



County Offices  
Newland  
Lincoln  
LN1 1YL

9 February 2024

**Flood and Water Management Scrutiny Committee**

A meeting of the Flood and Water Management Scrutiny Committee will be held on **Monday, 19 February 2024 at 10.00 am in the Council Chamber, County Offices, Newland, Lincoln LN1 1YL** for the transaction of the business set out on the attached Agenda.

Yours sincerely

A handwritten signature in black ink that reads 'Debbie Barnes'.

Debbie Barnes OBE  
Chief Executive

**Membership of the Flood and Water Management Scrutiny Committee**  
**(11 Members of the Council and 7 Other Voting Members)**

Councillors T R Ashton (Chairman), Mrs S A J Nutman (Vice-Chairman), P Ashleigh-Morris, A J Baxter, M Brookes, S Bunney, K J Clarke, A G Hagues, R P H Reid, P A Skinner and G J Taylor

**Other Voting Members**

District Councillors D Middleton (Boston Borough Council), D Hobson (East Lindsey District Council), P Vaughan (City of Lincoln Council), Mrs L Hagues (North Kesteven District Council), A C Beal (South Holland District Council), H Crawford (South Kesteven District Council) and I G Fleetwood (West Lindsey District Council)



**FLOOD AND WATER MANAGEMENT SCRUTINY COMMITTEE AGENDA  
MONDAY, 19 FEBRUARY 2024**

<b>Item</b>	<b>Title</b>	<b>Pages</b>
<b>1</b>	<b>Apologies for Absence/Replacement Members</b>	
<b>2</b>	<b>Declarations of Members' Interests</b>	
<b>3</b>	<b>Minutes of the previous meeting held on 27 November 2023</b>	5 - 14
<b>4</b>	<b>Announcements by the Chairman, Executive Councillors and Lead Officers</b>	
<b>5</b>	<b>Storm Henk and Flood &amp; Water Team update (including Section 19 investigations)</b> <i>(To receive a report from Matthew Harrison, Flood and Water Manager, which provides an update to the Committee on the recent work of the Flood Risk team including information of the status of all current flood investigations being undertaken in the County and the impact of the recent Storm Henk across Lincolnshire)</i>	15 - 24
<b>6</b>	<b>Environment Agency Update</b> <i>(To receive a report from Morgan Wray, Area Flood and Coastal Risk Manager, which updates the Committee on Environment Agency activities in Lincolnshire including progress on key capital schemes)</i>	25 - 44
<b>7</b>	<b>Anglian Water Update</b> <i>(To receive a report from Matt Moore, Flood Partnership Manager, on Anglian Water's recent activities in Lincolnshire)</i>	Verbal Report
<b>8</b>	<b>Working Group on Storms Impact (2023/24)</b> <i>(To receive a report from Simon Evans, Health Scrutiny Officer which enables the Committee to formalize its arrangements for the Storms Impact working group, including its remit, terms of reference and working arrangements)</i>	45 - 52
<b>9</b>	<b>County Council Resolution on Sewage Discharges</b> <i>(To receive a report from Simon Evans, Health Scrutiny Officer, on the Resolution referred to the Committee by Council which invites Members to consider actions available to the Council to respond to Sewage Discharges)</i>	53 - 66
<b>10</b>	<b>Flood and Water Management Scrutiny Committee Work Programme</b> <i>(To receive a report from Simon Evans, Health Scrutiny Officer, which enables the Committee to comment on the content of it's work programme for the coming year)</i>	67 - 70

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**Please note:** for more information about any of the following please contact the Democratic Services Officer responsible for servicing this meeting

- Business of the meeting
- Any special arrangements

Contact details set out above.

Please note: This meeting will be broadcast live on the internet and access can be sought by accessing [Agenda for Flood and Water Management Scrutiny Committee on Monday, 19th February, 2024, 10.00 am \(moderngov.co.uk\)](#)

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**FLOOD AND WATER MANAGEMENT  
SCRUTINY COMMITTEE  
27 NOVEMBER 2023**

**PRESENT: COUNCILLOR T R ASHTON (CHAIRMAN)**

Councillors P Ashleigh-Morris, A J Baxter, M Brookes, S Bunney, K J Clarke, A G Hagues, R P H Reid, P A Skinner, I D Carrington and J Tyrell

District Councillors D Middleton (Boston Borough Council), D Hobson (East Lindsey District Council), P Vaughan (City of Lincoln Council), M R Clarke (North Kesteven District Council), A C Beal (South Holland District Council) and I G Fleetwood (West Lindsey District Council)

External Agencies – Lisa Bush (Anglian Water), Yvonne Daley (Anglian Water), David Hickman (Executive Officer - Lindsey Marsh Drainage Board), Matt Moore (Anglian Water), Morgan Wray (Environment Agency)

Councillors W Bowkett, A Briggs, R Butroid, M Allan, J Killey, R Kendrick, Mrs M J Overton MBE, L Cawrey, and L Rollings (West Lindsey District Council) also attended the meeting. Councillors S Woolley, N Sear, A Austin, and S Rawlins attended the meeting remotely.

Officers in attendance:-

Simon Evans (Health Scrutiny Officer), Matthew Harrison (Flood and Water Manager), Vicky Jones (Flood Resilience Programme Coordinator), Chris Miller (Head of Environment), Christopher O'Rourke (Strategic Communications Lead), Brett Rycroft-Jones (Flood Resilience Programme Coordinator), and Jess Wosser-Yates (Democratic Services Officer).

**10 APOLOGIES FOR ABSENCE/REPLACEMENT MEMBERS**

Apologies for absence were received from Councillor Helen Crawford. It was reported that under Regulation 13 of the Local Government Committee and Political Groups Regulation 1990, Councillor Tyrell replaced Councillor Gary Taylor, and Councillor Ian Carrington replaced Councillor Susan Nutman for this meeting only.

**11 DECLARATIONS OF MEMBERS' INTERESTS**

No interests were declared at this point in proceedings.

**FLOOD AND WATER MANAGEMENT SCRUTINY COMMITTEE  
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12 MINUTES OF THE PREVIOUS MEETING HELD ON 18 SEPTEMBER 2023

RESOLVED

That the minutes of the previous meeting held on 18 September 2023 be approved and signed by the Chairman as a correct record.

13 ANNOUNCEMENTS BY THE CHAIRMAN, EXECUTIVE COUNCILLORS AND LEAD OFFICERS

The Chairman announced that nine Committee Members attended site visits on 15 October to locations such as the Horncastle and Louth flood alleviation schemes, the Louth Flood Storage Area, the Saltfleet, Fulbeck, Trusthorpe and Boygift Pumping Stations and coastal defences across the east of Lincolnshire. He thanked all involved in the organisation of the trip on behalf of the Committee.

The Chairman had extended the invitation to the Committee meeting to all Members of the County Council to prove them with a forum to raise local issues caused by Storm Babet, and welcomed all who were in attendance.

Councillor C Davie, Executive Councillor for Economic Development, Environment and Planning, had submitted his announcements to the Chairman to be shared on his behalf in his absence. The following matters were noted:

- The impact of Storm Babet in Lincolnshire was significant, and some catchments experienced over three times the average monthly rainfall.
- 29 Flood Warnings and 32 Flood Alerts had been put in place across the County, and Waddington rainfall gauging station had recorded the highest reading in 76 years during the storm.
- The Witham to Chapel Hill area had witnessed 364% of the average rainfall for October.
- 663 properties were recorded as internally flooded as a result of Storm Babet.
- The Flood and Water Team were analysing data and would investigate every instance of property flooding to determine its causes. This information formed part of the Section 19 (S19) Investigations that the Council undertook as part of its role as Lead Local Flood Authority (LLFA).
- 482 properties were recorded with external flooding.
- 98 instances of highway flooding were recorded which led to 48 road closures.
- Currently, there were 147 S19 investigations being commissioned.
- Recently completed flood alleviation works in Cherry Willingham, Kirton, Long Bennington and Scothern had functioned well during Storm Babet and no reported instances of flooded property had been received at the locations where works were undertaken.

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- The Government had announced multiple support grants for those directly affected by the effects of the storm, including a Community Recovery Grant, Council Tax Discounts and Business Rates Relief, all of which were administered by District Councils. Additionally, eligible flood-hit property owners where properties were seriously damaged internally between 19 and 25 October, could apply for up to £5,000 to make homes and businesses more resilient to future flooding via the Property Flood Resilience Repair Grant Scheme. This would be administered by the County Council, and Members were directed to the Flood Risk Management pages on the website for further information.

It was agreed that the announcements from the Executive Councillor for Economic Development, Environment, and Planning be circulated to Members and attendees.

14      STORM BABET AND FLOOD & WATER TEAM UPDATE (INCLUDING SECTION 19 INVESTIGATIONS)

Consideration was given to a report from Matthew Harrison, Flood and Water Manager and Morgan Wray, Area Flood Risk Manager – Environment Agency (EA), on the impact of Storm Babet in Lincolnshire.

The Flood and Water Manager informed that 663 properties were recorded as internally flooded as of Friday 24 November, which was three times as many than records from other significant storms. At the time of the meeting, Members were informed that 147 Section 19 investigations (S19s) had been commissioned and were reminded that these figures were likely to change. Additionally, the government had launched the Property Flood Resilience Repair Grant which enabled eligible flood-hit property owners to apply for up to £5,000 to make properties resilient to future flooding. The Grant would be administered by the Council and residents were encouraged to register their interests. It was noted the Grant would be available until March 2025.

As part of this item, the Area Flood Risk Manager – EA guided Members through a presentation on the impact of the storm. The Draft Flood Hydrology Report determined that up to six millimetres of rain had fallen in a 15-minute period in some locations, and the EA responded by imposing 32 flood alerts and 29 flood warnings. EA colleagues also had attended several tactical and strategic command group multi-agency meetings. Finally, the Area Flood Risk Manager provided a brief overview of the anticipated recovery process, such as asset and defence inspections and a review of Flood Warnings.

The Committee and guest Members were invited to highlight any issues in their divisions caused by Storm Babet; an extensive discussion ensued, and the following matters were highlighted:

**Section 19 Investigations (S19s)**

- The Flood and Water Management Act 2010 granted supplemental powers to the Council and as the Lead Local Flood Authority (LLFA), it was mandated to conduct

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S19s; this legal obligation required an identification of the source of flooding, and the process assessed whether all partners had sufficiently performed their function.

- Residents were consulted as part of the investigation, and it was highlighted that the Flood and Water Team valued local knowledge and experience; residents also received a copy of the final S19 report.
- The County Council's revenue budget commissioned S19s.
- The flooding of the B1190 had not triggered a S19; the Flood and Water Manager agreed to assess this matter but highlighted that property flooding was the current focus of the Flood and Water Team.
- 'Near miss' data informed S19s, and it was acknowledged that external flooding was also distressing for residents. There was no statutory duty for the Council to inspect 'near misses' yet they were still investigated by the Flood and Water Team.

**Emergency Response**

- All attendees commended the efforts of the emergency services and their response to flooding.
- The Executive Councillor for Fire & Rescue and Cultural Services extended an invitation to the Public Protection and Communities Scrutiny Committee at the discretion of the Chairman and the Chief Fire Officer.
- Members were directed to the Lincolnshire Resilience Forum (LRF) website and were urged to attend the Member Training at the Lincolnshire County Emergency Centre.

**Overflow of River Banks**

- There were widely reported instances of water banks overflowing and bursting, and it was suggested by Members that raising the bank level could mitigate this in the future.
- The Flood Partnership Manager – Anglian Water (AW) informed that a river breach implied that AW assets were damaged.
- The Flood Partnership Manager – AW expressed that when watercourses broke banks, the sewer network became easily overwhelmed which led to the water being contaminated by effluent; it was further noted that sewer networks were complex and the primary issue they faced was infiltration.

**Water Ownership and Responsibility**

- Residents had informed many Members that they were unsure of which organisation to contact when faced with flooding, and that details were not easy to access or understand. Often, residents were redirected to other organisations which caused further distress.
- It was requested that Parish Council's be provided with a list of contacts in various organisations and their responsibilities.
- The Executive Councillor for Fire & Rescue and Cultural Planning informed that information regarding water ownership was available on the LRF website.



**Flood Resilience and Climate Change**

- The EA was determining whether flood warnings were timely and accurate; this information underpinned the importance of a community action plan. Members were also informed that flood alerts were issued in more areas than flood warnings and therefore may not have acknowledged or identified local nuances.
- Flood resilience was imperative as Officers anticipated that climate change would cause more extreme weather events.
- Members recalled that flood resilience was raised as a topic at multiple Drainage Board (IDB) meetings and apprehension was expressed as long-term prevention methods and efforts were considered somewhat inadequate.

**Partnership working**

- Lindsey Marsh Drainage Board (LMDB) was working with the Environment Agency to develop a trial in order to carry out maintenance works on behalf of the EA on low and medium consequence systems. This had already been implemented on one watercourse as a rapid response to ongoing inundation of agricultural land and other property, and others are being identified. It was intended that this would supplement existing longer term arrangements such the Public Sector Co-Operation Agreement.
- The Memorandum of Understanding between the county and district councils provided a coordinated and collected response to flooding, including provision of emergency property level protective measures.
- Partnership working was observed during and Storm Babet and colleagues had to follow the advice of other organisations such as Natural England, and were required to adhere to the relevant legislation.

**Funding**

- AW requested in excess of £25 million from the government to assist with the impact of Storm Babet in Lincolnshire.
- The National Flood Forum worked with residents regularly impacted by flooding to support their efforts in attaining accessible and affordable insurance on their properties.
- The Area Flood Risk Manager highlighted there was a small measure of additional funding for economically deprived communities to assist the most vulnerable residents impacted by flooding. Additionally, there was a small amount of provision to support those whose mental health was negatively impacted.
- Members welcomed the Property Flood Resilience Repair Grant Scheme.
- It was requested that the Executive allocated more money in the budget for flood prevention.

**Resource management**

- Members informed that some residents experienced difficulties in acquiring sandbags.

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- The Flood Partnership Manager – AW informed that the flooding experienced in Lincolnshire was localised and severe, and in some cases all AW phone lines were busy and 2000 people were on hold.
- Members raised that some residents expressed disappointment towards limited responses from organisations; consequently, the Flood and Water Manager requested that details of these instances were forwarded to him for investigation.
- The Flood Partnership Manager – AW acknowledged residents’ frustration however he noted that the volume of water could not be decreased by officers on the scene.
- It was considered whether resources ought to have been increased once flood warnings had been issued in Lincolnshire.
- The Area Flood Risk Manager informed the Committee that the EA typically used the reasonable worst-case scenario to proactively allocate resources.
- Members raised that it was necessary that residents ensured that sandbags were disposed of properly.
- AW was likely to conduct a full investigation into the issues identified with the Horncastle Flood Alleviation Scheme during Storm Babet; it was known that sluice did not operate automatically, nor did it collect as much water as expected.

**Maintenance**

- The Executive Officer – LMDB informed that IDBs managed works in coastal and east bank areas and maintained these networks annually; LMDB were lobbying government for increased resourcing to facilitate river maintenance.
- The EA was restricted regarding their ability to deploy resources for maintenance; funding mechanisms prioritised certain properties - primarily residential - which was beneficial in an urban catchment. However, this rendered it difficult to source funding for rural catchments and agricultural properties.
- Residents reported they had not seen EA maintenance work in some locations for multiple years. Members highlighted that residents acknowledged the pressures faced by organisations caused by financial restraints, however the perceived lack of maintenance had exacerbated frustrations and the impact of flooding.
- The Flood and Water Team worked closely with Highways colleagues and trusted their oversight on road flooding.
- The Flood and Water Manager agreed to liaise with the Highways Team further to address blocked gullies.
- The EA, IDBs oversaw locally maintained watercourses, and the importance of collective responsibility was emphasised.

Additionally, the following matters were also raised:

- The Flood and Water Team had recorded approximately 1500 instances of flooding of varying degrees, which led to the establishment of tactical command group to coordinate responses; Flood Risk Management authorities were also represented on this group.
- Floodline was ran by the Council and was open 24 hours a day.

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- Residents were urged to report flooding on Fix My Street to alert the Flood and Water Team.
- It was noted that a Working Group on the response to Storm Babet would be established; it was emphasised the work of the Group ought to be broad, and include the human impact of flooding, as well as assessing other factors (contextual, economic, agricultural) and involve a cost benefit analysis of flood defenses and maintenance programmes.
- The minutes from the discussion on Storm Babet held at the Environment and Economy Scrutiny Committee would be circulated to Committee Members to inform the Working Group.
- Members acknowledged the severity of internal flooding and the adverse impact it had on residents' mental health.
- A number of particularly vulnerable people were affected by flooding.
- Groundwater flooding posed a problem for underground infrastructure.

RESOLVED

1. That all information presented by contributors on Storm Babet be noted; and
2. That a Working Group be established to investigate the response of the Council and its partners following Storm Babet

*(The meeting adjourned from 1:05pm until 1:20pm)*

15      ENVIRONMENT AGENCY UPDATE

It was noted that Members felt the Environment Agency had sufficiently updated the Committee on their recent activities in Lincolnshire within Item 5.

RESOLVED

That the information provided by the Environment Agency as part of Item 5 on their projects and key schemes be noted.

16      ANGLIAN WATER UPDATE

The Committee received a presentation from Lisa Bush – Head of Pollution Improvement Strategy – Anglian Water (AW) on Storm Overflows. This update was requested at the meeting of the Flood and Water Management Scrutiny Committee meeting held on 18 September 2023.

Members were informed that storm overflows were necessary and released diluted wastewater into rivers to prevent the sewers from overloading and backing up into properties. A 54% reduction in the duration of storm overflow spills had been observed, and AW anticipated £200 million of direct investment to facilitate further reductions.

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AW recognised high public concern regarding storm overflows, and therefore had committed to 11 storm overflow improvement schemes; five of which were located in Lincolnshire.

There were 139 Storm Overflows in Lincolnshire, 54 of which spilled less than ten times per year. Between 2025-30, AW would invest over £28 million on improvements to storm overflows in Lincolnshire County Council.

During consideration of this item, the following matters were noted:

- Members requested further information on glass coated storm tanks; it was clarified that they held sediment and were easily cleaned; they were designed to empty once weather stabilised. It was further noted that the contents did not remain in the tank long enough to ferment.
- Members questioned how overflows were monitored and recorded. They were informed that AW recorded all overflows, and unexpected overflows counted as pollution. In these cases, AW were obliged to notify the EA.
- It was questioned whether less pollution had occurred since monitoring overflows; it was clarified that a 54% reduction had been observed since monitoring, although it was accepted that this reduction was partially due to increased accuracy of records.
- Members welcomed that overflows were monitored, however they noted more investment may be required to mitigate the impact of climate change.
- Concern was raised that housing developments could exacerbate the complexity of draining issues and water ownership; the Flood Partnership Manager – AW informed the Committee that Zonal Charging was introduced by the Department for Environment, Food and Rural Affairs which required developers to pay funds to AW to fund improvements to drains.
- Members emphasised the importance of partnership working between planning authorities, the EA, AW and the Council.

**RESOLVED**

That the presentation from Anglian Water be noted.

**17 PROJECT GROUNDWATER (GREATER LINCOLNSHIRE)**

The Committee considered a report and presentation from Brett Rycroft Jones, Flood Resilience Programme Coordinator, and Vicky Jones, Flood Resilience Programme Coordinator which provided an update on the workings of Project Groundwater in Greater Lincolnshire.

Members were guided through the presentation and were informed that multiple projects were underway in Salting Allotments (Grimsby), Hillside Avenue (Lincoln), as well as a Salinisation project in partnership with the University of Lincoln.

A significant project in Bourne to locate Boreholes was also ongoing, and Wilkin Chapman Solicitors were beginning proceedings to create a legal document defining ownership and maintenance responsibilities of Boreholes. During consideration of the report, the following matters were noted:

- Many details regarding the origin and purpose of Boreholes were unknown; information held by the British Geological Society was limited, although it was established, they were predominantly used for water.
- The lack of information on the ownership and conditions of Boreholes emphasised the importance of developing the legal document.
- Members questioned the trend on salination problems, and were informed that the trend was becoming more noticeable to farmers; it was reported that retailers were requesting the same quantity of goods but farmers had to use more land to keep up with demand.
- The Committee welcomed the work undertaken alongside the University of Lincoln on crop diversification, and the Flood Risk Coordinator informed Members that farmers in Holbeach and Clements were willing to trial the project.
- Members highlighted that crop yields were also affected by soil quality and ought to be monitored.

RESOLVED

That the report and presentation be noted.

18 COUNTY COUNCIL RESOLUTION ON SEWAGE DISCHARGES

RESOLVED

That this item be deferred until the meeting on 19 February 2024.

19 FLOOD AND WATER MANAGEMENT SCRUTINY COMMITTEE WORK PROGRAMME

Consideration was given to a report by Simon Evans, Health Scrutiny Officer, which enabled the Committee to comment on the content of its work programme for the coming year.

It was noted that the County Council Resolution on Sewage Discharges would be added to the agenda of the meeting on 19 February 2024.

RESOLVED

That the Work Programme be approved subject to the above amendment.

The meeting closed at 2.18 pm

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**Open Report on behalf of Andy Gutherson, Executive Director of Place**

Report to:	<b>Flood &amp; Water Management Scrutiny Committee</b>
Date:	<b>19 February 2024</b>
Subject:	<b>Storm Babet, Storm Henk and Flood &amp; Water Team update (including Section 19 investigations)</b>

**Summary:**

To provide an update to Committee on the recent effects of Storm Henk across Lincolnshire and the work of the Flood and Water team including informing the Committee of the status of all current flood investigations being undertaken in the County.

**Actions Required:**

Members are invited to:

1. View the current list of completed and active flood investigations online at <https://www.lincolnshire.gov.uk/flood-risk-management/flood-investigations>
2. Inform Democratic Services in advance if they wish to raise any particular sites at the forthcoming Committee meeting.
3. Note and comment as required on updates provided on the work of the Floods and Water Team.

**1. Background**

A standing item to inform the Committee on the position of all current Section 19 investigations in the County. Whilst this report highlights the status of such investigations in the county, the opportunity is also being taken to update the committee on recent work and initiatives for which the Floods and Water Team are involved. This will hopefully provide members of the Committee with a much broader understanding on some of the recent work that has been undertaken in the County.

### **Investigations under Section 19 of the Flood and Water Management Act 2010**

The Committee will be aware that all such investigations are published on the County Council's website by means of an interactive map, whether the investigation is completed, actively under investigation or awaiting works to mitigate future flooding. When the Floods and Water Team are made aware of flooding that will trigger a S.19 investigation the database is updated, and as the online system is updated on a daily basis at 7pm, the information relating to that S.19 investigation will be available to view the same evening.

It is a duty under Section 19, Flood & Water Management Act 2010 (F&WMA) for the Lead Local Flood Authority (LLFA) to carry out investigations to identify which Risk Management Authorities (RMAs) have a flood risk management function in connection with the flood and whether they have exercised, or intend to exercise, that function in response to the flood. To assist with this, Lincolnshire County Council as the LLFA makes recommendations for proportionate works to manage future flood risk, to be delivered by individual RMAs or in partnership as considered appropriate or expedient. Such recommendations are also published although this is over and above the requirements of the F&WMA; all recommendations for mitigation works and the RMA leading those works are available to view on the interactive mapping. If Members have any site-specific questions, they are requested to contact the Flood and Water Manager in advance of the meeting.

The breakdown and current status of Section 19 Investigations is shown in table 1 on the following page:



	FY 2018 - 2019		FY 2019 - 2020		FY 2020 - 2021		FY 2021 - 2022		FY 2022 - 2023		FY 2023 - 2024		Total
	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing
BBC	0	2	0	11	0	4	0	1	1	7	14	0	15
CoLC	0	2	0	10	0	6	0	9	0	4	16	0	16
ELDC	0	10	1	33	1	8	0	2	3	9	74	4	79
NKDC	0	8	0	31	0	5	0	9	1	4	69	0	70
SHDC	0	3	0	11	1	15	1	1	14	22	12	0	28
SKDC	0	2	1	16	3	13	0	5	3	3	53	2	60
WLDC	0	1	0	41	1	7	0	4	3	12	48	1	52
193													
<b>Total</b>	0	28	2	153	6	58	1	31	25	61	286	7	320

Table 1 – Status of Section 19 Investigations (January 2024)

## Storm Henk – 2 January 2023

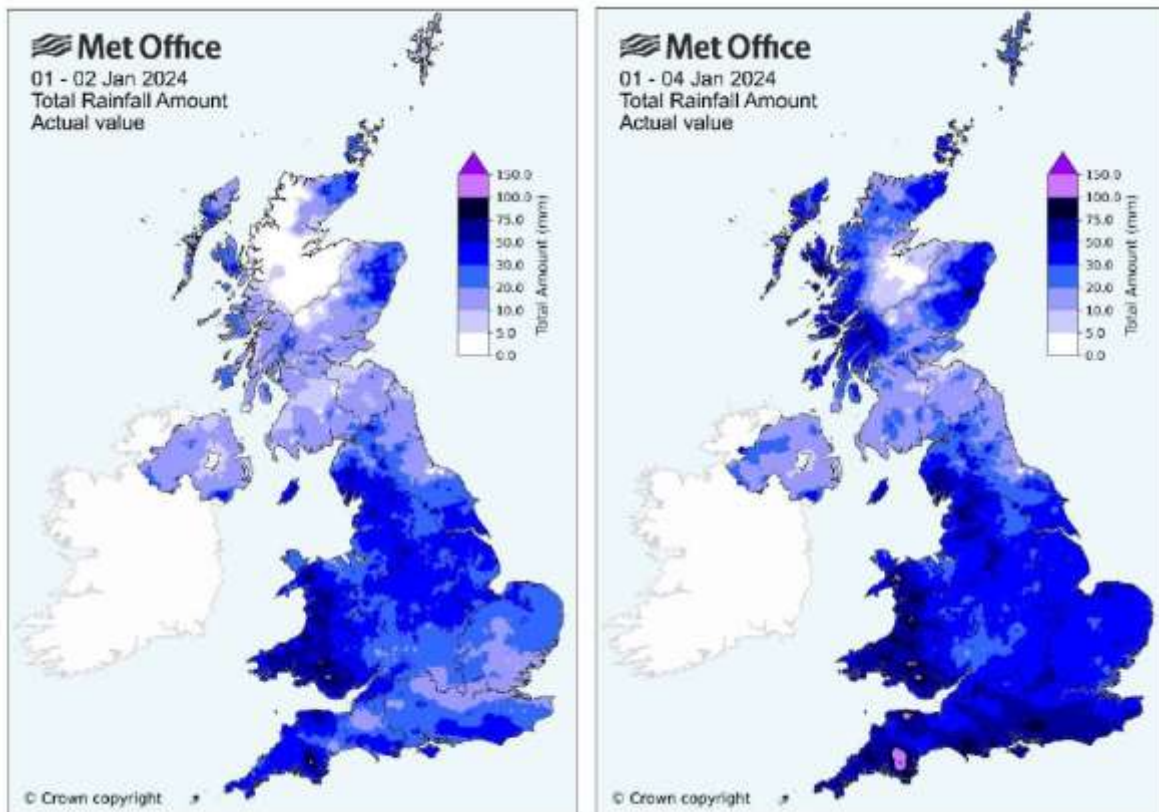
Storm Henk, the eighth storm of the 2023-2024 storm season, brought damaging winds and heavy rain to many parts of England and Wales on 2 January 2024.

Heavy rain from storm Henk contributed to significant flooding problems, following the wet weather during autumn, particularly as a result of Storm Babet, and in December 2023. Between 1 October 2023 and 4 January 2024, many areas across the UK received more than 150% of the 1991-2020 long term average rainfall for the four-month period October to January, including parts of the East Midlands.

For some of the wider context with regards to the impact of the storm and the weather patterns experienced the below information is taken from the following source on the Met Office website -[Microsoft Word - 2024 01 storm henk v1.docx \(metoffice.gov.uk\)](#). Information has been extracted with more specific reference to the events experienced in Lincolnshire.

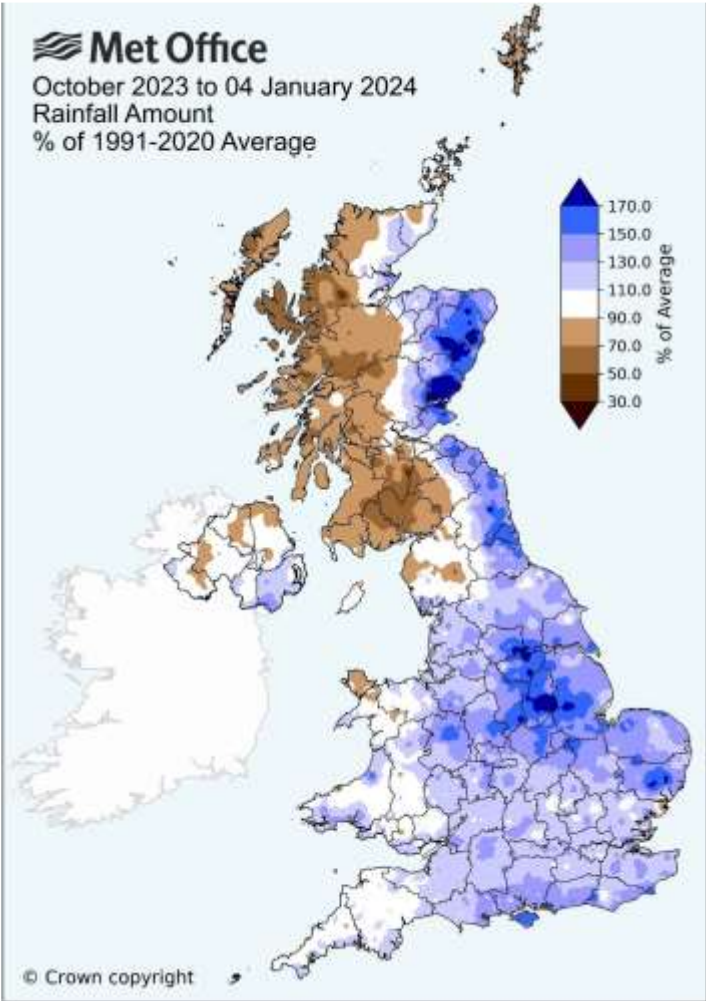
### Weather Data

The charts below show rainfall totals for the first two days of 2024 (left) and the first four days (right). 2024 started on a very wet and unsettled note, with over 30mm of rain falling widely over much of England and Wales with over 50mm in some areas.



From a Lincolnshire perspective Storm Henk brought almost a month's worth of rainfall to parts of the county in just three days. For example, Cranwell recorded 44.8mm (1.8in) of rain between 31 December and 3 January. The January average there for the whole month is 48.1mm. Elsewhere Holbeach in the south of the county received 38.4mm, well over half of their average January rainfall of 50.8mm. All of this came off the back of one of the wettest autumns and Decembers on record which has already left the ground across the county saturated. The close proximity of Storms Babet and Henk and the extensive impacts that have resulted from them did not permit enough time to assess and understand any additional causation of flooding (beyond excessive rainfall and saturated ground) and develop any mitigation plans. Investigating the causes of flooding will remain a priority within the available time and resources moving forward, subject to any further events during this winter period. As has been widely reported in the media the flooding impacts have been felt across the country and are by no means confined to Lincolnshire.

The chart below shows rainfall totals from October 2023 to 4 January 2024 as a percentage of the four-month long-term average for October to January inclusive. Remarkably, only a few days into January, several parts of the country, including Lincolnshire had received over 150% of the four-month average rainfall, and in some locations over 170%.



## Impacts in Lincolnshire

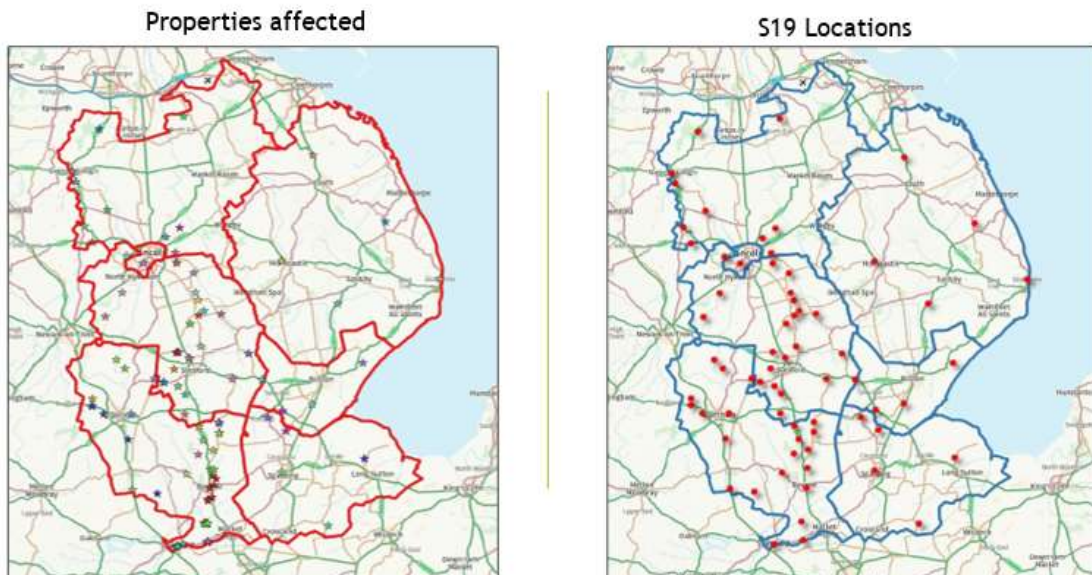
To date, following the impacts of Storm Henk, 68 Section 19 investigations have been commissioned dealing with 122 properties which suffered internal flooding. All district council areas were affected as shown in Table 2 below:

**Table 2 – Number of properties internally flooded by district authority area**

District	Number of Properties Internally Flooded	No of S19 Reports Commissioned
BBC	3	3
CoLC	2	1
ELDC	7	5
NKDC	34	22
SHDC	6	5
SKDC	60	22
WLDC	10	10

The maps below in figure 1 show the location of Section 19 Investigations across the county as a result of Storm Henk:

**Figure 1 – Distribution of Section 19 Investigations following Storm Henk**

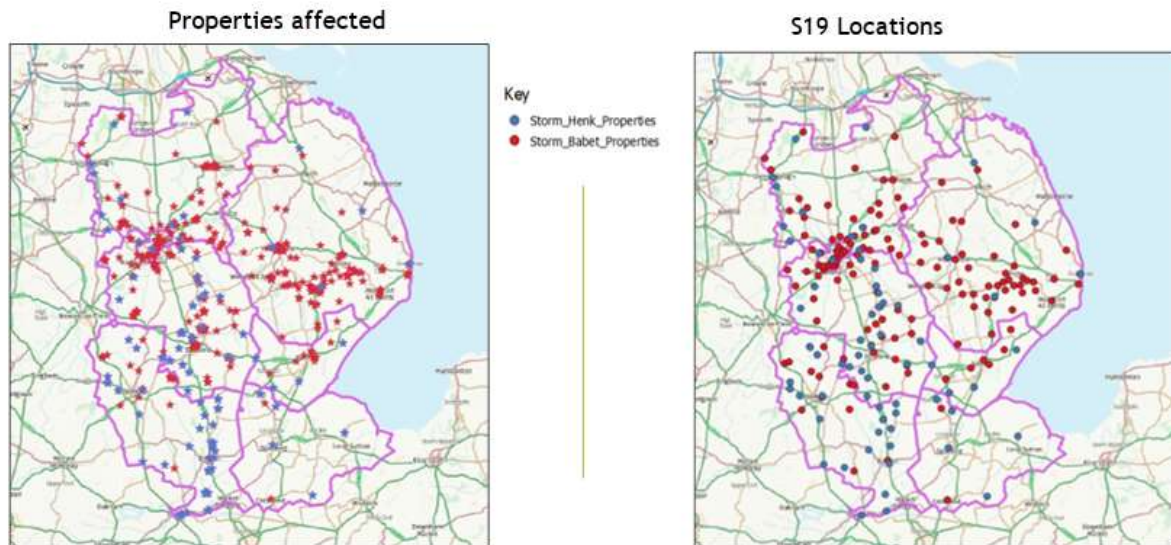


The combined effects of Storm Babet and Storm Henk have caused significant and widespread issues across Lincolnshire on a scale not seen since Lincolnshire County Council became Lead Local Flood Authority in 2012. At the time of writing following the

effects of flooding from both storm events 235 Section 19 Investigations are being undertaken covering 825 properties affected by internal flooding. Of these, 42 properties were affected by internal flooding from both Storm Babet and Storm Henk.

Figure 2 below shows the distribution of S.19 Investigations for both Storm Babet and Storm Henk:

**Figure 2 – Distribution of Section 19 Investigations following Storm Babet and Storm Henk**



The ambitious target has been set to have all Section 19 Investigations linked to Storms Babet and Henk completed by August 2024. This will however be kept under constant review as the complexity of investigations will vary, however it is recognised the importance of completing such investigations as quickly and efficiently as possible so that recommendations can be published.

### Flood Recovery Framework

Following activation of the Flood Recovery Framework in October 2023 in the aftermath of Storm Babet, a further Flood Recovery Framework was activated following Storm Henk. Help is available for:

1. Flooded households in eligible affected areas, who can apply for up to £500 cash to help with immediate costs.
2. Households and businesses significantly affected, who will be eligible for 100% council tax and business rates relief for at least 3 months.
3. Small-to-medium sized businesses in eligible affected areas, who can apply for up to £2,500 from the Business Recovery Grant to help them return quickly to business as usual.
4. Eligible flood-hit property owners, who can apply for up to £5,000 to help make their homes and businesses more resilient to future flooding via the Property Flood Resilience Repair Grant Scheme.

5. Farmers who have suffered uninsurable damage to their land will be able to apply for grants of up to £25,000 through the Farming Recovery Fund

Government have again established the Property Flood Resilience (PFR) Grant Scheme with the aim of reducing the risk of future flooding and/or minimising the effects of future flooding for properties flooded as a result of Storm Henk in January 2024. Eligible properties affected by the storm between the dates of 2 and 12 January will be able to apply to Lincolnshire County Council who will be administering this grant with up to £5,000 available to help make homes and businesses more resilient to future flooding. The £5000 grant covers property surveys with remaining funds being able to be used for physical PFR measures. Further information and guidance can be found on the Lincolnshire County Council website here - [Property flood resilience grant – Lincolnshire County Council](#)

To date Lincolnshire County council has received 286 Expressions of Interest for the PFR grant scheme following both Storms Babet and Henk. Subsequently 141 Full applications have been returned for assessment and for initial property surveys to be undertaken. Applications are currently being dealt with in batches, assessed against a priority criteria to ensure that applications put forward to PFR contractors can be delivered within the timeframes set out in government guidance to ensure the grant monies can be drawn down in the specified timeframe.

This process is being kept under constant review as applications are received as there will be a maximum capacity of work that contractors will be able to achieve within the timeframes applied by Government.

## **2. Conclusion**

The Flood and Water team will continue to prioritise work on Section 19 investigations, and the recommendations that come out of them. Storm Henk, and Babet before it, have again highlighted the impacts significant weather events have on resource to ensure Lincolnshire County Council can undertake its duty under the Flood and Water Management Act. The Floods and Water team will continue to work closely with internal departments and external partners and stakeholders to assess the impacts of these extreme weather events and seek mitigation measures wherever possible, as well as advising individuals and communities how they can become more resilient to such events as and when they may happen in the future.

## **3. Consultation**

### **a) Risks 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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## Open Report on behalf of the Environment Agency

<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**

<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

	
<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**

	
<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**

<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**

<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

	
<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**



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



<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**

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

<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**

	
<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**

	
<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**

<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.

This report was written by Morgan Wray, who can be contacted at [morgan.wray@environment-agency.gov.uk](mailto:morgan.wray@environment-agency.gov.uk)



**Open Report on behalf of Andrew Crookham,  
Deputy Chief Executive and Executive Director of Resources**

Report to:	<b>Flood and Water Management Scrutiny Committee</b>
Date:	<b>19 February 2024</b>
Subject:	<b>Working Group on Storms Impact (2023/24)</b>

**Summary:**

On 27 November 2023, the Committee agreed to establish a working group focusing on the impacts of Storm Babet, which occurred in October 2023. Since that date there have been further storms, including Storm Henk, which have led to further flooding events in Lincolnshire.

This item enables the Committee to formalise its arrangements for the working group, including its remit and timetable.

**Actions Required:**

- (1) That the terms of reference be approved, as set out in Appendix A, which includes the following remit (subject to any comments from the first meeting of the working group), which includes the following remit for the working group:
  - (a) To consider the impact of Storm Babet and Storm Henk in late 2023 and early 2024 including the responses from partner organisations in relation to floods and incidents in Lincolnshire.
  - (b) To submit a report to the Flood and Water Management Scrutiny Committee by October 2024 on the Working Group's findings, considering good practice, lessons learned and future action to be taken, including (but not limited to) possible recommendations both to partner agencies and Lincolnshire County Council.
  - (c) To aim to be satisfied by its conclusion that all findings have been considered, including the work completed by the Flood and Water Management Scrutiny Committee on Section 19 report findings, whilst taking into account any financial implications that may arise out of any actions.
  - (d) To consider addressing the concerns raised by the public and stakeholders around information available to communities.

- (2) That in addition to the working group meeting which took place on 16 February 2024, a further five meetings be programmed, with a view to finalising the working group's report by 30 September 2024.

## 1. Background

### Establishment of Working Group

On 27 November 2023, the Committee considered a detailed item on the impacts of Storm Babet, with contributions from representatives from various partner agencies. The Committee agreed to establish a working to look in greater detail at the impact of Storm Babet and the responses made. Since November, there have been further named storms, including Storm Henk, which have led to flooding in Lincolnshire. About sixty of the properties flooded by Storm Babet were again flooded by Storm Henk. For this reason it is proposed to broaden the remit of the working group beyond Storm Babet to include other storms during the 2023/24 storm season.

### Terms of Reference and Working Arrangements

Terms of reference and working arrangements have been drafted and are attached at Appendix A for the Committee's consideration and approval. This document is also being considered by the first meeting of the working group on 16 February 2023.

#### 1.1 - Planned Meeting Dates

The following schedule of meetings is planned. For each the dates the planned items are indicated. Other items may be added provided they meet the working group's remit. Similarly, some of the items may be considered on different dates, depending on the availability of the contributor.

Date	Activity / Contributor
16 February	<ul style="list-style-type: none"> <li>• Terms of Reference</li> <li>• Internal Drainage Boards</li> </ul>
15 March	<ul style="list-style-type: none"> <li>• Local Resilience Forum</li> <li>• District Councils</li> </ul>
5 April	<ul style="list-style-type: none"> <li>• Section 19 Investigations (Lincolnshire County Council)</li> </ul>
10 May	<ul style="list-style-type: none"> <li>• Anglian Water</li> </ul>
24 May	<ul style="list-style-type: none"> <li>• Environment Agency</li> </ul>

Date	Activity / Contributor
7 June	<ul style="list-style-type: none"> <li>Review of Evidence Received and Themes for Final Report of the Working Group</li> </ul>

## 2. Conclusion

The Committee is invited to consider and approve the Storms Impact Working Group Terms of Reference, as set out in Appendix A of the report.

## 3. Appendices

These are listed below and attached to the back of the report	
Appendix A	Storms Impact Working Group – Proposed Terms of Reference

## 4. 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 by Nicola Calver, Democratic Services Manager, who can be contacted at [Nicola.Calver@lincolnshire.gov.uk](mailto:Nicola.Calver@lincolnshire.gov.uk) and, Simon Evans, Health Scrutiny Officer, who can be contacted at [Simon.Evans@lincolnshire.gov.uk](mailto:Simon.Evans@lincolnshire.gov.uk)

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# Appendix A

## Storms Impact Working Group – Proposed Terms of Reference

### Formation

1. The Storms Impact Working Group will be formed in accordance with the requirements set out in Part 4 of the Council's Constitution.
2. These Terms of Reference will be agreed by the Flood and Water Management Scrutiny Committee.

### Purpose and Remit

3. This Working Group will:
  - (a) consider the impact of Storm Babet and Storm Henk in late 2023 and early 2024 including the responses from partner organisations in relation to floods and incidents in Lincolnshire.
  - (b) submit a report to the Flood and Water Management Scrutiny Committee by October 2024 on the Working Group's findings, considering good practice, lessons learned and future action to be taken, including (but not limited to) possible recommendations both to partner agencies and Lincolnshire County Council.
  - (c) aim to be satisfied by its conclusion that all findings have been considered, including the work completed by the Flood and Water Management Scrutiny Committee on Section 19 report findings, whilst taking into account any financial implications that may arise out of any actions.
  - (d) consider addressing the concerns raised by the public and stakeholders around information available to communities.

### Membership

4. The Storms Impact Working Group will be comprised of the entire Flood and Water Management Scrutiny Committee as agreed by exception due to the wide reaching and public nature of the Working Group's remit.
5. Substitution Members are not accepted.

### Roles and Responsibilities

6. The Working Group will be managed and facilitated by a Scrutiny Officer and supported by the Lead Officers within the Flood and Water Team. Partners and Stakeholders such as the Environment Agency, Anglian Water and Local Resilience Forum and are invited to attend and also to submit paperwork for consideration.
7. Members of the Working Group have due regard to the level of officer support and other resources required and will work closely with the teams to produce outcomes.

## **Meetings**

8. Due to the wide-ranging remit of this working group, the Storms Impact Working Group will meet up to six times within its set timeframe for completion. Should additional meetings be required, the Overview and Scrutiny Management Board will be requested to approve an extension and any necessary additional resources.
9. Meetings to take place within the schedule agreed on formation and will be held in the Council Chamber at County Offices, Lincoln.
10. Meetings will be chaired by the Chairman of the Flood and Water Management Scrutiny Committee, or (in their absence) the Vice Chairman.
11. The minimum attendance will be three Members. Should this not be met, the quorum rules within the Council's Constitution will be applied.
12. At each meeting the Scrutiny Officer will introduce the actions log from previous meetings.
13. Members of the Working Group that may not be able to attend a meeting should notify Democratic Services in accordance with normal absence procedures.

## **Working Etiquette**

14. Members of the Working Group will exchange views and opinions and conduct their affairs in accordance with the Code of Conduct and the Member- Officer Protocol.
15. Agenda and papers and/or presentations will be shared with Members of the Working Group at least five working days in advance of the meeting.
16. All reports considered by the Working Group will be taken as read permitting time for brief introduction.
17. An action log will be taken and managed by the Scrutiny Officer and all assigned tasks will be monitored by the Working Group.
18. Democratic Services Officer will produce a set of notes capturing key points raised in debate and populate the action log.

## **Members' Interests**

19. Members will declare at the beginning of each meeting any personal/professional interests which may or may not have informed their Pecuniary Interests Forms which are relevant to the items of business to be discussed.

## **Reports**

20. All LCC reports including the final report (summarising the Working Group's outputs and recommendations to the parent cttee) to be produced in collaboration between Leading Officers and the Scrutiny Officer.
21. Evidence reports will be produced by stakeholders and cleared by Leading Officers prior to Working Group submission.

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**Open Report on behalf of Andrew Crookham,  
Deputy Chief Executive and Executive Director of Resources**

Report to:	<b>Flood and Water Management Scrutiny Committee</b>
Date:	<b>19 February 2024</b>
Subject:	<b>County Council Resolution on Sewage Discharges</b>

**Summary:**

On 15 September 2023, Lincolnshire County Council discussed a motion on sewage discharges. Following the debate, the Council referred the matter to this Committee, with a view to the issue being fully discussed by this Committee and the actions available to the County Council determined. On 27 November 2023, the motion was reported to this Committee, which decided to defer the matter to this meeting, given the importance of consideration of Storm Babet in November. However, the Committee was provided on 27 November with a presentation from Anglian Water on storm overflows, which is attached to this report for background information.

This item enables the Committee to consider the issues raised by the County Council debate, with a focus on the actions available to the County Council.

**Actions Required:**

The Committee is invited to: -

- (1) discuss the issues raised by the County Council motion;
- (2) note the information contained in the presentation provided by Anglian Water on Storm Overflows on 27 November 2023; and
- (3) decide whether to request the County Council's Executive Councillor for Economic Development, Environment and Planning to take any further action at this stage.

## 1. County Council Motion – 15 September 2023

On 15 September 2023, the County Council considered a motion on sewage discharges into rivers and the sea. The motion as proposed at the meeting contained the following wording:

*“We are aware that:*

- *Local residents are deeply concerned about human health and the impact on wildlife of regular wastewater discharge, including untreated sewage, into our local rivers and seas.*
- *Anglian Water discharges sewage into local rivers and seas on a regular basis.*
- *Water companies are writing renewed long-term plans now.*
- *The Environment Agency has overall responsibility, but needs to be clearer on the impacts.*

***This Council calls on our MPs, water companies and the Environment Agency to take whatever action is necessary to stop raw sewage discharges in our area at the earliest possible time.”***

An alteration to the motion was accepted by the County Council, the effect of which was to include the following additional wording:

***“This Council also asks for this matter to be referred to the Flood and Water Management Scrutiny Committee, where this issue can be fully aired, and actions available to this Council can be determined.”***

On 27 November 2023, the above motion was reported to this Committee, which decided to defer the matter to this meeting, given the importance of its consideration of the responses to Storm Babet at the November meeting.

## 2. Anglian Water Presentation: Storm Overflows

On 27 November 2023, the Head of Pollution Improvement Strategy Anglian Water provided a presentation to the Committee on Storm Overflows, which is attached at Appendix A to this report for background information.

## 3. Actions Available to the County Council

As indicated in the Council’s decision of 15 September 2023, the focus of the discussion at this meeting will be the powers available to the County Council, which can include, for example, requesting that the Executive Councillor for Economic Development, Environment and Planning raising the issues, as indicated in the motion.

#### 4. Appendices

These are listed below and attached to the report.

Appendix A	Storm Overflows – Presentation by Head of Pollution Improvement Strategy Anglian Water
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#### 5. 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 by Simon Evans, Health Scrutiny Officer, who can be contacted via [Simon.Evans@lincolnshire.gov.uk](mailto:Simon.Evans@lincolnshire.gov.uk)

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# Storm overflows

**Lisa Bush**

Head of Pollution Improvement  
Strategy  
Anglian Water

27<sup>th</sup> November 2023



# What are storm overflows?

And why they are necessary today?



## What they are...

**Storm overflows** or **CSOs** are a designed part of our sewerage system that act as '**pressure-release-valves**' to avoid the network backing up and flooding properties when there is heavy rain

Sewers have not been designed like this for many years, but **urban creep**, changing **rainfall** patterns with **climate change**, and a lack of natural drainage, are all increasing pressures on these outdated systems

Storm overflows are **common** across Europe, with a total of **650,000** storm overflows across the continent. **15,000** of these are in England and **1,500** in the Anglian Water region.

During **wet weather** and **snow melt**, storm overflows release diluted wastewater into rivers, preventing a combination of sewage and rain from overloading the sewers and backing up into homes and businesses.

## Why they're a problem

Despite storm discharges being predominantly rainwater, it is never desirable for untreated sewage to be released to the environment

Storm overflows are amongst the reasons why rivers fall short of 'Good Ecological Status', though only account for around 4% of these reasons nationally, and less than 1% of the reasons in our region (see below)

Storm overflows operate under permits from the Environment Agency, and none of our storm overflows are considered by them to be 'unsatisfactory'.

# How are Anglian Water performing?

**2022 we saw a 54% reduction in duration of spills, and the joint biggest reduction across the water industry for 2021 –2022. The last time we saw numbers this low was in 2018, when only 9% of our network was covered by EDMs. 2022 spills have reduced to 89,514 hours in 2022 from 194,594 hours in 2021;**

- The average duration of spills per EDM equals 84 hours during 2022 compared with 232 hours in 2021 and 405 hours in 2018 when we first reported EDM information.
- The average number of spills across all storm overflows was 15, down from 25 the year before.
- At the end of 2022, our EDM coverage was at 68%, up from 54% in 2021, we will have 100% coverage by the end of this year (December 2023).

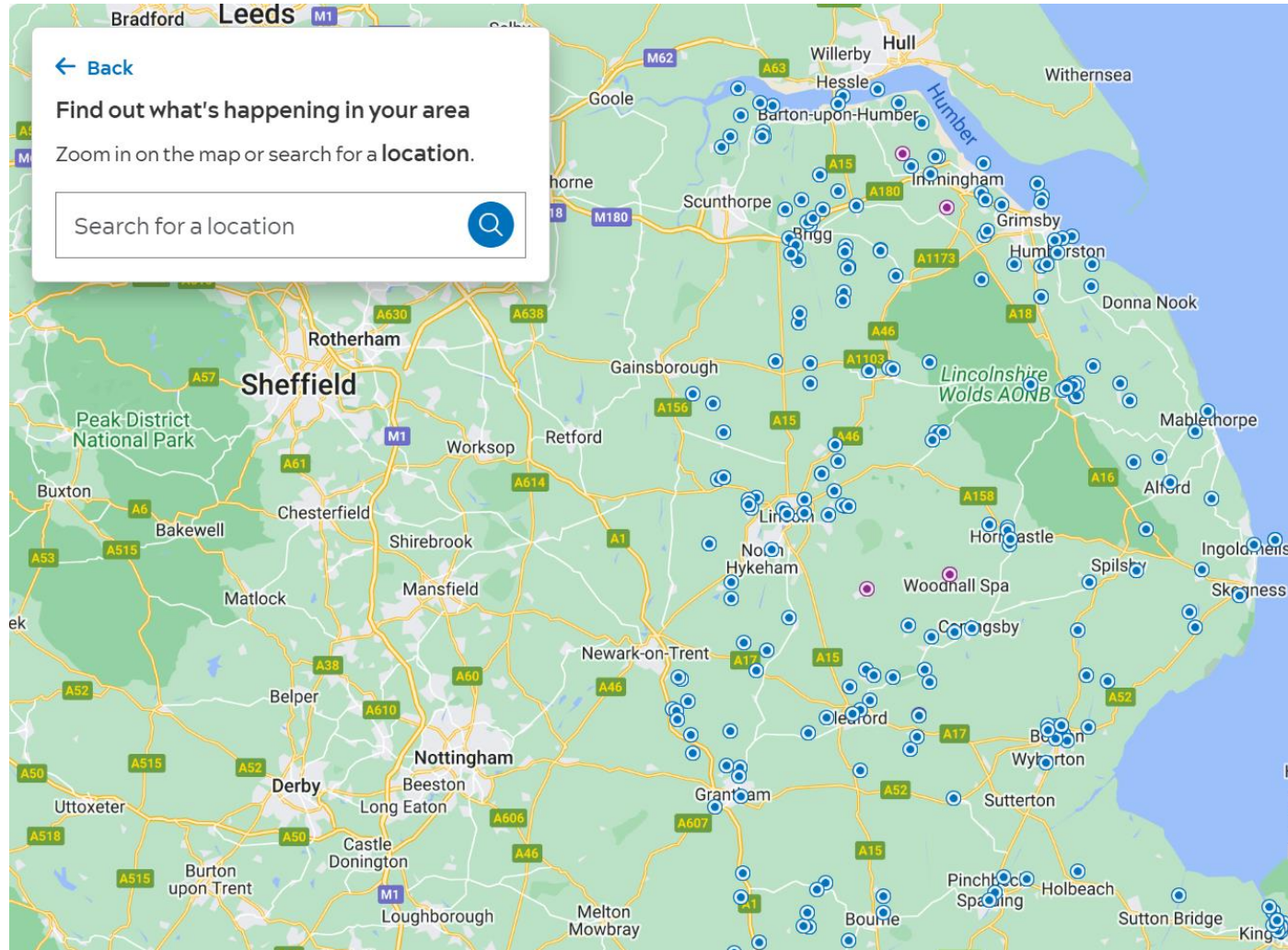
## Our targets:



- **By 2025 reduce spills to an average of 20 spills**
- **By 2035 reduce spills by 75% on our most sensitive receptors**
- **By 2050 reduce spills to an average of 10 spills**

**While we are pleased with this progress, there is still a great deal to be done to reduce the impacts of spills on our rivers and waterways.**

# How can I find out more?



[← Back](#)


**Storm overflow not active**  
Feeds into: River Lymn

Our monitoring shows there is no current spill from our storm overflow.

**Most recent spill**

Started: n/a		Time: n/a
Stopped: n/a		Time: n/a
Duration: n/a		

**i Useful information**

**Are you seeing a spill at this location?** 

We have confirmed there are no spills from our storm overflow.

If you are seeing something that you wouldn't expect in this location? To find out more click [here](#)

Further storm overflow spill data can be found [here](#).

# What does it look like for Lincolnshire?



	2020					2021					2022				
District Council	Number of EDMs installed	Total Spill Count	Total Duration	Average spill	Average duration	Number of EDMs installed	Total Spill Count	Total Duration	Average spill	Average duration	Number of EDMs installed	Total Spill Count	Total Duration	Average spill	Average duration
Boston	10	94	262.48	9.40	26.25	12	194	444.67	16.17	37.06	12	142	390.58	11.83	32.55
East Lindsey	30	971	8631.93	32.37	287.73	37	1067	6194.69	28.84	167.42	42	930	3535.57	22.14	84.18
Lincoln	3	137	2998.81	45.67	999.60	3	8	4.03	2.67	1.34	4	15	16.8	3.75	4.20
NE Lincolnshire	7	380	1731	54.29	247.29	11	546	2393.77	49.64	217.62	13	456	1287.02	35.08	99.00
North Kesteven	9	108	761	12.00	84.56	18	536	4965.71	29.78	275.87	22	461	3982.75	20.95	181.03
N Lincolnshire	14	248	2554.6	17.71	182.47	18	550	5436.88	30.56	302.05	22	291	1592.25	13.23	72.38
South Holland	2	52	324.5	26.00	162.25	5	164	1241.83	32.80	248.37	7	175	1176	25.00	168.00
South Kesteven	7	116	1868.75	16.57	266.96	14	430	5477.16	30.71	391.23	17	415	2463	24.41	144.88
West Lindsey	13	233	3027.25	17.92	232.87	21	657	5856.89	31.29	278.90	23	535	3736.75	23.26	162.47
	95	2339	22160.32	25.77	276.66	139	4152	32015.63	28.05	213.32	162	3420	18180.72	19.96	105.41

# We welcome scrutiny on our water recycling and pollutions

Over 2020-2025 we're investing £811 million as part of our Water Industry Natural Environment Programme – the largest programme of any water company. This includes £200m of direct investment in reducing storm overflow spills

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## Setting the scene: the big picture

Across the UK combined sewer overflows contribute just 4% of the reasons why UK rivers are not high quality (and only 1% in the East of England).

Other drivers impacting river water quality include:

- Agriculture and rural management
- Urban development and transport
- Non-native species
- Misconnected plumbing

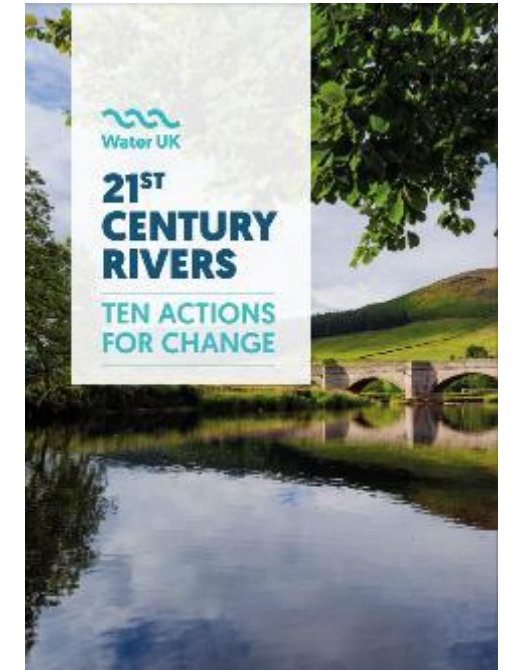


## Storm spills investment in numbers

- Accelerated £200 million+ AMP7 programme
- Installing more storm tanks: £80 million
- Increasing capacity at water recycling centres, reducing the risk of spills to the environment: £56 million
- Targeting investment to increase monitoring, directly reduce spills and pollutions, and protect the environment: £46 million
- Improving bathing water quality: £21.5 million
- Installing sustainable drainage solutions: £20 million

## The future we want to see

- The statutory need to tackle storm overflows ensuring prioritisation through the price review process
- A new, jointly owned national plan for rivers
- An end to the automatic right to connect
- A ban on wet wipes that don't meet Fine to Flush standards
- Collaborative action to restore rivers and natural habitats



# Investment Details 2020-2025: Going beyond the regulations

In the period 2020-2025 Anglian Water were funded to deliver the following environmental improvements for storm overflows:

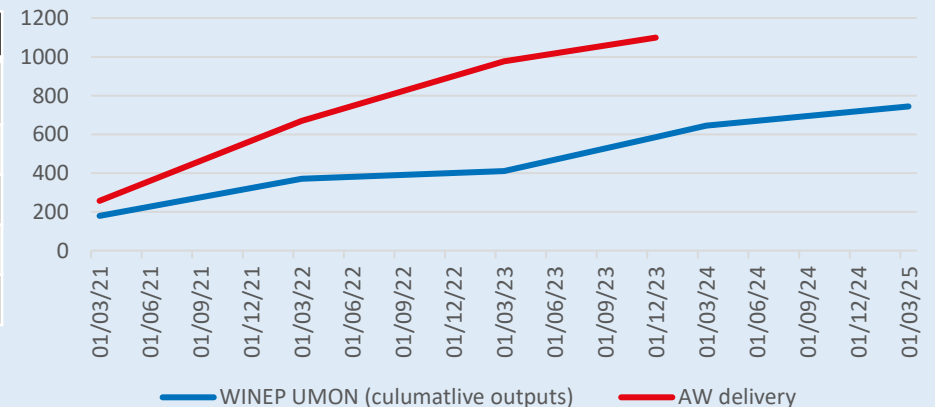
- Deliver 77% event duration monitoring coverage on storm overflows by 2025
- Deliver 10 storm overflow improvement schemes on the highest risk overflows (in terms of ecological impact) reducing spills to 40 per year.

In recognition of the high public concern regarding storm overflow, Anglian Water has committed to go beyond its regulatory requirement and Ofwat allowed funding for storm overflows for this period. We have committed to:

- 100% coverage of storm overflows by December 2023.
- 11 storm overflow improvement schemes, aiming to go beyond 40 spill requirements wherever possible.
- 5 of these improvement scheme are located in LCC region

Site name	Environmental obligation	What Anglian Water is delivering
HORNCastle-SPORTS GROUND SSO	40 spills per year by 2025	Solution to get to 10 spills / yr in 2025
Caistor WRC	40 spills per year by 2025	Deliver to max of 40 spills per year
Coningsby WRC	40 spills per year by 2025	Deliver to max of 40 spills per year
HARLAXTON STW	40 spills per year by 2025	Solution to get to 10 spills / yr in 2025
HOLBEACH STW	40 spills per year by 2025	Solution to get to 20 spills / yr in 2025

AW delivery of event duration monitoring on storm overflows



# Investment Details 2025-2030: Environmental programme



## Headline figures for Lincolnshire County Council area

- 139 Storm Overflows in this region
- 54 of these already spill less than 10 times per year (based on 2022 spill monitor data) which is the spill target for 2050.
- Between 2020-2025 we are investing over £5million. This is 50% of the overall spend.
- Between 2025-2030 we will be investing over £28mill on improvements to storm overflows within Lincolnshire County Council.
- Interventions include: Improved monitoring, storm storage tanks & lagoons (both within the sewer network and at our WRCs), new screens to prevent the visible pollution impact of storm spills and installing sustainable urban drainage system (SuDS) to prevent rain water entering the sewers.



# Investment Details 2025-2030: Named spill reduction schemes

We have a number of storm overflows in Lincolnshire County Council's area that have been identified for spill reduction schemes between 2025-2030 based on collaborative prioritisation meetings with Rivers Trust, EA, Natural England and Anglian Water.

There remains opportunities to swap in / swap out schemes

Site	Estimated Solution Cost	Provisional solution strategy
ALFORD STW	£558,570.00	Glass coated steel storm tank and pumping station
BOSTON-EAST SIDE TPS	£9,349,106.50	Storm Storage Tank, Pumping Station & UV Plant at WRC
BOURNE STW	£1,112,337.60	Glass coated steel storm tank and pumping station
CANWICK STW	£2,784,509.28	Glass coated steel storm tank and pumping station
LOUTH SPAW LANE SSO	£826,900.35	Offline collection storage
LOUTH STW	£895,491.81	New storm lagoon
LOUTH-BRIDGE ST SSO	£744,842.46	Sustainable urban drainage system (SuDS) - wet swales
LOUTH-CHURCH LIGHTS CSO	£111,300.29	Sustainable urban drainage system (SuDS) - wet swales
LOUTH-JAMES ST SSO	£68,572.86	Sustainable urban drainage system (SuDS) - wet swales
MARSTON STW (LINCS)	£1,515,333.84	Glass coated steel storm tank and pumping station
NETTLEHAM STW	£448,213.59	New storm lagoon and pumping station
NORTH THORESBY STW	£77,185.14	Increase pass forward flow on the WRC
SPILSBY STW	£707,442.15	New storm tank and pumping station
SPILSBY STW	£496,605.24	Glass coated steel storm tank and pumping station
STAMFORD-HUDDS MILL TPS	£177,303.96	Sustainable urban drainage system (SuDS)
SUTTON BRIDGE STW	£529,024.35	New storm tank and pumping station
TETNEY-NEWTON MARSH STW	£1,439,232.72	New storm lagoon and pumping station
WILLINGHAM STW	£415,555.92	Glass coated steel storm tank and pumping station



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**Open Report on behalf of Andrew Crookham,  
Deputy Chief Executive and Executive Director of Resources**

Report to:	<b>Flood and Water Management Scrutiny Committee</b>
Date:	<b>19 February 2024</b>
Subject:	<b>Flood and Water Management Scrutiny Committee Work Programme</b>

**Summary:**

This item enables the Committee to review the content of its work programme.

For the 2024/25 municipal year, three meetings of the Committee are currently scheduled on 24 June 2024, 14 October 2024 and 20 January 2025. The Committee is invited to review this schedule, with a view to considering whether four meetings would be appropriate.

There was positive feedback following the Committee's site visits on 15 October 2023. In view of this, the Committee may wish to agree to the principle of scheduling a site visit for 2024/25, possibly in the summer or autumn of 2024.

**Actions Required:**

The Committee is invited: -

- (1) To review its work programme; and highlight for discussion any additional scrutiny activity which fall within the Committee's terms of reference and could be included for consideration in the work programme.
- (2) To consider whether for the 2024/25 municipal year, it is the Committee's preference for four meetings to be scheduled.
- (3) Given the benefits of the site visits on 15 October 2023, to agree in principle that a site visit be planned for the summer or autumn of 2024.

## 1. Work Programme

19 February 2024		
Item		Contributor
1	Floods Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager, Lincolnshire County Council
2	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency
3	Anglian Water Update	Matthew Moore, Flood Partnership Manager, Anglian Water
4	Storms Impact Working Group Terms of Reference and Working Arrangements	Simon Evans, Health Scrutiny Officer
5	County Council Resolution on Sewage Discharges	Simon Evans, Health Scrutiny Officer

24 June 2024		
Item		Contributor
1	Floods Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager
2	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency
3	Anglian Water Update	Matthew Moore, Flood Partnership Manager, Anglian Water
4	Sustainable Urban Drainage Schemes – Approving body Update	Warren Peppard, Head of Development Management, Lincolnshire County Council

14 October 2024		
Item		Contributor
1	Floods Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager
2	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency
3	Anglian Water Update	Matthew Moore, Flood Partnership Manager, Anglian Water

14 October 2024		
Item		Contributor
4	Report of the Storms Impact Working Group	Councillor Tom Ashton, Chairman of the Flood and Water Management Scrutiny Committee

20 January 2025		
Item		Contributor
1	Floods Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager
2	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency
3	Anglian Water Update	Matthew Moore, Flood Partnership Manager, Anglian Water

For the 2024/25 municipal year, three meetings of the Committee are currently scheduled on 24 June 2024, 14 October 2024 and 20 January 2025, when it is usual for four meetings to be held. The Committee is invited to consider whether three meetings are appropriate given the activity in the current year. If the Committee were to record its preference for an additional meeting, it could be programmed in early March 2025 or, instead of meeting on 14 October, a meeting could be scheduled in September and another meeting in November.

## 2. Items to be Programmed

- South Lincolnshire Water Partnership and Water Resources East - Progress Update
- Coastal Adaptation Strategy
- Lincolnshire Reservoirs – Update
- Natural Flood Management

## 3. Site Visits

On 15 October 2023 nine members of the Committee visited sites relevant to the Committee's remit, which included the Horncastle and Louth Flood Alleviation Schemes; the Louth flood storage area; the Saltfleet, Fulbeck Trusthorpe and Boygift pumping stations, as well as coastal defences. In view of the positive feedback from these visits, it is proposed that the Committee agree in principle to further day of site visits, for example during the summer or autumn of 2024.

#### **4. Conclusion**

The Committee is invited to review its work programme and highlight for discussion any additional scrutiny activity which could be included for consideration in the work programme, including those items listed in Section 2 above as 'to be programmed'.

#### **5. 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 by Simon Evans, the Health Scrutiny Officer, who can be contacted on 01522 553607 or by e-mail at [Simon.Evans@lincolnshire.gov.uk](mailto:Simon.Evans@lincolnshire.gov.uk).