



## Open Report on behalf of the Environment Agency

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| <b>Report to:</b> | <b>Flood and Water Management Scrutiny Committee</b> |
| <b>Date:</b>      | <b>19 February 2024</b>                              |
| <b>Subject:</b>   | <b>Environment Agency Update</b>                     |

### Summary:

This reports provides an update to the Committee on Environment Agency activities in Lincolnshire, including progress on key capital schemes.

### Actions Required:

The Flood and Water Management Scrutiny Committee is invited to note Environment Agency activities in Lincolnshire as outlined in the report.

## 1. Background

### Recent Flooding

During October 2023 and January 2024, Storm Babet and Storm Henk brought significant heavy rainfall across much of the UK causing flooding across Lincolnshire & Northamptonshire. As a result of Storm Babet, we saw at least a month's rain in 24 hours with up to 90mm falling in some parts of Lincolnshire. Storm Henk saw rainfall totals of up to 40mm, putting pressure on already saturated catchments.

We are now focussing our efforts on the recovery phase, our priority being to undertake actions to review damage to our defences and understand remedial actions and to engage with communities. Additional work associated with the impact has had significant impact on our resources.

We will continue to monitor the situation closely with our teams checking our flood defence assets are operating correctly and, where safe, clearing blockages and screens.

We are continuing to work closely with our Local Resilience Forum partners in Lincolnshire and Northamptonshire.

Since October 2023, we have been undertaking over 9000 asset inspections. We manage over 2000km of main river across Lincolnshire and Northamptonshire and our Field Operations Teams are completing proactive works. This includes undertaking checks at key

locations, clearing debris from watercourses and unblocking culverts. We have also commissioned consultants to undertake full assessments of any damaged assets. We are reviewing data and evidence from partners and communities to assess the impact of flooding. We are providing support to our partners, such as Internal Drainage Boards, at a number of locations.

After a flooding incident has happened, we carry out a review of the Flood Warnings that have been issued to see whether any improvements are needed for the future. This helps to ensure they are as accurate, relevant and timely as they can be for communities. We also undertake community engagement work to increase sign up to our free flood warning service and support communities to be prepared for flooding.

**1.1 Programme Update**

**1.1.1 – Saltfleet to Gibraltar Point Beach Management**

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| <b>Lead Organisation</b>             | Environment Agency |
| <b>Start Date</b>                    | February 2021      |
| <b>End Date</b>                      | January 2028       |
| <b>Total project cost</b>            | £64,798,923        |
| <b>Partnership Funding required?</b> | N                  |
| <b>Total Partnership Funding</b>     | N/A                |
| <b>Who is contributing?</b>          | N/A                |
| <b>Households better protected</b>   | 19,768             |



**Background:**

Beach re-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.

**Update since last meeting:**

Asset repairs on the sea wall at Skegness 2024 completed, continued monitoring of the structure and detailed asset inspections/testing of the wall at highlighted sections. Beach Nourishment 2024 campaign will be delivered under the existing contract. Tender for Beach Nourishment 2025-2027 in progress, will be issued in Feb 2024 with a view to award in Nov 2024. After this contract period (2028) this work will be included in the CAM project. BCUR02 has been submitted for review and now awaiting final updates. Risks - delivery, EA has no MCF contract in place.

### 1.1.2 - Middle River Ancholme – catchment management

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| <b>Lead Organisation</b>  | Environment Agency   |
| <b>Start Date</b>   | September 2026   |
| <b>End Date</b>   | October 2027   |
| <b>Total project cost</b>   | £4,915,551   |
| <b>Partnership Funding required?</b>  | Y  |
| <b>Total Partnership Funding</b>  | £1,300,000   |
| <b>Who is contributing?</b>   | Other Government Departments (OGD)   |
| <b>Households better protected</b>  | 161  |

#### Background:

This project aims to deliver the policies within the Ancholme Catchment Flood Management Plan and builds on previous River Ancholme strategy from early 2000's. Previous projects tried unsuccessfully to develop formal flood storage areas, but these were found to be unaffordable under the Partnership Funding policy. This new approach aims to build a partnership with the landowners and Ancholme IDB to develop a more affordable, sustainable and flood resilient approach, including by identifying where water could be stored within the catchment and then utilising the existing drainage infrastructure more effectively. This will mean apportioning the available economic benefits to justify a range of investments to existing Main River, surface water and land drainage networks, and potentially adjust the governance to some of the watercourses. This collaboration will also involve the newly formed Ancholme Catchment Partnership and consider the need for water storage for both public/industry water supply and irrigation purposes. The comprehensive approach will require a long development period with envisage phases of changes / improvements, that take opportunities of the emerging changes to farming subsidies. The project complements the catchment modelling and forward planning being undertaken by Ancholme IDB.

#### Update since last meeting:

Finalised OBC scope is due from Arup before end of December. Initial desktop studies to include review of River Ancholme model, Geotechnical and Environmental data. Jacobs expect the model review to be completed early in the New Year. Liaison with Ancholme IDB following Storm Babet, has identified possibilities to make the catchment more resilient, by

allowing swifter flood water evacuation, and hence aid farmland recovery. These opportunities are to be incorporated into the project scope for further investigation.

**How this scheme is aligned with the FCERM Strategy Delivery Plan:**

This project aims to improve the resilience and sustainability of the Middle River Ancholme sub-catchment by utilising and strengthening the existing drainage infrastructure collaboratively with key partners and the Ancholme Catchment Partnership. It seeks to be a catalyst to facilitate more temporary storage of water, thus re-establish better connectivity with its natural flood plain, provide ecological enhancements and carbon offsetting facilities, which could then be sold by landowners for payments from an emerging carbon and BNG credit market.

- Strategic objective 1.1: Between now and 2050 the nation will bolster its resilience to flooding and coastal change.
- Strategic objective 1.2: Between now and 2050 risk management authorities will help places plan and adapt to flooding and coastal change for a range of climate scenarios.

Although not situated in the 'Fens', the project aims to follow the principles to support Measure 1.5.4. By 2025 the Environment Agency will work with farmers, land managers, water companies, internal drainage boards and other partners to develop a long-term plan for managing future flood risk in the Fens.

**1.1.3 – Wainfleet Flood Resilience Scheme**

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| <b>Lead Organisation</b>  | Environment Agency   |
| <b>Start Date</b>   | July 2025  |
| <b>End Date</b>   | August 2026  |
| <b>Total project cost</b>   | £5,088,588   |
| <b>Partnership Funding required?</b>  | Y  |
| <b>Total Partnership Funding</b>  | £3,979,218   |
| <b>Who is contributing?</b>   | Other Government Departments (OGD)   |
| <b>Households better protected</b>  | 47   |

**Background:**

In June 2019 two and a half times the month’s average rainfall fell in 3 days in the Steeping catchment. This led to overtopping of the defences and ultimately a breach in the right bank of the Wainfleet Relief Channel on 12 June 2019. As a direct result 75 homes and businesses were flooded as well as 2000 acres of agricultural land. In response to this, the Steeping River Steering Group was set up and published a Catchment Action Plan which was recently refreshed and published in May 2021. This contains an action to increase the resilience of the raised defences that protect the western side of Wainfleet against overtopping and the effects of climate change. This capital project seeks to deliver this action.

**Update since last meeting:**

Work continues to progress the scope of for the Outline Business Case with the contract expected to be awarded in January 2024. Work will then begin to further develop and refine the options already outlined in the Strategic Outline Case. The project team continues to look for efficiencies in the delivery of the project; for example, by delivery work jointly with other projects where opportunities exist.

**How this scheme is aligned with the FCERM Strategy Delivery Plan**

The project is aimed at improving the resilience of the raised banks to be from failure caused by overtopping or weaknesses in the structure. It therefore contributes to the following National Strategy objective to better protect people from flooding by building and maintaining defences.

Strategic objective 1.1: Between now and 2050 the nation will bolster its resilience to flooding and coastal change.

**1.1.4 - Saltfleet to Gibraltar point Enhancing Lincolnshire Coast**

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| <b>Lead Organisation</b>             | Environment Agency |
| <b>Start Date</b>                    | TBA                |
| <b>End Date</b>                      | TBA                |
| <b>Total project cost</b>            | £17,074,991        |
| <b>Partnership Funding required?</b> | N                  |
| <b>Total Partnership Funding</b>     | N/A                |
| <b>Who is contributing?</b>          | N/A                |
| <b>Households better protected</b>   | 0                  |

**Background:**

Enhancing Lincolnshire Coast project would be a significant investment from government. It would, therefore, need to deliver the maximum returns for all partners and stakeholders, by ‘doing the project right’ and ‘doing the right project’. Enhancing the Lincolnshire Coast project will be the phase of works that follows on from the

nourishment, which is currently proposed until around 2040, and will evidence and deliver transformation of flood risk management infrastructure of the East Coast of Lincolnshire.

**Update since last meeting:**

The Business Case Update Report to inform the business about the change of scope from the originally approved Strategic Outline Case has been approved by the Large Projects Review Group and referred to Director of Operations for his approval. This has allowed us to progress with draft text for partner agreements (currently with Legal) and begin a scoping exercise for aspects of the Coastal Investment Plan (CIP) that can be fully funded by Grant in Aid. This will ensure any deliverables under the CIP meet the evidence needs for the next Outline Business Case stage, anticipated around 2027, but will also ensure wider evidence is generated to make a compelling case to Government for future investment. An initial Project Board start up meeting has been held with EA staff and our consultants; however, partners work continues at their own risk until funding and collaborative agreements are in place and signed by all parties.

**1.1.5 – Boston Barrage/Barrier Works**

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| <b>Lead Organisation</b>             | Environment Agency |
| <b>Start Date</b>                    | November 2017      |
| <b>End Date</b>                      | June 2025          |
| <b>Total project cost</b>            | £62,041,431        |
| <b>Partnership Funding required?</b> | N                  |
| <b>Total Partnership Funding</b>     | N/A                |
| <b>Who is contributing?</b>          | N/A                |
| <b>Households better protected</b>   | 525                |

**Background:**

The Boston Barrier scheme, once finished, will provide better protection to over 14,000 properties against tidal flooding and is deemed a ‘National Priority Project’ within the Environment Agency’s Six Year Programme.

**Update since last meeting:**



At present, the EA Team is considering the best approach to ensure completion of Ten years on from the devastating tidal surge that hit Boston in 2013, the Boston Barrier better protects more than 13,700 homes, and has already been used against high tides to protect Boston four times. Whilst flood risk can never be eradicated, the construction of phase one of the Boston Barrier Scheme, along with a separate EA scheme downstream of the barrier site, the Haven Banks Improvement Scheme, have vastly improved Boston’s tidal flood resilience.

The assets we are constructing will remain in place to keep Boston flood resilient for the next 100 years, so it’s imperative the works are completed in the right way, are technically correct, and are value for money. The design process for phase two of the scheme is taking

some time because phase two is unique and complex in nature, largely due to it taking place on an active shipping port and existing built environment.

The latest construction programme anticipates completion of the Boston Barrier Scheme as a whole in 2026, but this date may change as the team takes time to review the proposed designs of construction works. Once complete, this second and final phase of works will ensure continuity of the defence downstream of the primary barrier gate further protecting Boston against future climate change.

### 1.1.6 – Lower Witham Flood Resilience Project

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| <b>Lead Organisation</b>  | Environment Agency   |
| <b>Start Date</b>   | N/A  |
| <b>End Date</b>   | N/A  |
| <b>Total project cost</b>   | £1,859,639   |
| <b>Partnership Funding required?</b>  | N  |
| <b>Total Partnership Funding</b>  | N  |
| <b>Who is contributing?</b>   | N/A  |
| <b>Households better protected</b>  | 0  |

#### Background:

In 1997 the Lower Witham Strategy recommended reinforcement of key embankments whilst allowing some areas to flood, in order to relieve the pressure on the system. Since then, 30km embankments have been reinforced, but repeated high flows have damaged more. Storage options have not been implemented, due to availability of suitable sites and difficulties in meeting HM Treasury funding rules of the time. The works in the 2000s included the creation of Fiskerton Nature Reserve, as environmental mitigation. Now these types of works are seen as offering a real alternative to hard defences, providing room for flood water as well as having a lower carbon footprint and enhancing the local environment.

Flooding in 2019 has again highlighted the need to update the long-term plan to manage flood risk in the area. With revised partnership funding rules, allowing more projects to proceed, and a new interest from landowners in providing public goods such as flood storage, it is hoped that the original vision can now be realised. The Lower Witham is one of six river catchments within the East of England Fens that will come together under the Future Fens: Flood Risk Management programme. This work will contribute towards the

ambitions for Climate Resilient Places within the National Flood & Coastal Erosion Risk Management Strategy where there is a specific measure focussed on the Fens.

The works in the 2000s included the creation of Fiskerton Nature Reserve, as environmental mitigation. Now these types of works are seen as offering a real alternative to hard defences, providing room for flood water as well as having a lower carbon footprint and enhancing the local environment. Flooding in 2019 has again highlighted the need to update the long-term plan to manage flood risk in the area.

It is anticipated that a significant capital investment programme will start on the ground in 2025, and in the meantime the Environment Agency’s operational teams will continue to maintain and manage the flood risk assets where resources allow.

**Update since last meeting:**


Following Storm Babet during which the Lower Witham experienced record rainfall amounts and river levels, many embankments were damaged and there were two full breaches, and a number of partial defence failures. Local landowners have approached the Environment Agency, suggesting a different approach to recovery of these assets.

A steering group has been formed with local RMAs and landowners, to look at options to use farmland for flood storage and asset recovery. This steering group and pilot project is focused on the area around Barlings Eau / Lower Witham North Bank and will be led by the Fens 2100+ team who will also be taking forward the strategy update work, once the baselining phase is completed in 2024.

**How this scheme is aligned with the FCERM Strategy Delivery Plan**

As the Lower Witham Flood Resilience Project sits within the wider Fens Catchment, the project supports FCERM Strategy Measure 1.5.4. By 2025 the Environment Agency will work with farmers, land managers, water companies, internal drainage boards and other partners to develop a long-term plan for managing future flood risk in the Fens.

**1.1.7 – Gibraltar Point to Freiston Shore System Sustain Project**

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| <p><b>Lead Organisation</b></p>   | <p>Environment Agency</p>  |
| <p><b>Start Date</b></p>  | <p>September 2025</p>  |
| <p><b>End Date</b></p>  | <p>September 2026</p>  |



|                                      |                                   |
|--------------------------------------|-----------------------------------|
| <b>Total project cost</b>            | £5,465,407                        |
| <b>Partnership Funding required?</b> | Y                                 |
| <b>Total Partnership Funding</b>     | £2,177,000                        |
| <b>Who is contributing?</b>          | Asset Replacement Allowance (ARA) |
| <b>Households better protected</b>   | 1,625                             |

**Background:**

The project looks at sustaining the primary line of defence of the Wash Frontage from Gibraltar Point to Freiston Shore. The Asset Performance team has identified key low spots, cattle poaching and burrowing animals, which are areas of concern for bank stability. This project will look to repair the embankment and sustain the whole line back to its nominal standard of protection and service.

**Update since last meeting:**



Unfortunately, due to contract issues with the ground investigation work, the window was missed and is now forecast to begin in March 2023. We are progressing with the optioneering stage for the Outline Business Case (OBC). We are going to look at producing a bigger OBC to inform a lighter touch Final Business Case. The project continues to move along.

**How this scheme is aligned with the FCERM Strategy Delivery Plan**

This project seeks to sustain the primary defence line along the Wash Frontage from Gibraltar Point to Freiston Shore; therefore, the FCERM strategy objectives below are in line with the project’s objectives:

- Strategic objective 2.3: Between now and 2030 risk management authorities will support investments to manage flooding and coastal change that enables growth in a sustainable and climate resilient way.
- Strategic objective 1.2: Between now and 2050 risk management authorities will help places plan and adapt to flooding and coastal change for a range of climate scenarios

**1.1.8 – River Slea Flood Resilience Project**

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| <p><b>Lead Organisation</b></p>   | <p>Environment Agency</p>  |

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| <b>Start Date</b>                    | August 2025 |
| <b>End Date</b>                      | March 2027  |
| <b>Total project cost</b>            | £4,575,113  |
| <b>Partnership Funding required?</b> | N           |
| <b>Total Partnership Funding</b>     | N/A         |
| <b>Who is contributing?</b>          | N/A         |
| <b>Households better protected</b>   | 582         |

**Background:**

This project covers the River Slea main river which runs through the town of Sleaford to Cobblers Lock. In the east of the town the river splits to follow the Sleas Navigation channel to the north and the original course of the Old River Sleas to the south. The navigation follows the contours of the land, dropping the river level from around 13m above sea level in Sleaford, to around 3.5m above sea level via a series of historical locks (not all of which are operational). The Old River Sleas follows a more natural course through the Sleas valley before joining back with the navigation again at Cobblers Lock.

As a river heavily influenced by groundwater flows the Sleas can suffer from low flows at times making abstractions for drinking water and irrigation a challenge. A flow augmentation scheme supports water levels in the river during dry periods.

Through the town itself, a series of movable structures maintain a water level for aesthetic reasons, although these do interfere with natural river processes, are a barrier to fish and eel migration and increase flood risk, which is why they must open during high flows. These structures now require significant investment. Structures along the old navigation channel are also in a state of disrepair. With government funding to the EA dependent upon evidenced reductions in flood risk, securing sufficient funding to repair / replace assets with no flood risk benefit is not possible.

**Update since last meeting:**

The project team attended the Sleaford RiverLight festival in October and were located in the event’s EcoVillage. Attendance at the event spread awareness of the project and reached a wider public audience than previous events. To support this, the Citizen Space webpage has also been updated.

Work continues to develop a shortlist of options including further ecological surveys, a carbon workshop and scoping for ground investigation works. A hydraulic model review is being undertaken to ensure the project is in a position to start modelling the different options. To support the modelling, further topographic survey is going to be undertaken imminently to record recent topographic changes in the catchment.

The project team is liaising with the local community following storm Babet to improve understanding of the impact of the event on the local community.

**How this scheme is aligned with the FCERM Strategy Delivery Plan**

This project seeks to review existing structures in the watercourse which are coming to the end of their design life, therefore the FCERM strategy objectives below are in line with project objectives:

- Strategic objective 2.3: Between now and 2030 risk management authorities will support investments to manage flooding and coastal change that enables growth in a sustainable and climate resilient way.
- Strategic objective 1.2: Between now and 2050 risk management authorities will help places plan and adapt to flooding and coastal change for a range of climate scenarios.
- Strategic objective 1.1: Between now and 2050 the nation will bolster its resilience to flooding and coastal change.

**1.1.9 – Crowland and Cowbit Washes (Welland Flood Banks) Refurbishment**

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| <b>Lead Organisation</b>   | Environment Agency  |
| <b>Start Date</b>  | August 2026   |
| <b>End Date</b>  | March 2029  |
| <b>Total project cost</b>  | £6,708,371  |
| <b>Partnership Funding required?</b>   | Y   |
| <b>Total Partnership Funding</b>   | £2,416,411  |
| <b>Who is contributing?</b>  | Asset Replacement Allowance (ARA), Levy   |
| <b>Households better protected</b>   | 663   |

**Background:**

The Crowland and Cowbit Washes (the Washes) are not performing as anticipated. The Cradge bank for the Crowland and Cowbit Washes needs refurbishment along with inlet syphons. The current focus of the study is to understand the area that benefits from the Washes. The Washes have not been utilised in recent years and the Welland system has been significantly altered since their construction.

This project aims to provide a better representation of flood risk associated with the operation (or non-operation) of the Washes through modelling and mapping. We need to

better understand how the Washes function, which communities’ benefit from their existence, and whether any improvements can be made to utilise them more effectively and reduce flood risk. We also need to better understand the implications of failure to store water in the Washes to define the benefit area. The number of properties currently benefitting is estimated at 663.

It is intended that this evidence base will be used in conjunction with that derived for Maxey Cut Banks to support development of an Initial Assessment that supports a strategic approach to continue maintain the standard of protection for Lower Welland catchment in line with the Welland CFMP recommendations.



**Update since last meeting:**

The non-technical summary has been completed along with a review of asset condition data. Engagement with stakeholders is now taking the form of structured interviews and this process should be completed by Christmas.

**How this scheme is aligned with the FCERM Strategy Delivery Plan**

This project supports FCERM Strategy Measure 1.5.4: By 2025 the Environment Agency will work with farmers, land managers, water companies, internal drainage boards and other partners to develop a long-term plan for managing future flood risk in the Fens. It is anticipated that this project will be part of the adaption pathways that will feed into Fens 2100+.

**1.1.10 – LWFRP – Works Arising Phase 1**

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| <b>Lead Organisation</b>  | Environment Agency   |
| <b>Start Date</b>   | May 2025   |
| <b>End Date</b>   | March 2027   |
| <b>Total project cost</b>   | £23,991,053  |
| <b>Partnership Funding required?</b>  | Y  |
| <b>Total Partnership Funding</b>  | £6,000,000   |
| <b>Who is contributing?</b>   | Other Government Departments (OGD)   |
| <b>Households better protected</b>  | 1,362  |

**Background:**

Whilst the Lower Witham Strategy is being updated there is a need for works on the existing defences in the Lower Witham to ensure that the standard of protection is maintained until the outcomes of the updated strategy can be implemented. This project will run parallel to the Lower Witham Flood Resilience Project (strategy).

It is intended that this evidence base will be used in conjunction with that derived for Maxey Cut Banks to support development of an Initial Assessment that supports a strategic approach to continue maintain the standard of protection for Lower Welland catchment in line with the Welland CFMP recommendations.

**Update since last meeting:**

This project aims to bolster our existing defences as far as is affordable, while the update to the Lower Witham Strategy is developed. A draft programme of works to repair and sustain critical embankments and renew the Grand Sluice at Boston is proposed. An Outline Business Case was approved in October 2023 by the Large Projects Review Group, allowing a £4.63million spend to move to Full Business Case to deliver works offering £660million in flood risk benefits. Two parcels of land are currently in the process of being purchased in the Lower Witham, to allow the project to proceed through the provision of biodiversity net gain, carbon offset, and potentially in the future, flood plain reconnection and flood storage (post-delivery of Phase 1 works). Phase 1 Works are programmed to commence in 2025, and complete in 2027.

**How this scheme is aligned with the FCERM Strategy Delivery Plan**

The LWFR Phase One works will improve the resilience of the raised banks from failure caused by overtopping or weakness of the structure. It therefore contributes to Strategic objective 1.1: Between now and 2050 the nation will bolster its resilience to flooding and coastal change.

**1.1.11 – Fens 2100+ Strategy – LNA**

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| <b>Lead Organisation</b>             | Environment Agency |
| <b>Start Date</b>                    | N/A                |
| <b>End Date</b>                      | N/A                |
| <b>Total project cost</b>            | £1,436,641         |
| <b>Partnership Funding required?</b> | N                  |
| <b>Total Partnership Funding</b>     | N/A                |
| <b>Who is contributing?</b>          | N/A                |
| <b>Households better protected</b>   | 0                  |

**Background:**

*Not available.*

**Update since last meeting:**

Fens2100+ continues to progress well. We are now in contract with our external suppliers (Arup) for project 1. This is one of 3 Fens2100+ projects within the programme and will

develop a decision-making framework which applies across the Fens landscape to ensure the EA and IDB's make clear and consistent FCERM investment decisions.

We are also scoping project 3 which will expand the Great Ouse baseline report across all of the Fen's catchment. We hope to be in contract with Arup to begin delivery of this in early 2024. This will give a consistent evidence base confirming the benefits and costs of current assets across the Fens.

We are continuing to undertake internal and external engagement and are also implementing the governance for Fens2100+ which includes a programme board and Asset managers group. We have held internal engagement meetings and workshops and have the first external advisory group meeting in December 2024. We are working with the lower Witham team to support them with the lower Witham recovery work to respond to the impacts of storm Babet on the fens.

### **How this scheme is aligned with the FCERM Strategy Delivery Plan**

*Not available.*

## **1.2 Incident Management**

### **Incident Management Overview**

- 1.2.1** In our work as a **Category 1 Responder under the Civil Contingences Act 2004** (CCA 2004), the Environment Agency is responsible for managing a wide variety of environmental and flooding incidents.
- 1.2.2** The Environment Agency 5 Year Action Plan (EA2025) outlines our three long term goals, the first being '*a nation resilient to climate change*'. This goal is underpinned by the Incident Management Strategy 2020-2025 which outlines our three areas of focus, all of which relate to our preparedness and ability to responds to flooding incidents
- **Plan for changing risk**
  - Collaborate to inspire action through partnership.
  - Respond to the climate emergency.
- 1.2.3** Incident management work in Lincolnshire and Northamptonshire Area is not just focused on flooding – the Area is subject to a variety of the highest risk on the National Risk Register à **Coastal Flooding; River Flooding; Surface Water Flooding; Industrial Accidents; and Drought.**
- 1.2.4** We have built excellent working relationships with other professional partners in the **Local Resilience Forums** (LRF) that we support. Our close working relationship with LRF partners continues to ensure that the communities we all serve are best supported during an incident.

**1.2.5** The sections below further detail key aspects of our work internally, with partners and our local communities.

### **Local Resilience Forum**

**1.2.6** Local resilience Forums (LRFs) are multi-agency partnerships made up of representatives from local public services, including the emergency services, local authorities, the NHS, the Environment Agency and other professional and voluntary organisations. These agencies are known as Category 1 & 2 Responders, as defined by the Civil Contingencies Act.

**1.2.7 FloodEx22 recommendations:** Following last year's multi-LRF exercise FloodEx22 and subsequent debrief recommendations, a number of key work areas have been finalised ready for sign-off in the postponed November LRF Programme Management Board. An ongoing piece of work by ELDC's caravan licencing team is to improve access to information regarding caravan sites at tidal risk, and reviewing how they would self-evacuate ahead of a tidal event.

**1.2.8 Storm Babet debriefs:** The EA have participated in Lincs LRF tactical and Strategic debriefs to review learning from the response to Storm Babet. It is expected that the findings will be collated into a report including a list of recommendations, which will be used to set the actions and priorities of the Lincs LRF Flood Group into next year.

**1.2.9 Lower Witham Plan:** The newly created Lower Witham Tactical Information Guide (TIG) was used for the first time during the Storm Babet response, to prepare and respond to the breach risk posed by the embankment slip near Fiskerton. As part of the post-incident debrief, we will review how well the plan worked and identify any improvements needed as a result of this incident.

### **Other LRF work:**

**1.2.10 National Resilience Standards:** Prior to a peer review with neighbouring Humber LRFs, we carried out a review of the Humber LRF's resilience standards. Overall, we supported the scoring and they have identified the specific areas where improvements are needed, and this work will be carried out over the coming months by the relevant LRF subgroups

**1.2.11 New Humber tidal cross-boundary EA procedure:** The East Midlands, Yorkshire, and Lincolnshire & Northamptonshire Area Incident Teams have agreed a Humber Incident Management Improvement Plan to ensure our priority workloads align and that EA input into Humber LRF is fully coordinated. A key milestone has been developing a tri-area procedure using real-time map outputs to communicate forecast impacts in a consistent manner from all 3 areas to the LRF in the runup to a tidal incident. This will provide a much clearer picture of the risk, and thereby enable a more effective multi-agency response. Training has been rolled out to all 3 Area duty roles and the new procedure is now live and will be used for any future Humber tidal events that require TCG/SCG escalation. We are looking for opportunities to

familiarise Humber LRF partners with this new procedure at an appropriate working group. We will also look at integrating this data into the multi-agency flood plan in future updates, as well as feeding into other LRF preparation activities such as targeted evacuation planning.

**1.2.12 East Coast Flood Risk:** A LNA Tidal Incident Management (TIM) Group has been formed in the EA to assure progress of actions along the Lincolnshire East Coast. It brings together multiple workstreams and is improving communication across teams. The group is now well established and bridges gaps between EA strategic, operational, incident response and procedures, along with the response of our partners and tidal surge impacts on communities that are more vulnerable in a scenario where adverse weather impacts the beach. A Beach Management Plan has now been created and close to completion, a Beach Management Assessment Group meets monthly to discuss surveying results of the beach profile and defences, and a process is now in place to escalate to an Enhanced Tidal Planning Cell if there are concerns for a low beach scenario, procedures now created to lower triggers for a Below Required Condition asset (low beach profile) which means we would be more proactive to issuing warning and informing messages and activating an EA Operational Action Plan. We have also added additional actions for waste, water quality and regulated industry to prepare for a severe tidal surge.

## **Preparation**

**1.2.13 Winter Readiness Training:** We ran a very comprehensive week of training for all incident response staff in Lincolnshire and Northamptonshire in the first week of October 2023. This focussed on being as prepared as possible for winter months and the associated risks. We calculated that over 1,100 hours of training were delivered during just one week. This is the equivalent of one person's full-time work for 31 weeks!

Several exercises ran during this week, including Exercise Banshee which exercised our customer facing response roles, a site-specific sampling exercise, and participation in Lincolnshire LRF Exercise Ezra.

Staff also joined Learning bursts and 'back to basics' sessions throughout the week, as well as focused role specific training sessions. Those who participated in the exercises gave excellent feedback and found their new skills very useful in the coming weeks.

**1.2.14 New Starter Training:** We are now delivering a nationally consistent onboarding new starter training course and directing staff to fill key roles on a monthly basis. We are developing Exercise Griffin, as an opportunity for all staff to familiarise themselves with the Incident Room set up and Concept of Operations command structure.



**1.2.15 Exercise Centaur:** This has been postponed to December due to flood incident response. We are working in collaboration with a local business to exercise our Environment Management incident response staff on a working waste site.

**1.2.16 Flood Resilience Engagement:** We supported Lincolnshire LRF's Exercise ESRA rest centre exercise in October designed to test new innovation products including an electronic registration system and an evacuation leaflet. We spoke to over 70 people and have supplied flood resilience leaflets to three community organisations to share at their event. We also had a stall at Mablethorpe market and carried out some 'shop-knocking' in Ingoldmells. We visited 50 business premises sharing information about how to be prepared for flooding and signing them up to the flood warning service. One pub said they would use a laptop to help sign up customers. We did a presentation with Van Oord at Sutton-on-Sea Residents Association which was attended by 28 residents. We answered lots of questions and got their ideas on how we can help them build resilience. After Storm Babet we were pleased to be invited by Horncastle community larder to come along to two drop-in events.



### 1.3 Resource Update

1.3.1 In the Witham and South Forty Foot Catchments maintenance was required to clear a build-up of weed that had come from upstream due to high flows. The work took place at the Billingham Skirth pointing doors on the Billingham Skirth, near Tattershall Bridge, where it flows into the River Witham. The weed was constricting flow into the River Witham from the Billingham Skirth. It was cleared using Conver weed boats. The boats collected and lifted the loose weed, removing it from the watercourse until the outfall was clear. It was completed in October 2023 by CGM, one of our FCRM Operational Framework Lot 2 contractors.



*Photos 1/2: Billingham Skirth pointing doors at Billingham Skirth outfall into the River Witham near Tattershall Bridge. Photo (left) show before weed clearance and (right) completed works.*

1.3.2 We have completed the regular weed control programme in Lincolnshire on Anwick Catchwater near Anwick, the Carr Dyke between Timberland and Martin, the South Forty Foot upstream of Neslem Bridge and Dorrington Dyke upstream of Causeway Road Bridge. The warmer weather had encouraged thick weed growth, which impacts water flow through the catchwater and dykes.

1.3.3 An excavator with a long reach arm and weed basket attachment was used to clear the weed out of the channel on most of the watercourses. However, on the South Forty Foot, Conver weed boats were required to carry out the cutting because the embankments are too tall for an excavator to work from. Engagement with local landowners was required to gain access to the sites and carry out the work safely.

1.3.4 The maintenance work was completed in September / October 2023. We worked in partnership under the Public Sector Corporation Agreement with Witham 1<sup>st</sup> IDB and our FCRM Operational Framework Lot 2 contractors, CGM, who also engaged sub-contractors to ensure the maintenance was carried out safely and on schedule.



*Photos 3/4: Weed control on Carr Dyke between Timberland and Martin using an excavator and weed basket (left); weed control on the South Forty Foot using Conver weed boats (right)*

## 1.4 Intermittent Maintenance Programme

- 1.4.1** The intermittent programme comprises of projects across the area which repair or improve the condition of our flood risk assets. The projects are carried out using a variety of delivery routes. Our Internal Field Teams, Collaborative Delivery Framework (CDF), FCRM Operational framework, and Public Sector Co-operation Agreements.
- 1.4.2** In the Witham Catchment, bushing works were carried out on the embankments of the Fosdyke watercourse between Burton Waters and the A57, North of Lincoln.
- 1.4.3** Bushing works are important to enable good access for maintenance, to cut the embankments to specification and to undertake inspections without bushes obscuring the view. The work was undertaken using chainsaws and tracked chippers. It was completed in October 2023 by one of our FCRM Operational Framework Lot 2 contractors, Ground Control, at the cost of £34,000.



*Photos 5/6: Before bushing works between Burton Waters and the A57 on Fosdyke (left), and after completion of works (right).*

## 2. Conclusion

The Flood and Water Management Scrutiny Committee is invited to note Environment Agency activities in Lincolnshire as outlined in the report.

## 3. Consultation

### a) Risk and impact analysis

n/a

## 4. Appendices

None used.

## **5. Background Papers**

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

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