

Open Report on behalf of Environment Agency

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

Summary:

To update 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:

Scheme Name	Promoter
• 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:

Start date:	May 2014
End date:	December 2019
Total Project Cost:	£105,109,685

Update since last meeting

Legal work is ongoing to finalise the local Boston District Fishing Association (BDFA) agreement. The BDFA should be relocating to the completed facility downstream of the barrier location once the legal agreement is signed.

Foundations for the barrier control building have commenced and the barrier cofferdam works have started from the Jack-Up Barge. Fish refuges are in place during works.

Barrier High Voltage substation is in progress and anchor piles on the right bank are being installed.

Design works are progressing and discussions continue with the Port of Boston over various matters.

June – December 2018

- Relocate fishing fleet to quayside
- Demolition of existing “oil” jetty structure on right-bank
- Construct right bank embankments
- Commence Frontier quayside works
- Construct barrier control room
- Construct quayside
- Fabrication of barrier gate offsite
- Manufacture hydraulic rams
- Construction of the barrier
- Design of wet dock entrance
- Secondary dredging starts October 2018

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.

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

Update since last meeting

Through partnership working with Lincolnshire County Council, this project has secured £1M of European funding. A legal agreement between LCC and the EA is now signed. The programme of works will tender over the winter period with a contract start date expected June 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.

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

Update since last meeting

Following the success of the 2018 flood risk management options consultation, we are now finalising the two preferred flood management

options alongside the Strategic Environmental Assessment and HRA for full Strategy consultation early next year.

As part of the Strategy we are working with the support of RMA partners to ensure that we can appropriately apportion the Outcome Measure benefits within the Strategy area to prevent future double counting in line with government guidance.

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.

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

Update since last meeting

This year's campaign was completed 23rd June. Total sand placed on beach 397,636 m³.

The contractor is pricing repair works to the promenade as requested by local team, for possible delivery October '18 outside the main holiday period. Planning commenced for next year's campaign with possible inclusion of an area of beach south of Skegness and subject to monitoring results.

1.5 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" (PACM) 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).

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

Update since last meeting

The PACM pilot has completed its initial assessment of the catchment and identified future flood risk options for the catchment as a whole.

The current preferred flood risk management option is to ensure the maintenance and condition of the raised defences which includes toe protection works on the Wainfleet Relief Channel and the Steeping River together with exploring upstream options to reduce flood risk and siltation.

The first phase of a two year programme of toe erosion protection has been completed, consisting of a 950m length of the Wainfleet Relief Channel and a 250m length on the Steeping.

1.6 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.

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

Updates since last meeting

➤ Black Sluice Pumping Station

As recently announced at the Anglian Northern RFCC meeting, we are moving to decommission Black Sluice Pumping Station in Boston.

This has been agreed with all key partners: LCC, Boston Borough Council, Black Sluice IDB, RFCC, the NFU, and Association of Drainage Authorities.

The pumps do not protect people and property from flooding, which means we the EA cannot continue to fund the asset.

Due to the significant refurbishment costs, Black Sluice IDB are unable to take on the asset through a transfer.

We are now working with Heritage Lincolnshire to understand possible other uses for the building itself.

We will continue to use the gravity sluices as the primary means to reduce high flows in the South Forty Foot Drain.

The partnership is taking a strategic approach to managing flood risk and water resources in the wider area.

Due to continued partner engagement activity, there have been very few enquiries from the general public. The public drop in sessions will continue weekly at the Boston Hub.

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

The RMRN de-maining pilot project has completed the formal consultation phase for the South Forty Foot Catchment. A formal response document has been written and is available on gov.uk

The formal public notices have now been issued and are live on .gov.uk. If there are no formal objections by the close of consultation on 19th Nov then the watercourses will be transferred to Black Sluice IDB.

➤ **Bank Armouring**

Bank armouring has been carried out on part of the fenland section of the Swaton Eau.

Modelling will be reviewed to confirm to any further sites requiring armouring in the next two years.

1.7 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.

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

Update since last meeting

The works have gone out to tender for the Sluices, and costing is being undertaken by the consultant for the wall elements of the project. The deadline to submit quotes for the works is the 10th October.

Environmental surveys and discussions are continuing so that everything is in place. This includes discussion about eels and otter surveys.

1.8 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.

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.

Mott McDonald have been commissioned, through the Programme Delivery Unit, to prepare the full business case preparation is ongoing.

The commission is in two phases, the first will focus on the engagement of farmers and land owners to identify suitable sites for NFM measures to be implemented. The second phase will include the economic appraisal of the NFM options, outline designs and completion of the business case which will be submitted to the Large Projects Review Group.

It is likely the first works on site will take place during the winter of 2018/19.

2. Updates on Other Items

2.1 Donna Nook Managed Realignment Site

The Environment Agency has applied to the Department of Transport to secure the diversion and stopping up of the footpath on to the realigned path. The draft Order was heard at a public inquiry in June 2018.

The Inspector, appointed by the Planning Inspectorate, will make his recommendation to the Secretary of State for Transport who make the final decision.

The Environment Agency will ensure all preparatory work is complete ahead of the final decision so that works can commence at the earliest opportunity, allowing for considerations such as six weeks of High Court challenge and overwintering bird restrictions if permissions are granted.

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

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