key Capital Schemes

This paper provides an update on the key schemes within the current 2015-21 consented programme for the Northern Regional Flood & Coastal Committee (RFCC) area. The overall programme consists of 107 schemes with the key ones being the **34** highest priority schemes based on the following criteria:

- **Outcome measures** – Schemes delivering > 200 households
- **Significant expenditure** – Schemes with consented total spend > £1m
- **Contributions** – Schemes with public, private and further contributions required collectively > £300k
- **Other** projects deemed important in the Area including for reasons associated with reputational risk

Of the 34 key schemes **16** are located within Lincolnshire:

| <u>Scheme Name</u> | <u>Promoter</u> |
|---|--------------------|
| • Boston Barrier | Environment Agency |
| • Boston Haven Banks | Environment Agency |
| • Saltfleet to Gibraltar Point Strategy | Environment Agency |
| • Lincshore | Environment Agency |
| • Horncastle Flood Alleviation Scheme | Environment Agency |
| • Louth Flood Alleviation Scheme | Environment Agency |
| • Wainfleet Relief Channel | Environment Agency |

- Black Sluice Catchment Works Environment Agency
- Work arising from Upper Witham Strategy Review (Lincoln Defences) Environment Agency
- Swaton Flood Resilience Scheme Environment Agency
- Welland Flood Banks Refurbishment Environment Agency
- Saltfleet Pumping Station Lindsey Marsh IDB
- Boygrift Pumping Station Lindsey Marsh IDB
- Wrangle Sea Banks Witham Fourth IDB
- Hobhole Pumping Station Witham Fourth IDB
- Westmere Pumping Station South Holland IDB

Of the 107 schemes in the Northern RFCC programme 17 are being promoted by Lincolnshire County Council.

This paper provides a short summary of the **11** Environment Agency key schemes on the Northern RFCC programme with Lincolnshire. More comprehensive report being provided to the Lincolnshire Flood Risk & Drainage Partnership Strategy Group and the Northern RFCC, both of which have representatives from the County Council.

1.1 Boston Barrier

A tidal barrier across the Witham Haven which, in conjunction with associated works to the Haven Banks, reduce the chance of tidal flooding to the centre of Boston to a 1 in 300 annual chance over the next 100 years.

The Barrier scheme remains on programme:

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| Start date: | May 2014 |
| End date: | December 2019 |
| Total Project Cost: | £90,339,950 |

Update since last meeting

The project has now received Her Majesty's Treasury Full Business Case (HMT FBC) approval, with funding being fully secured for the scheme through Flood Defence Grant in Aid funding (FDGiA).

The Transport & Works Act Order (TWAO) has now been secured through the Secretary of State following on from the Public Inquiry at the beginning of 2017.

The Design and Build phase of the works have been successfully tendered through the Environment Agencys Water and Environment Management Framework (WEM) Lot 4 procurement contract, with the contract awarded to Bam Nuttall and Mott MacDonald.

A Marine Management Organisation (MMO) licence has been applied for outside of the TWAO order following Defra requirements.

Following a ground breaking ceremony on 22 January 2018 work on the barrier has now commenced.

1.2 Boston Haven Banks

Works to raise a number of low spots along the Haven banks which, in conjunction with the barrier, reduce the chance of tidal flooding to the centre of Boston to a 1 in 300 annual chance. This phase of works is the first in a series of bank raising phases to keep pace with climate change over the next 100 years.

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| Start Date: | October 2016 |
| End Date: | December 2019 |
| Total Project Cost: | £2,000,000 |

Update since last meeting

The Outline Business Case (OBC) design cost for delivering crest heights to a minimum of 6.50m above ordnance datum (AOD) has increased and requires additional FCRM Grant in Aid. The OBC funding calculator is being amended in conjunction with the Boston Barrier team to ensure we avoid double counting of benefits.

The overall programme still is for completing the scheme by December 2019

1.3 Saltfleet to Gibraltar Point Strategy Review (SGPSR)

Beach nourishment remains the most cost effective solution in the short-term as we keep pace with climate change. However, this option alone will not be technically viable in the longer term. The SGPSR will indicate when an alternative approach for significant capital investment is required and the need for partnership contributions is likely.

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| Start Date: | February 2018 |
| End Date: | April 2021 |
| Total Project Cost: | £1,210,866 |

Update since last meeting

Following extensive consultation with key stakeholders between November 2016 and September 2017, which included Local Authorities, Internal Drainage Board, Town and Parish Councils, businesses and environmental groups, we have been able to reduce the long list of options down to a shorter list of six options, as follows:

- Beach without control structures – annual nourishment with present beach material and standard
- Beach without control structures – annual nourishment with alternative beach material and standard
- Beach with rock groyne control structures – annual nourishment and standard
- Beach with rock groyne and fishtail control structures – annual nourishment and standard
- Beach with rock groyne and fishtail control structures – annual nourishment with volumes to a higher or lower standard

- Beach with rock groyne and fishtail control structures – frequency of nourishment to a higher or lower standard

Further formal consultation is ongoing during February and March 2018 to reach our preferred option(s). The consultation period will run for six weeks and we are holding a series of drop-in events along the coast at Saltfleet, Mablethorpe, Anderby, Chapel St Leonards, Skegness and Gibraltar Point.

These results will then feed in to the final Saltfleet to Gibraltar Point Strategy, (SGPS) alongside the Strategic Environmental Assessment which we will formerly consult on later in the year. We will be submitting the SGPS for approval in 2019, with delivery of works commencing April 2021 onwards.

In conjunction with the Saltfleet to Gibraltar Point coastal strategy consultation, we are using the opportunity to seek views on what else communities may want to see, called ‘additionality’, along the Lincolnshire coast which can support tourism and growth.

These opportunities may require additional funding, and the SGPS could provide support to assist others develop a project where there is mutual benefit in managing coastal flood risk.

The Environment Agency have developed a Saltfleet to Gibraltar Point web page to keep people up to date with the latest information, where venue dates and times for the consultation drop-ins can be viewed. This web page will also be used to facilitate links to allow e-consultation on the strategy options and can be accessed by following the link:

<https://consult.environment-agency.gov.uk/flood-and-coastal-risk-management/sgp/>

1.4 Lincshore (Interim Beach Management Lincolnshire Coast)

Beach nourishment scheme protecting approximately 20,000 houses, 35,000ha prime agricultural land and 30,000 static caravans as well as major tourism developments between Mablethorpe and Skegness.

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| Start Date | January 2015 |
| End Date: | March 2021 |
| Total Project Cost: | £65,792,126 (inc. previous years) |

Update since last meeting

The contract to supply consultancy support to the project has been awarded to CH2M.

The contract for the Lincolnshire Beach Management Interim Works (formerly Lincshore) contract has been awarded to Team Van Ord for annual nourishment through to 2020.

1.5 Horncastle Improvements

A flood storage reservoir on the River Bain built with the help of £8.2million of contributions from a range of partners. Also individual property protection for 15 properties along the River Waring.

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| Start Date: | July 2014 |
| End Date: | July 2017 |
| Total Project Cost: | £7,253,000 |

Update since last meeting

The works are now complete, the reservoir operational and an official opening ceremony held on 28th July 2017.

Settlement of the final account is delayed due to disputed claims. The contractor has notified the Environment Agency of their intention to await the outcome of adjudication for the Louth sites before deciding on a course of action for Horncastle.

The land transfer documents have been completed and compensation has started to be paid to landowners who have agreed to flood easements. Other landowners will be compensation in a different manner.

1.6 Louth Improvements

Two flood storage reservoirs on the River Lud built with the help of £6.5million of contributions from a range of partners.

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| Start Date: | May 2014 |
| End Date: | July 2017 |
| Total Project Cost: | £5,118,100 |

Update since last meeting

The works are now complete, the reservoir operational and an official opening ceremony held on 28th July 2017.

Settlement of the final account is delayed due to disputed claims. The contractor has notified the Environment Agency of their intention to seek adjudication on the disputed costs. It is very unlikely this will be resolved this financial year.

The land transfer documents are awaiting agreement. Once completed flood easements paid to landowners who have agreed to flood easements. Other landowners will be compensation in a different manner.

1.7 Wainfleet Relief Channel

The main flood risk issue along the Wainfleet Relief Channel is the condition of the flood embankments, though justification of the required works is likely to be difficult using current funding rules. Therefore an alternative approach is required.

The Steeping Catchment will be the key pilot for a “Partnership Approach to Catchment Management” being promoted through the Lincolnshire Flood Risk Management Partnership, which will involve the development of a long term strategic approach to managing flood risk in the Steeping Catchment, working across a range of partners including Lincolnshire Flood Risk Management Partnership, landowners, and other key groups such as local councils and the National Farmers Union (NFU).

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| Start Date: | April 2017 |
| End Date: | March 2022 |
| Total Project Cost | £2,833,600 |

Update since last meeting

The Partnership Approach to Catchment Management (PACM) pilot has now established key objectives for the catchment and is working towards determining future options to achieve these.

This option scoping will consider the need for works on the Wainfleet Relief channel and what a Capital scheme will need to consider in order to best meet the Flood Risk Management requirements for Wainfleet and surrounding area.

A public drop in session around the ongoing Enhanced Maintenance has been held and confirmed positive support for the current approach to address flood risk and promote sustainable use of the River System in conjunction with our Partners such as Lindsey Marsh Drainage Board.

1.8 Black Sluice Catchment Works

A catchment wide review of flood risk across the Black Sluice catchment has concluded with the following key projects resulting:

- Transfer of Black Sluice Pumping Station to the local IDB
- Rationalisation of the Main River network
- Armouring to selected embankments to reduce the risk of catastrophic failure.

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| Start Date: | October 2016 |
| End Date: | March 2020 |
| Total Project Cost: | £2,163,650 |

Update since last meeting

➤ Black Sluice Pumping Station

The Environment Agency has been working closely with Black Sluice IDB to transfer the pumping station to them (NOT the sluice and navigation lock). This includes supporting the IDB on their proposals to refurbish the pump station through a £4m project fitting new electric pumps.

The IDB are currently trying to secure funding for this project, such as FCERM Local Levy.

The Environment Agency have agreed to continue to maintain (though not operate) the pumping station until June 2018 whilst the IDB do this. In the meantime and in parallel, we will begin the decommission process.

A meeting is being held in March 2018 with the local MP and representatives of Lincolnshire County Council, Boston Borough Council and the IDB to discuss the matter in detail.

The Environment Agency will continue to keep partners updated. Whilst the current situation with the BSPS is now in the public domain, a priority will be managing that message therefore any enquiries to Committee members should also be directed to the project lead Abigail Jackson (Environment Agency).

➤ **Rationalising the Main River Network (RMRN) Project**

Following the successful public drop-ins held in October a formal consultation has taken place, closing on 12 February 2018. We are currently reviewing comments.

If there are no objections, the ambition is to de-main and transfer in July 2018.

The Environment Agency and Black Sluice IDB are in discussion regarding around future maintenance requirements, asset transfer details and environmental mitigation measures.

➤ **Bank Armouring**

This financial year armouring and low spot repair is proposed for three assets on the fenland section of the Swaton Eau, and preparations are well advanced for this work to be completed in the near future.

Modelling is being reviewed to confirm to any further sites requiring armouring in the next two years.

1.9 Lincoln Defences (previously- Work arising from Upper Witham Strategy Review)

A catchment wide review of flood risk across the Upper Witham catchment has concluded with the following key projects resulting:

- Replacement of a section of floodwall along Fosdyke Canal, alongside Foss Bank.
- Refurbishment of sections of flood wall along the River Witham alongside St Catherines.
- Refurbishment of sections of flood wall along the River Witham between Dixon Street and Boultham Avenue.
- Mechanical & Electrical refurbishment to the three sluices in the city, at Stamp End, Great Gowts and Bartgate.

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| Start Date: | June 2017 |
| End Date: | September 2021 |
| Total Project Cost: | £6,048,000 |

Update since last meeting

Work to develop the business case is ongoing, with support from the new Programme Delivery Unit.

Following an initial assessment of costs and benefits, which highlighted a likely need for around £1.36million of additional partnership funding, the detailed business case is being worked on.

1.10 Swaton Resilience Scheme

A flood alleviation scheme for the village of Swaton. Traditional flood risk solutions are unlikely to be justifiable hence a Natural Flood Management solution is being considered, ideally reducing flood risk across the wider catchment including the villages of Threkingham and Spanby.

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| Start Date: | October 2016 |
| End Date: | February 2022 |
| Total Project Cost: | £1,237,000 |

Update since last meeting

The Strategic Outline Case for the Swaton Natural Flood Management (NFM) Project was approved in January 2018. Work on the Outline Business Case (OBC) has now commenced through the Project Delivery Unit.

The aim is to finalise and submit the OBC in spring 2018. Work to be completed before this date includes additional survey of the catchment and watercourses, additional modelling, installation of baseline monitoring, and extensive engagement with land owners, land managers and partners.

2. Consultation

a) Have Risks and Impact Analysis been carried out?

N/A

b) Risks and Impact Analysis

N/A

3. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written on behalf of Deborah Campbell, who can be contacted via 03708 506 506 or deborah.campbell@environment-agency.gov.uk