

Open Report on behalf of Environment Agency

Report to: Flood and Water Management Scrutiny Committee

Date: 18 September 2023

Subject: Environment Agency Update

Summary:

This report updates the Flood and Water Management Scrutiny 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 review and comment on the contents of this written update and share feedback on projects and key capital schemes with Environment Agency.

1. Background

Programme Update

1.1.1 Saltfleet to Gibraltar Point Beach Management

Lead Organisation	Environment Agency
Start Date	March 2020
End Date	January 2025
Total project cost	£33,581,231
Partnership Funding required?	N
Total Partnership Funding	N/A
Who is contributing?	N/A
Households better protected	11,618

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:

The 2023 beach nourishment works are currently underway, using the Vox Apolonia, which is an LNG vessel (the first LNG dredger to be used in UK waters), although the dredger is currently offsite rectifying a fault and was back on-site 18th June. Procurement routes are being explored for the beach nourishment project and associated repair works, as the current contract will expire after the 2024 campaign. To date works have been completed at Huttoft, Mablethorpe, and Trusthorpe, and the contractors continue south towards Ingoldmells. They are also installing six radar stations along the coastline between Saltfleet and Gibraltar Point; works are progressing well. The radar masts will allow near real time monitoring of the sediments and bedforms off the east coast. Groundworks are complete and the mast columns were installed in June. We also carried out maintenance works to the splash deck and walls Skegness, completed in mid-July.

1.1.2 Middle River Ancholme - catchment management

Lead Organisation	Environment Agency
Start Date	December 2022
End Date	March 2027
Total project cost	£2,888,800
Partnership Funding required?	Υ
Total Partnership Funding	£1,300,000
Who is contributing?	Other Government Departments (OGD)
Households better protected	192

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:

The SOC was submitted for assurance in early June by the EA's project team, which included involvement from both framework delivery partners. This identified an increase in the economic benefits. The scope to develop the OBC for submission around summer 2024 will continue, with a focus on hydraulic modelling of the identified options and measures, and necessary engagement with landowners and catchment partners. The partnership with Ancholme IDB is sharing data and developing complementary flood management solutions. It is envisaged that the initial programme of FCRM works will be undertaken by the end of 2026. Innovative funding ideas are being explored around Green Financing and habitat/carbon credits. Wider catchment opportunities, including ecosystem services provisions and alternative governance arrangements, may follow as subsequent phases.

How this scheme is aligned with the Flood and Coastal Erosion Risk Management 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**

Lead Organisation	Environment Agency
Start Date	October 2022
End Date	October 2025
Total project cost	£4,896,639
Partnership Funding required?	Υ

Total Partnership Funding	£3,755,800
Who is contributing?	Other Government Departments (OGD)
Households better protected	51

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:

The Strategic Outline Case (SOC) has been approved and the project now moves on to complete the Outline Business Case. A project team has been assembled to undertake this work with a site meeting held in order to become familiar with the objectives of the project and the challenge on the ground.

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

Lead Organisation	Environment Agency
Start Date	July 2020
End Date	December 2044
Total project cost	£766,796,582
Partnership Funding required?	N
Total Partnership Funding	N/A
Who is contributing?	N/A
Households better protected	20,000

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:

A partnership between Lincolnshire County Council, Lindsey Marsh Drainage Board, East Lindsey District Council and the Environment Agency is being explored to optimise the delivery and funding options for the East Lincolnshire coast. This will take the form of an Investment Plan which will look at the strategic options for the frontage in the long term.

1.1.5 **Boston Barrage/Barrier Works**

Lead Organisation	Environment Agency
Start Date	May 2014
End Date	November 2024
Total project cost	£51,021,365
Partnership Funding required?	N
Total Partnership Funding	N/A
Who is contributing?	N/A
Households better protected	14,256

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 the Boston Barrier Scheme. It is imperative that the works are completed in the right way, are technically correct, and are value for money. This process is slower than anticipated due to the unique and complex nature of the work, which is much greater than originally realised.

The latest construction programme anticipates completion of the Boston Barrier Scheme in 2025. However, this date may change as the team takes the time to review the proposed designs of construction works.

More than 13,700 properties are now better protected from tidal flooding by the primary barrier gate which was used for the first time against a high tide in November 2021 and continues to be available as required. Once complete, the second and final phase of works will ensure continuity of the defence downstream of the primary barrier gate and will

better protect a further 526 properties from tidal flooding. This brings the total number of properties protected by the scheme to over 14,256.

1.1.6 **Lower Witham Flood Resilience Project**

Lead Organisation	Environment Agency
Start Date	August 2021
End Date	March 2027
Total project cost	£1,859,639
Partnership Funding required?	N
Total Partnership Funding	N
Who is contributing?	N/A
Households better protected	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:

The draft Economic Appraisal output was shared with Risk Management Authorities, and on 9th May a successful working group meeting was held to gather feedback to inform final amendments. It is expected that the final output will be issued by the end of October, and letters of support will be sought from all RMAs which will secure continued delivery of both the EA and RMA capital programme until the long-term strategy outputs are implemented. UAV lidar and imagery surveys are complete and supporting the tactical plan asset condition scores used to inform prioritisation of Phase One works.

New modelling of the Lower Witham is ongoing and due for completion by the end of the year. The baseline report and tactical plan outputs are to be completed by the current LWFRP team and then the strategy update will be taken forwards by the Fens 2100+ team. The LWFRP community engagement events are currently paused; It is hoped that future engagement events will be planned collaboratively between the LWFRP team, Fens 2100+ team, and RMAs on completion of the baselining work.

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

Lead Organisation	Environment Agency
Start Date	September 2022
End Date	June 2025
Total project cost	£5,475,833
Partnership Funding required?	Υ
Total Partnership Funding	£2,177,000
Who is contributing?	Asset Replacement Allowance (ARA)
Households better protected	1,793

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:

We are finalising the contract between EA and our consultants.

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

Lead Organisation	Environment Agency
Start Date	February 2023
End Date	March 2027
Total project cost	£6,898,844
Partnership Funding required?	N
Total Partnership Funding	N/A
Who is contributing?	N/A
Households better protected	815

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 Slea Navigation channel to the north and the original course of the Old River Slea 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 Slea follows a more natural course through the Slea valley before joining back with the navigation again at Cobblers Lock.

As a river heavily influenced by groundwater flows the Slea 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's Strategic Outline Case (SOC) received FSoD approval in April. To move the project forward, the EA are working with our suppliers to scope the next phase of the project (working towards Outline Business Case) and the hydraulic modelling is currently being assured by the Environment Agency. The project is also moving forward with their engagement and the project's first two public drop-in engagement events took place on 13th and 20th June in Sleaford to introduce the public to the project.

Work on the River Slea hydraulic model is still progressing with sensitivity tests being run and reviewed at present. Engagement continues; the second project newsletter was issued in early December 2022 and an imminent Citizen Space webpage update is planned in December 2022 /January 2023. The project objectives have also been updated.

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 **NFM - Swaton Flood Resilience Scheme**

Lead Organisation	Environment Agency
Start Date	April 2019
End Date	March 2022
Total project cost	£185,834
Partnership Funding required?	Υ
Total Partnership Funding	£28,000
Who is contributing?	RFCC Local Levy
Households better protected	14

Background:

Natural Flood Management R&D Scheme in the Swaton Eau catchment of the South Forty Foot Drain. It addresses regular flooding to the villages of Swaton, Threekingham and Spanby, where a conventional engineered flood scheme is not viable.

Update since last meeting:

No update.

1.1.10 Crowland and Cowbit Washes (Welland Flood Banks) Refurbishment

Lead Organisation	Environment Agency
Start Date	March 2023
End Date	April 2026
Total project cost	£6,752,849
Partnership Funding required?	Υ
Total Partnership Funding	£2,316,503
Who is contributing?	Asset Replacement Allowance (ARA), Levy
Households better protected	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 Environment Agency is now in contract with Arup for support to develop the Strategic Outline Case. The current tasks include a summary of modelling previously undertaken for a non-technical audience, long listing of options, stakeholder engagement and asset condition review. This phase comprises of collating all existing work done to date with gap analysis and non-technical summaries to support internal and external stakeholder engagement. This will enable development of a Strategic Outline Case that can meet the wider catchment opportunities such as environmental enhancement in addition to better flood risk management. A start up meeting was held on 22 June 2023.

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+.

1.1.11 FCERM in the Fens (L&N)

Lead Organisation	Environment Agency
Start Date	June 2021
End Date	July 2021
Total project cost	£64,000
Partnership Funding required?	N
Total Partnership Funding	N/A
Who is contributing?	N/A
Households better protected	0

Background:

Flood Risk Management (FRM) within Fenland & Lowland catchments is a key activity for Risk Management Authorities (RMA's) within the Environment Agency's Lincolnshire & Northamptonshire Area (LNA). This project will inform the evidence base used for LNA to deliver on the National FCERM objective:

"By 2025 the Environment Agency will work with farmers, land managers, internal drainage boards and other partners to develop a long term, adaptive plan for managing future flood risk in the Fens."

The project will be split into three separate strands of work:

- Production of a Guide to Sustainable Flood Risk Management in Fenland and Lowland catchments.
- Beneficiary Mapping including supply chain vulnerability.
- Carbon baselining of current flood risk management activities in Lincolnshire and Northamptonshire Fenland and Lowlands.

Update since last meeting:

No update.

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.

1.1.12 **LWFRP - Works Arising Phase 1**

Lead Organisation	Environment Agency
Start Date	May 2023
End Date	March 2027
Total project cost	£26,000,000
Partnership Funding required?	Υ
Total Partnership Funding	£6,000,000
Who is contributing?	Other Government Departments (OGD)
Households better protected	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:

Prioritisation of sites has been undertaken to inform Phase One works. This will include embankment improvements and refurbishment of key control structures. The draft Economic Appraisal output was shared with Risk Management Authorities, and on 9th May a successful working group meeting was held to gather feedback to inform final amendments. It is expected that the final output will be issued by the end of October, and letters of support will be sought from all RMAs which will secure continued delivery of both the EA and RMA capital programme until the long-term strategy outputs are implemented. Two land parcels are in the process of being secured at Apley adjacent to the Barlings Eau, and Cherry Willingham adjacent to the River Witham, allowing us to deliver Biodiversity Net Gain, Carbon Sequestration and potential for flood storage to support delivery of both the Phase One and future works arising from the Strategy.

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.

1.1.13 Fens 2100+ Strategy - LNA

Lead Organisation	Environment Agency
Start Date	October 2022
End Date	March 2027
Total project cost	£8,456,400
Partnership Funding required?	N
Total Partnership Funding	N/A
Who is contributing?	N/A
Households better protected	0

Background:

Not available.

Update since last meeting:

Fens 2100+ is progressing well. We have nearly completed recruitment of the programme team and had 4 additional programme team members join at the end of June 2023, we are still recruiting for a project manager. Project 1 contract has been signed and we are currently scoping the work for project 3 and hope to be in contract for project 3 by October 2023.

We have started undertaking external engagement and ran a workshop at Flood and Coast 23 which was very well attended, we also attended Floods and Water live in Lincolnshire in July 2023 alongside undertaking direct engagement with key stakeholders. We held a launch workshop at the end of June 23 with key stakeholders, which was both well attended and interactive and invitees gave positive feedback. We have a follow up meeting booked with these attendees on 21st September.

We are finalising the governance approach and will have set up the programme board and associated steering groups, with meetings booked within the next few months.

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 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 (LRF)

- 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 **Exercise Mighty Oak:** On 28-30 March we participated in this Tier 1 exercise which tested the cross-governmental response to a national power outage (NPO). In both the Lincs and Northants LRFs we participated in all three days at a Strategic Commander level. The Mighty Oak report has been published and identified 72 recommendations which will be shared with LRFs shortly.
- 1.2.8 Important lessons were identified from this exercise at a local and National levels. A key finding was the importance of water multiple partners realised the importance of water in the safe and continued discharge of their operations, so the loss of potable water is something that cannot be underestimated.

Lincolnshire LRF Update

- 1.2.9 **FloodEx 2022**: Following last year's multi-LRF exercise FloodEx22 and subsequent debriefs, the final report and recommendations list have now been signed off by Lincolnshire LRF Programme Management Board (PMB).
- 1.2.10 A number of debrief recommendations to further improve the LRF's tidal flood preparedness and response were passed onto the Lincolnshire LRF Flood Group, a working group chaired by the EA's Area Incident Team Senior Advisor. The group is

now meeting every 2 months to address these actions and report back to the LRF's PMB regularly with progress. One particular area of focus is better and more proactive sharing of EA data on defence condition, to enable the LRF to consider breach risk as part of the preparatory actions in the run-up to a forecast tidal surge.

Incident Management

Planning

- 1.2.11 East Coast Flood Risk: A LNA Tidal Incident Management Group (TIMG) is being formed within the EA to assure progress of actions along the East Coast and bring together multiple workstreams and improve communication across teams. A Programme Initiation Document is currently being drafted and will be available shortly which details the objectives of the group and milestones. The TIMG will bridge the gap between EA strategic and operational aims and projects, our incident response and procedure used by the duty team, and the response of our partners and tidal surge impacts on communities at highest risk.
- 1.2.12 **Breach Planning:** The AIT, Flood Resilience, East Coast Strategy and Asset Performance team members continue to work collectively to develop a specific procedure for both coastal (Tidal) and fluvial (river) breach response. Using AIMS and Below Required Condition (BRC) data provided by AP teams, the AIT will coordinate the development of a procedure for the duty team to ensure they can access the data and provide an assessment to our partners on where we believe would be the highest risk areas (based on the best available data). This piece of work will be a primary objective of the TIMG.
- 1.2.13 **Cell Broadcasting 'Emergency Alerts':** Emergency Alerts went live in March 2023 and a National Welcome Message was broadcast on Sunday 23 April to all enabled 4G and 5G mobile phones throughout the country. The message resulted in all mobile phones receiving a text along with a loud audible tone to alert them. Unfortunately, there were some minor technically issues that resulted in a few mobile phone users unable to receive the alert which the Cabinet Office is investigating.
- 1.2.14 The Environment Agency is the first organisation equipped to broadcast through the Cabinet Office an Emergency Alert and we will only be use them when issuing Severe Flood Warning alerts.
- 1.2.15 See the Gov.uk website for more details: www.gov.uk/alerts and https://www.gov.uk/alerts/announcements.

Preparation

1.2.16 **Summer Readiness Training:** During our summer readiness week we delivered 468 hours of learning about Incident Readiness over the last week of April to staff in

- Lincs & Northants area this is the equivalent of 12.6 working weeks in a row! This format seems to appeal to our staff and be very effective.
- 1.2.17 Our Training and Exercising staff have been developing some new exercise scenarios and recently visited another Area Incident Room in Welwyn Garden City to observe Exercise Nemo. We picked up some good tips and did more networking with T&E colleagues. Adam is also developing New Starter inductions into Incidents, with colleagues across the country to observe Exercise Nemo. We picked up some good tips and did more networking with T&E colleagues. Adam is also developing New Starter inductions into Incidents, with colleagues across the country.
- 1.2.18 Flood resilience engagement: We supported the Flood Action Campaign Pilot in Grimsby earlier in the year test a new mix of communication channels to alert communities to their risk of flooding, including material at bus stops and on billboards. After this successful campaign, we are now having ongoing discussions with national colleagues to decide how best to implement the learning from these pilots more widely.

Incidents and Emergency Response

- 1.2.19 **Industrial Action and automation of Alerts and Warnings:** Both Unison and Prospect have renewed their mandate for action, and we are awaiting details of any future action by staff.
- 1.2.20 **Drought Status**: Lincolnshire and Northamptonshire Area (LNA) moved to Normal status in May 2023 due to the rainfall that had occurred over the preceding weeks that saw river flows, groundwater, Soil Moisture Deficit, reservoirs and other criteria return to normal.

1.3 Resource Update

1.31 Teams in the Witham and South Forty Foot Catchments have been busy working with framework partners to delivery routine maintenance in the area. We work with a range of partners including CGM Group, Black Sluice IDB, Witham Fourth IDB, Witham Third IDB, Witham First IDB and Upper Witham IDB. At East Fen Catchwater we have been completing health and safety grass cutting on our raised embankments. The framework has also completed a full cut on embankments near the Till Washlands.





Photos 1: Health and safety grass cutting at East Fen Catchwater; Photo 2: Full grass cut on Till Washlands

1.3.2 At Billinghay Skirth, framework partners have also completed weed cutting using Truxor weed boats due to poor access issues. This section of watercourse has been a challenge in recent years, with the Field Team reviewing and trialling various methods to ensure the appropriate maintenance is delivered.





Photo 3 and 4: Weed cutting using Truxor weed boats, Billinghay Skirth. Before (left), after (right)

1.3.3 The Field team also replaced broken fencing with a secure gate providing safe access for future maintenance works at Kirkstead Bridge.





Intermittent Maintenance Programme

- 1.3.4 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.
- 1.3.5 In the Witham Catchment we have been progressing the planned works for 23/24 through scoping and design assessments with consultants ARUP & Jacksons. Site visits are an important step in the project design to ensure the most effective and efficient measure is put in place.
- 1.3.6 For example, at Carholme Drain we are scoping embankment repair works where the crest is showing signs of vehicle rutting. This can make it increasingly difficult to enable safe access to plant or machinery when delivering routine FCRM maintenance activities. The visit with consultants looked at access & egress options, environmental assessments and how these defence reinstatements could be achieved.



Photo 7: Rutting on crest bank on Carholme Drain; Photo 8: Skinnard Dyke bank reprofiling; Photo 9: location for improved vehicle access at Lincoln Washlands

- 1.3.7 We are also looking at options for bank reprofiling at Skinnard Dyke as there are signs of slippage and movement due to the age of the bank. Further movement in channel may restrict flow and affect channel conveyance performance. The aim is to reinstate the more uniform channel standard to enable better consistent flows.
- 1.3.8 At Witham Washlands we are looking to improve boat access along the Upper Witham, removing the issue shown in the photo above. The aim is to allow safe and easy access for weed boats to be craned into the channel. The site walkover identified options for access & egress, suitable compound locations, environmental assessments and also assisted in developing design solutions for the desired hard

- standing. This work will, once designed, also need to be approved by the Reservoir Engineer.
- 1.3.9 The MEICA team also deliver important works and we often find opportunities to align our programmes and seek further efficiencies. For example, at Claypole they have been carrying out important major mechanical maintenance at the weir. Working with consultants and contractors, they are replacing the penstocks and improving access. Whilst the structure is dewatered it allows us to carry out structural surveys and detailed asset inspections, the clearing of any debris and desilting which allow the structure to perform as efficiently as possible.







Photos 16, 17 and 18: De-watering of Claypole weir

Capital Recondition Programme

1.3.10 In the Witham Catchment we are carrying out works to repair burrowing animal damage to an embankment. In order to move the animals from the area, an artificial sett has been and installed to the rear of the Foss Dyke embankment. Once the animals have moved, the existing sett will be excluded and collapsed under licence. The existing sett had encroached into the flood embankment rendering it unable to retain the water at high levels and was creating access risks for mechanical plant when delivering routine maintenance activities.







Photos 19, 20 and 21: Works to move burrowing animals from the Foss Dyke embankment.

2. Conclusion

The Flood and Water Management Scrutiny Committee is invited to review and comment on the contents of this written update and share feedback on projects and key capital schemes with Environment Agency

3. Consultation

a) Risks and Impact Analysis

n/a

3. Appendices

n/a

4. 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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