



County Offices  
Newland  
Lincoln  
LN1 1YL

17 November 2023

**Flood and Water Management Scrutiny Committee**

A meeting of the Flood and Water Management Scrutiny Committee will be held on **Monday, 27 November 2023 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), M R Clarke (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, 27 NOVEMBER 2023**

<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 18 September 2023</b>	5 - 12
<b>4</b>	<b>Announcements by the Chairman, Executive Councillors and Lead Officers</b>	
<b>5</b>	<p><b>Storm Babet and Flood &amp; Water Team update (including Section 19 investigations)</b></p> <p><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 Babet across Lincolnshire)</i></p>	13 - 20
<b>6</b>	<p><b>Environment Agency Update</b></p> <p><i>(To receive a verbal update 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></p>	Verbal Report
<b>7</b>	<p><b>Anglian Water Update</b></p> <p><i>(To receive a verbal update from Jonathan Glerum, Regional Flood Risk Manager, on Anglian Water's activities in Lincolnshire)</i></p>	Verbal Report
<b>8</b>	<p><b>Project Groundwater (Greater Lincolnshire)</b></p> <p><i>(To receive a report and presentation from Brett Rycroft-Jones, Flood Resilience Programme Coordinator and Vicky Jones, Flood Resilience Programme Coordinator, which provides an update on the Greater Lincolnshire Groundwater Project)</i></p>	21 - 34
<b>9</b>	<p><b>County Council Resolution on Sewage Discharges</b></p> <p><i>(To receive a report from Simon Evans, Health Scrutiny Officer, which invites the Committee to consider the Council's resolution on 15 September 2023 that requested the issue of sewage discharge be referred to the Flood and Water Management Scrutiny Committee to determine the actions available to the Council)</i></p>	35 - 36
<b>10</b>	<p><b>Flood and Water Management Scrutiny Committee Work Programme</b></p> <p><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></p>	37 - 40

Democratic Services Officer Contact Details

Name: **Jess Wosser-Yates**

Direct Dial **01522 552334**

E Mail Address [jess.wosser-yates@lincolnshire.gov.uk](mailto:jess.wosser-yates@lincolnshire.gov.uk)

**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, 27th November, 2023, 10.00 am \(modern.gov.co.uk\)](#)

All papers for council meetings are available on:

<https://www.lincolnshire.gov.uk/council-business/search-committee-records>



**FLOOD AND WATER MANAGEMENT  
SCRUTINY COMMITTEE  
18 SEPTEMBER 2023**

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

Councillors P Ashleigh-Morris, A J Baxter, M Brookes, S Bunney, K J Clarke, A G Hagues, P A Skinner and G J Taylor

District Councillors D Middleton (Boston Borough Council), D Hobson (East Lindsey District Council), P Vaughan (City of Lincoln Council) and A C Beal (South Holland District Council)

External Agencies – Jonathan Glerum (Anglian Water), Andrew McGill (Lindsey Marsh Drainage Board) and Morgan Wray (Environment Agency)

Councillor C Davie attended the meeting remotely, and Councillor A Austin attended as an observer.

Officers in attendance:-

Simon Evans (Health Scrutiny Officer), Matthew Harrison (Senior Commissioning Officer - Flood Risk), Chris Miller (Head of Environment) and Warren Peppard (Head of Development Management) and Jess Wosser-Yates (Democratic Services Officer)

**1 APOLOGIES FOR ABSENCE/REPLACEMENT MEMBERS**

Apologies for absence were received by Councillors R Reid, H Crawford, I G Fleetwood and P Bedford.

It was reported that under Regulation 13 of the Local Government Committee and Political Groups Regulation 1990, Councillor L Hagues was replacing Councillor M Clarke on behalf of North Kesteven District Council for this meeting only.

**2 DECLARATIONS OF MEMBERS' INTERESTS**

No interests were declared at this point in proceedings.

**3 MINUTES OF THE LAST MEETING HELD ON 15 MAY 2023**

**RESOLVED**

That the minutes of the last held on 15 May 2023 be approved and signed by the Chairman as a correct record.

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4 ANNOUNCEMENTS BY THE CHAIRMAN, EXECUTIVE COUNCILLORS AND LEAD OFFICERS

The Chairman welcomed the new District Councillors who were attending their first Scrutiny meeting, and thanked Councillors A Austin, F Martin and M Seymour who previously sat as District representatives on the Committee.

He informed the Committee that a motion had passed at the Lincolnshire County Council (LCC) meeting held on 15 September 2023 to refer to the matter of discharge of sewage into rivers and the sea to the Committee where the issue could be fully aired, and actions available to the Council can be determined. This topic would be scheduled for consideration at the meeting on 27 November 2023.

He also highlighted that a site visit had been scheduled on 16 October 2023 to observe the work of Project Groundwater in Lincolnshire.

Councillor C Davie, Executive Councillor for Economic Development, Environment and Planning, made the following announcements:

- Lincolnshire County Council (LCC) continued to engage with partners to manage the risk of coastal flooding to ensure communities were resilient. In collaboration with the University of Lincoln, the Environment Agency and East Lindsey District Council, LCC developed a jointly agreed, transparent evidence-base to aid Local Authorities in planning to mitigate the challenges of climate change.
- The Humber 2100+ project continued to formulate data regarding the risk of tidal flooding at the estuary.
- Officers continued to work with Anglian Water (AW) on the Lincolnshire Reservoir Project who were establishing a community liaison group to capture residents' concerns. Officers worked to ensure the project involved a range of benefits to ensure the environmental and economic benefits of the scheme were recognised.
- The Flood and Water Team received 18 reports of localised flooding in response to rainfall on the 10 and 11 September; the majority related to carriageway and external flooding. Internal flooding was reported at 5 properties.
- LCC continued to deliver capital flood risk projects and was developing a pipeline of works to address issues caused by recent flooding. Works in Cherry Willingham and Long Bennington were due to be completed by the end of September; a further project in Holdingham would start at the end of September.

The Committee noted the announcements and raised the following matters:

- City of Lincoln Council had received funding from government to accommodate the increased penny rates on internal drainage boards (IDBs) and thanked the lobbying efforts of the Committee. Members suggested this funding gap was due to a mismatch in legislation which meant District Councils (DCs) could collect funding from other authorities.

**FLOOD AND WATER MANAGEMENT SCRUTINY COMMITTEE**  
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- Members questioned whether the funding issues impacting the Lindsey Marsh and Witham Fourth District IDBs had been resolved. The Executive Councillor informed that there was no long-term solution in place and subsequently highlighted the importance of sustained government lobbying.
- District Councils (DCs) that paid the IDB special levy had received a one-off contribution from the Treasury to help pay what was now considered as an annualised revenue charge. The Chairman further emphasised the significance of lobbying to change how the IDB funding mechanism worked.
- Executive Councillor responded to concerns regarding funding for flood prevention and was content LCC was able to manage and meet financial obligations for residents.

5 FLOOD AND WATER TEAM UPDATE (INCLUDING SECTION 19 INVESTIGATIONS)

Consideration was given to a report from Matthew Harrison, Flood and Water Manager, which updated 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.

The team continued to resolve issues caused by localized flooding on 10 and 11 September and the status of current and ongoing Section 19 reports was largely unchanged. Since the publication of the report, internal flooding had been reported as a result of thunderstorms on 17 September, and near miss data was anticipated though the situation was developing.

The Long Bennington Flood alleviation scheme was due to be completed by the end of September and was welcomed by residents. Work continued on Project Groundwater, and some schemes were receiving national recognition.

Members considered the report, and during the discussion the following matters were noted:

- Members thanked the Highways and Flood and Water teams for their work in Market Rasen to mitigate flood risk, however it was noted that thunderstorms and heavy rainfall continued to worry residents as the town had not experienced such weather since flooding events in August 2022.
- The Flood and Water Manager assured that rainfall data was typically robust, although predicting the localised nature of thunderstorms and rainfall was generally difficult.
- Members requested an update on boreholes in Bourne and were subsequently informed that the National Flood Forum had contacted many landowners, and walkover surveys were scheduled at the end of September. LCC was working with the National Flood Forum to improve resident engagement, and approximately 40-50 boreholes had been located in the wider Bourne area.
- The Committee questioned the extent that future rainfall estimations were impacted by climate change; the Flood and Water Manager noted that the frequency and severity of storms had increased and highlighted that estimations were based on

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anecdotal evidence. Trends in rainfall data would eventually emerge which would increase understanding of the impact of climate change, and data could be cited when applying for funding.

- The Flood and Water Manager agreed to investigate issues with clogged draining systems in South Lincolnshire

**RESOLVED:**

1. That the information presented by the Floods and Water Team on their activities, including section 19 investigations, be noted.
2. That the following comments from the Committee be recorded and passed on to the Executive Councillor as required.

**6 THE ESTABLISHMENT OF A SUDS (SUSTAINABLE URBAN DRAINAGE SYSTEMS) APPROVING BODY (SAB) – PROGRESS UPDATE**

Consideration was given to a report from Warren Peppard, Head of Development Management – Growth, which updated the Committee on the proposed implementation of Schedule 3 of the Flood and Water Management Act which recommended that a Sustainable Urban Drainage Systems (SuDS) approving body (SAB) be established.

The Head of Development Management guided the Committee through the report and highlighted the importance of partnership working following the implementation of Schedule 3. Lincolnshire County Council (LCC) was currently at the information gathering stage and was awaiting further detail from the government.

Implementation of Schedule 3 was expected in April 2024, although recent information from the Department for Food and Rural Affairs (DEFRA) had suggested a delay until the end of 2024.

Schedule 3 had been enacted in Wales, and LCC was holding regular meetings with colleagues there to share good practice.

The Committee considered the report, and during the discussion the following matters were highlighted:

- Members noted that LCC had not received formal confirmation from government as to whether funding to establish the SAB would be received, although it was expected.
- DEFRA had acknowledged that staffing and maintenance costs would be a key component of the consultation process, and LCC was awaiting confirmation on three potential funding streams.
- It was agreed that the Committee would review a draft response to government regarding the implementation of Schedule 3.
- Concerns were raised that SuDS were sometimes built in dangerous locations in a manner that did not compliment the natural environment. The Head of



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Development Management assured that LCC was responsible for the maintenance of highways and would ensure SuDS were appropriately placed and were integrated well with the surrounding area.

- The importance of partnership working was acknowledged as it was expected that the developers' automatic right to connect existing AW surface water sewers would be removed under Schedule 3.
- Members anticipated strengthened national standards regarding rainwater harvesting.
- The Regional Flood Risk Manager from AW noted that uptake for rainwater harvesting was low. Consequently, AW was involved in an industry-wide project on utilising rainwater harvesting.
- Despite campaigning, Schedule 3 would not render AW a statutory consultee.
- It was questioned whether the legislation provided LCC as the Lead Local Flood Authority any purchase around the planning process of SuDS. The Head of Development Management noted it was unlikely that the formal statutory consultation within planning process would change.
- The Committee requested further updates on this matter when available and noted the potential for a site visit to SuDS sites across the county.

**RESOLVED**

That the progress with the establishment of a Sustainable Urban Drainage Systems Approving Body be noted

**7      ENVIRONMENT AGENCY UPDATE**

Consideration was given to a report from Morgan Wray, Area Flood and Coastal Risk Manager, which provided the Committee with an update on Environment Agency (EA) activities in Lincolnshire including progress on key capital schemes.

The Committee was guided through the report, and during the discussion the following points were noted:

- Questions were raised regarding EA activity in Boston and the Boston Barrier; the Committee was informed that works relating to the barrier were dependent on works around the wet dock being completed. Additionally, the Area Flood and Coastal Risk Manager agreed to forward relevant queries to the Programme Director for Boston for additional information. It was noted that the issue in the river Witham was troubling for residents, businesses and clubs that used it.
- Members highlighted that weeds were growing on the banks of smaller rivers; the speed of growth was increasing due to climate change and was causing logistical issues for users. The Area Flood and Coastal Risk Manager subsequently informed Members that EA maintenance activities were based around flood risk meaning smaller watercourses did not take a priority unless they were in a residential area, and assured details would be passed on to the EA Operations Team.

- It was assured that EA conducted a regime of inspections of assets and water courses. The regularity of these inspections was dictated by flood risk and results were available online.
- Assurance was sought from Members regarding the ongoing weed build-up in the River Witham at Boston; EA had been working in partnership with Canal & River Trust to resolve the issue.
- Members asked whether subsurface weed in the river Witham affected the conveyance of the river and were informed that it depended on the type and location of the weed; it was noted that higher rainfall flushed the system well. The Area Flood and Coastal Risk Manager highlighted that EA were only funded for the maintenance of weed to manage flood risk, not aesthetic purposes.
- Warmer summers enabled green weed to grow more which was considered as a potential consequence of climate change.

**RESOLVED:**

That the report from the Environment Agency on their projects and key capital schemes be noted.

**8 ANGLIAN WATER UPDATE**

Consideration was given to a verbal report from Jonathan Glerum, Regional Flood Risk Manager, on Anglian Water's (AW) activities in Lincolnshire. Matt Moore, Flood Partnerships Manager, was also in attendance for this item.

The Committee was guided through a presentation which outlined AW's priorities and delivery strategy of various project and adaptive processes to mitigate challenges moving forward. Furthermore, Members were requested to assess locations in their divisions and raise any issues with the Regional Flood Risk Manager.

Members considered the report, and during discussion the following matters were highlighted:

- The Committee was informed that the instance of effluent discharge in Jaywick, Essex, was due to an operational issue which led to the waste being discharged for 30 seconds a day for 18 months and remained undetected; it was assured that Chelmsford Magistrates Court had concluded there was no negative environmental impact caused by the discharge. Members questioned how much sewage had been discharged into Lincolnshire's water courses and assurance was provided that this matter would be reported at the next meeting. Members were also signposted to a website that published information about sewage discharge and locations.
- Residents perceived some road closures by AW to be unnecessary, and the Committee was subsequently informed that representatives from AW had attended a Highways and Transport Scrutiny Committee meeting and had formulated an

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action plan to reduce closures in partnership with its Members; a progress report was expected at that meeting in December 2023.

- Members welcomed increased partnership working and AW's consistent engagement with Lincolnshire County Council.
- Members questioned whether AW communicated potential road closures and disruptions to local businesses and residents through social media, and were informed that there were specific communications dedicated to alert any impacted parties of planned work.
- The Flood Partnerships Manager informed the Committee that there was an online dashboard called 'In Your Area' where residents could view a list of live incidents.
- The SuDS that were anticipated to be built in Lincoln would be located on the verges of Nettleham Road.
- Information regarding investment proportionality and shareholder profits would be circulated as per Members' request.
- AW agreed to establish an engagement plan with Highways colleagues. Additionally, AW attended all local drainage groups and updated Highways colleagues regularly through these meetings.

**RESOLVED**

That the presentation from Anglian Water on their activities be noted.

**9      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.

Members requested the following items be considered at an upcoming Scrutiny meeting:

- Report about pollution from sewage discharge from the Environment Agency
- An update report on Internal Drainage Boards.

**RESOLVED**

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

The meeting closed at 12.20 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>27 November 2023</b>
Subject:	<b>Storm Babet and Flood &amp; Water Team update (including Section 19 investigations)</b>

**Summary:**

To provide an update to Committee on the recent effects of Storm Babet 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 asked:

- (1) to 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) to note and comment as required on updates provided on the work of the Flood 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 Flood 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.

This report also focusses on some of the data so far obtained (as at 16/11/2023) in relation to Storm Babet which caused widespread flooding in Lincolnshire during October 2023.

### 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 Flood and Water Team are made aware of flooding that will trigger a Section 19 (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 prior to Storm Babet is shown in table 1 below.

	2018		2019		2020		2021		2022		2023		Total	
	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed	Ongoing	Completed
BBC	-	3	-	11	-	4	-	2	-	7	2	-	2	27
CoLC	-	2	-	7	-	10	-	9	-	5	1	-	1	34
ELDC	-	12	1	30	-	9	1	4	2	8	6	4	10	67
NKDC	-	8	-	30	-	6	1	8	-	5	3	-	4	57
SHDC	-	3	-	11	-	19	-	3	14	20	1	-	15	56
SKDC	-	1	-	8	2	19	2	4	3	6	6	-	13	38
WLDC	-	2	-	41	-	4	2	8	4	10	2	-	8	65
<b>Total</b>	-	31	1	138	2	71	6	38	23	61	21	4	53	344
<b>% Completed</b>	<b>100</b>		<b>99</b>		<b>97</b>		<b>86</b>		<b>73</b>		<b>16</b>		<b>87</b>	

**Table 1 – Status of Section 19 Investigations prior to Storm Babet in October 2023**

## **Storm Babet – October 2023**

During 18<sup>th</sup> to 21<sup>st</sup> October Storm Babet brought exceptional rainfall to the UK with heavy, persistent, and widespread rain affecting eastern Scotland, much of England, Wales and Northern Ireland from 18th to 20th, with 100mm falling fairly widely. This was the third-wettest independent 3-day period for England and Wales in a series from 1891, while the Midlands provisionally recorded its wettest 3-day period on record. This rain came on top of very wet weather earlier in October with some central and eastern parts of England and Scotland recording more than twice the October whole-month average rainfall in the first three weeks of the month.

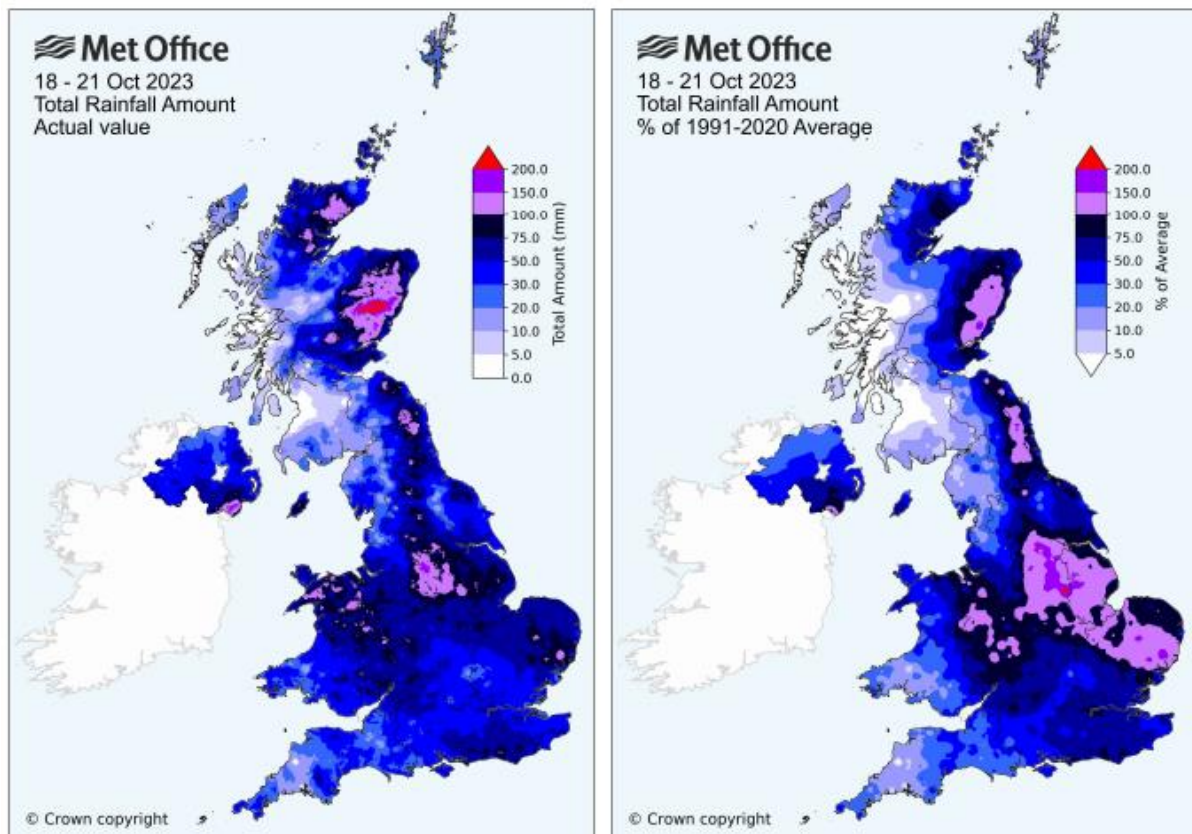
For some of the wider context with regards to the impact of the storm and the weather patterns experienced the below information is taken from the following source on the Met Office website - [Microsoft Word - 2023\\_08\\_storm\\_babet\\_v1.docx \(metoffice.gov.uk\)](#). Information has been extracted with more specific reference to the events experienced in Lincolnshire.

Storm Babet resulted in the most severe and widespread disruptive weather impacts of 2023 so far with multiple severe flood warnings issued by the Environment Agency (EA). Early figures during the above period recorded over 1000 homes in England affected by flooding across Yorkshire, the East Midlands and the Humber area. This number has risen significantly as new information has been forthcoming.

### Weather Data

The sequence of analysis charts on 17th, 18th, 19th and 20th show storm Babet tracking north to the UK. Atlantic storm systems affecting the UK in the autumn and winter months normally track west to east, driven by the jet stream, clearing eastwards fairly quickly. In contrast, this storm was on an unusual track from south to north, enabling it to pick up additional moisture as it crossed the Bay of Biscay. Babet was also unable to clear eastward into the North Sea due to a blocking area of high pressure across Scandinavia. The rain-bearing fronts therefore remained stationary across eastern Scotland for a prolonged period before moving back across England and Wales.

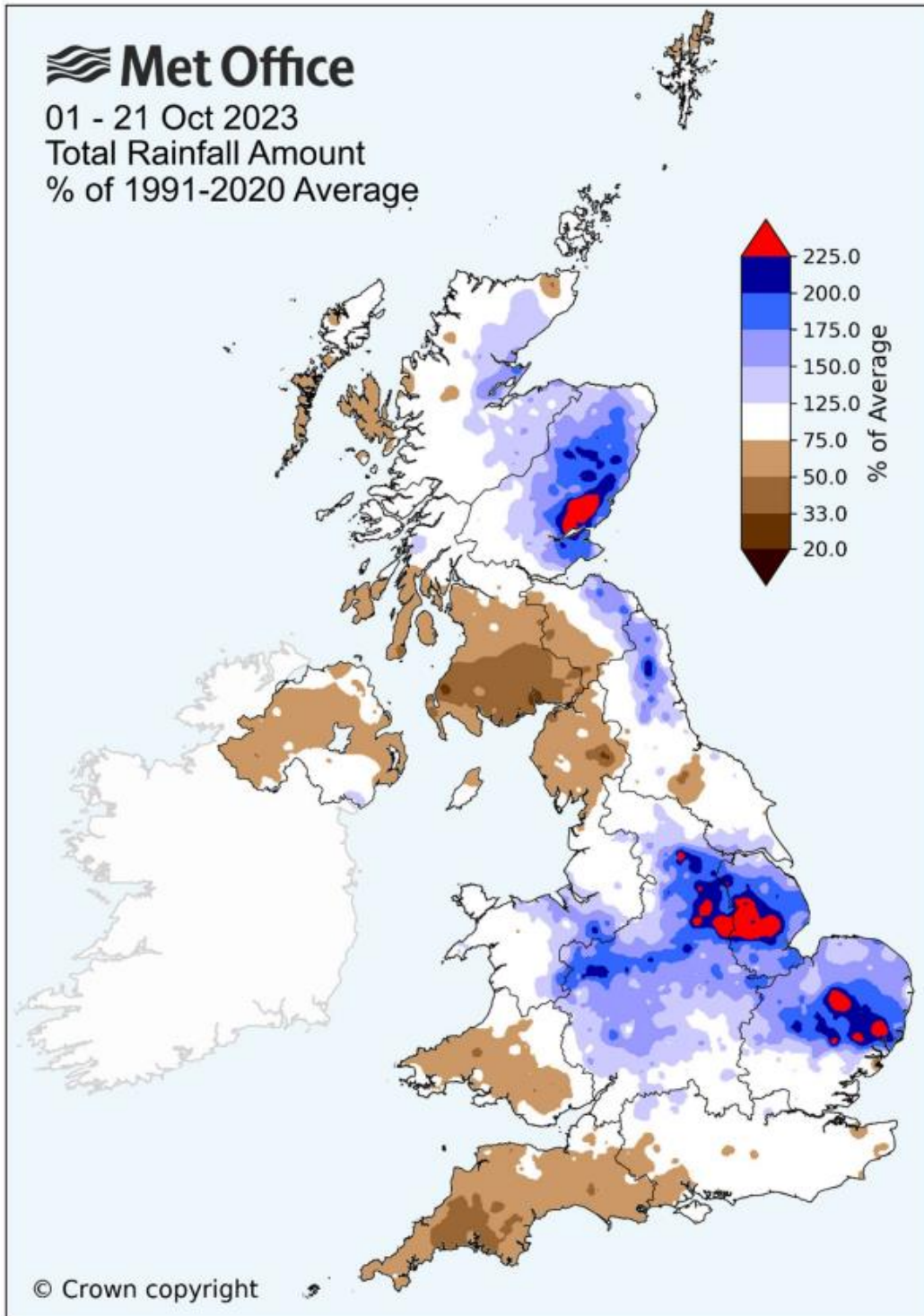
The maps below show the accumulated daily rainfall for the 4-day period 18 to 21 October 2023 from storm Babet as actual totals in mm (left) and percentage of the October whole-month average (right). Large swathes of the UK received over 50mm of rain, with 75 to 100mm widely recorded and over 100mm in the wetter locations (in some places over 150mm).



Data recorded at weather station in Lincolnshire shows rainfall accumulations from 18th to 21st October between 55mm and 93mm. During this period many long-running stations in England recorded their wettest October day on record, including at Waddington on 19th October (76 years).

The map below shows rainfall totals across the UK for the first three weeks of October from 1st to 21st as anomalies relative to the 1991-2020 October long-term average. Much of East Anglia, the Midlands, Lincolnshire and south Pennines, parts of Northumberland and much of eastern Scotland received over 150% of the whole-month average rainfall over this period, with significant areas over 200% and locally the wettest areas (shaded in red) more than 225%.





### Impacts in Lincolnshire

At the time of writing (16/11/2023) officers at Lincolnshire County Council are still assessing the huge amount of information and data received as a result of the widespread flooding experienced from Storm Babet. Almost 1500 records and reports have been assessed to determine the level of internally flooded properties, near miss reports and affected roads. This is still an emerging picture and final numbers have not yet been realised. So far, the following have been identified:

Internally flooded properties (including those reported as internally flooded but TBC)	605
Externally Flooded Properties (gardens, outbuilding etc)	491
Road Closures required due to flooded carriageway	48
Flooding to the highway (but not requiring full road closures)	98

In addition to the above there are a further 206 reports received from a variety of sources which have identified ‘flooding’ as having occurred following Storm Babet. These records are still being investigated to determine whether this involves internal or external flooding to property.

A programme of work has been developed to deliver the Section 19 investigation process in the most efficient way possible, taking into account the large number of affected properties, however the volume of work that this has generated will take some time to complete. Reports are being packaged into geographical areas and so far 147 individual Section 19 reports will be commissioned.

#### Flood Recovery Framework

The Flood Recovery Framework was activated on 25th October 2023 to support households and businesses in areas worst affected by Storm Babet. Guidance has recently been issued from the government departments with regards how the grants will be administered at a local level and by who. The first four grants announced are being administered by the District Councils across Lincolnshire, and information is available via the relevant district authority websites.

Schemes made available are;

- Community Recovery Grant - £500 per flooded household
- Council Tax Discounts
- Business Rates Relief
- Business Recovery Grant –up to £2,500 per flooded business

In addition, eligible flood-hit property owners will also be able to 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. This element will be administered by Lincolnshire County Council, although at the time of writing officers are still working with government departments to understand how the guidance can be utilised in the most effective way for the benefit of residents who may wish to apply for the scheme. Much work is being undertaken to have a framework for this in place as soon as possible, but in the short term any interested residents are encouraged to register their interest via [PropertyFloodResilience@lincolnshire.gov.uk](mailto:PropertyFloodResilience@lincolnshire.gov.uk) where further advice and guidance will be provided in due course.

## **Other workstreams**

It is pleasing to report the recent completion of a number of capital funded flood alleviation works in the following locations;

- Cherry Willingham
- Kirton
- Long Bennington
- Scothern

Collectively these projects are better protecting almost 70 residential or commercial properties and a school from the impacts of surface water flooding as well as reducing disruption to the travelling public due to previously flooded roads. All of these sites performed well during the heavy rainfall experienced during Storm Babet and evidence so far gathered suggests no adverse effects or flooding reported in the location of the works.

## **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 Babet has again highlighted the impacts significant weather events have on resource and costs to ensure Lincolnshire County Council can undertake its duty under the Flood and Water Management Act. The full effects of Storm Babet have yet to be realised and further updates will be brought to this committee as the true scale of events emerges. This will influence any capital work programmes that are developed as a result of flooding incidents and this will be determined by the outcome of Section 19 Investigations. As locations are identified and work programmes are developed they will be brought to future meetings of this committee. It should however be noted that the effects of increasing significant weather events are likely to put increased strain on budgets and the resources available to be able to deliver the works required.

## **3. Consultation**

### **a) Risks and Impact Analysis**

N/A

## **4. Appendices**

N/A

## **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 Matthew Harrison, who can be contacted on 07771 837565 or [matthew.harrison@lincolnshire.gov.uk](mailto:matthew.harrison@lincolnshire.gov.uk).

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

Report to:	<b>Flood and Water Management Scrutiny Committee</b>
Date:	<b>27 November 2023</b>
Subject:	<b>Project Groundwater (Greater Lincolnshire)</b>

**Summary:**

This paper is a report accompanying the presentation on Project Groundwater (Greater Lincolnshire) that will be delivered at the meeting and consists of an overview of the project's current status and a more in-depth review of two key workstreams; Salinisation of the fen and the legal responsibilities of Boreholes.

**Actions Required:**

The Flood and Water Management Scrutiny Committee is invited to:

- (1) review and comment on the contents of the report and presentation; and,
- (2) comment on the project and provide feedback to relevant Leading Officers and Portfolio Holders.

## **1. Background**

Project Groundwater Greater Lincolnshire is one of the 25 successful schemes awarded funding by Defra as part of the £200m Flood and Coastal Innovation Programme, announced in 2020, with the aim of better understanding groundwater flood risk.

The groundwater project is looking at five trial communities across Greater Lincolnshire; Barrow, Barton, Bourne, Grimsby and Scopwick. As well as undertaking various research programs with partners such as the University of Lincoln, Middlesex University, Buckinghamshire Council and Wilkin Chapman LP, among others.

The presentation will consist of an update on those communities where work has begun on the ground, and then an overview on the work being undertaken on the impact of Boreholes and the rights and responsibilities of ownership and maintenance. It will then also cover the impact of salinisation of the fen and its impact on the cost of food

production from field to fork. Finally, an outlook of the next six months of the project will be provided.

**2. Conclusion**

That Flood and Water Management Scrutiny Committee receives the report and presentation and make comments on the actions taken to date and next steps for the project.

**3. Consultation**

**a) Risks and Impact Analysis**

N/A

**4. Appendices**

These are listed below and attached at the back of the report	
Appendix A	Project Groundwater (Greater Lincolnshire) presentation

**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 Vicky Jones (Flood Resilience Program Co-Ordinator) who can be contacted on 07436057029 or [vicky.jones@lincolnshire.gov.uk](mailto:vicky.jones@lincolnshire.gov.uk), and Brett Rycroft-Jones, who can be contacted on 07387530652 or [brett.rycroft-jones@lincolnshire.gov.uk](mailto:brett.rycroft-jones@lincolnshire.gov.uk)

# Project Groundwater Greater Lincolnshire

Welcome

27<sup>th</sup> of Nov 2023



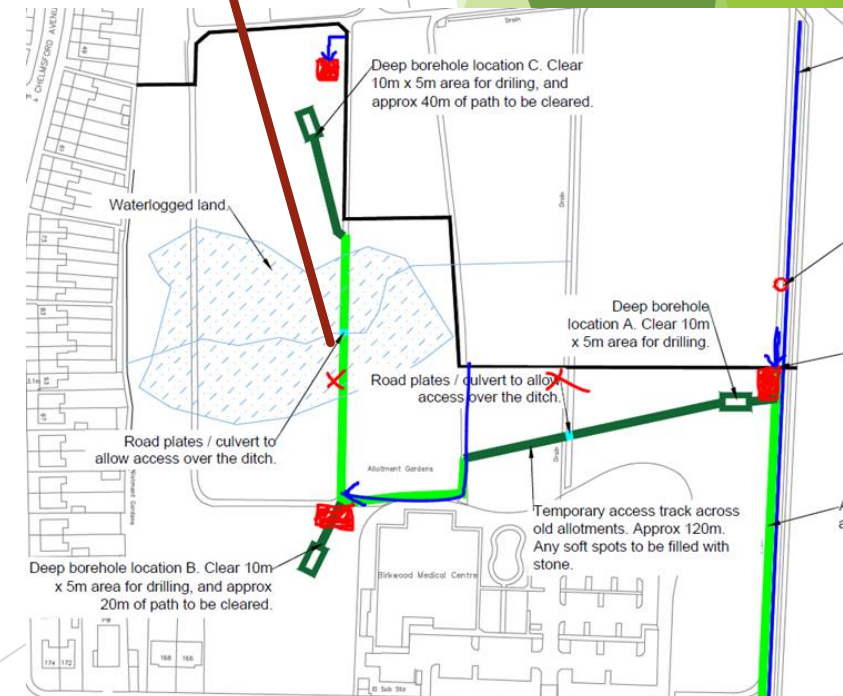
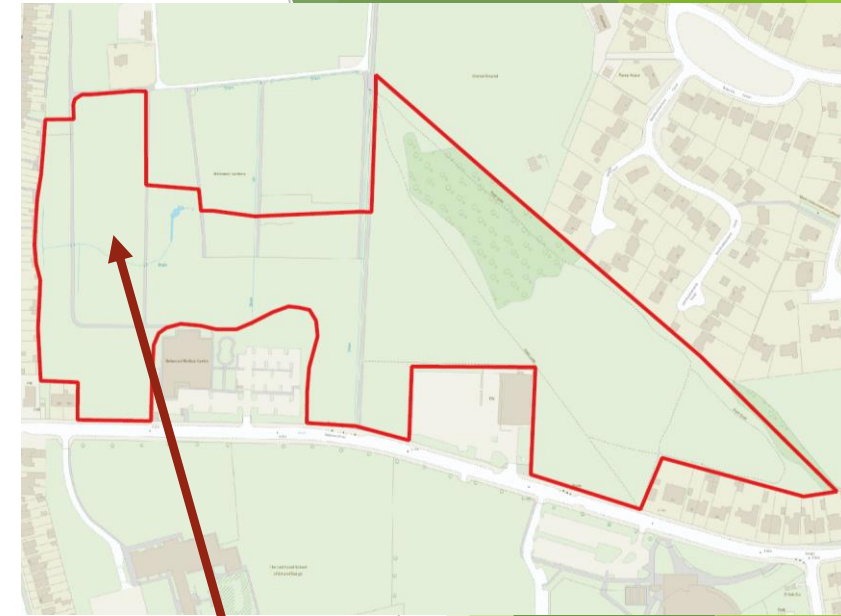
Appendix A

# Grimsby / Saltings Allotments

EA have requested a risk methodology statement be prepared for the site before large scale clearance works go underway. Anglian water provided 20 years of water quality data to support this.

Access clearance has begun. This work involves clearing the gates and a pathway into the site, where soil sampling will proceed.

Once site access is cleared, companies are invited on site to generate wetland designs for board approval. Meeting with FAG and Allotment owners to discuss their requirements



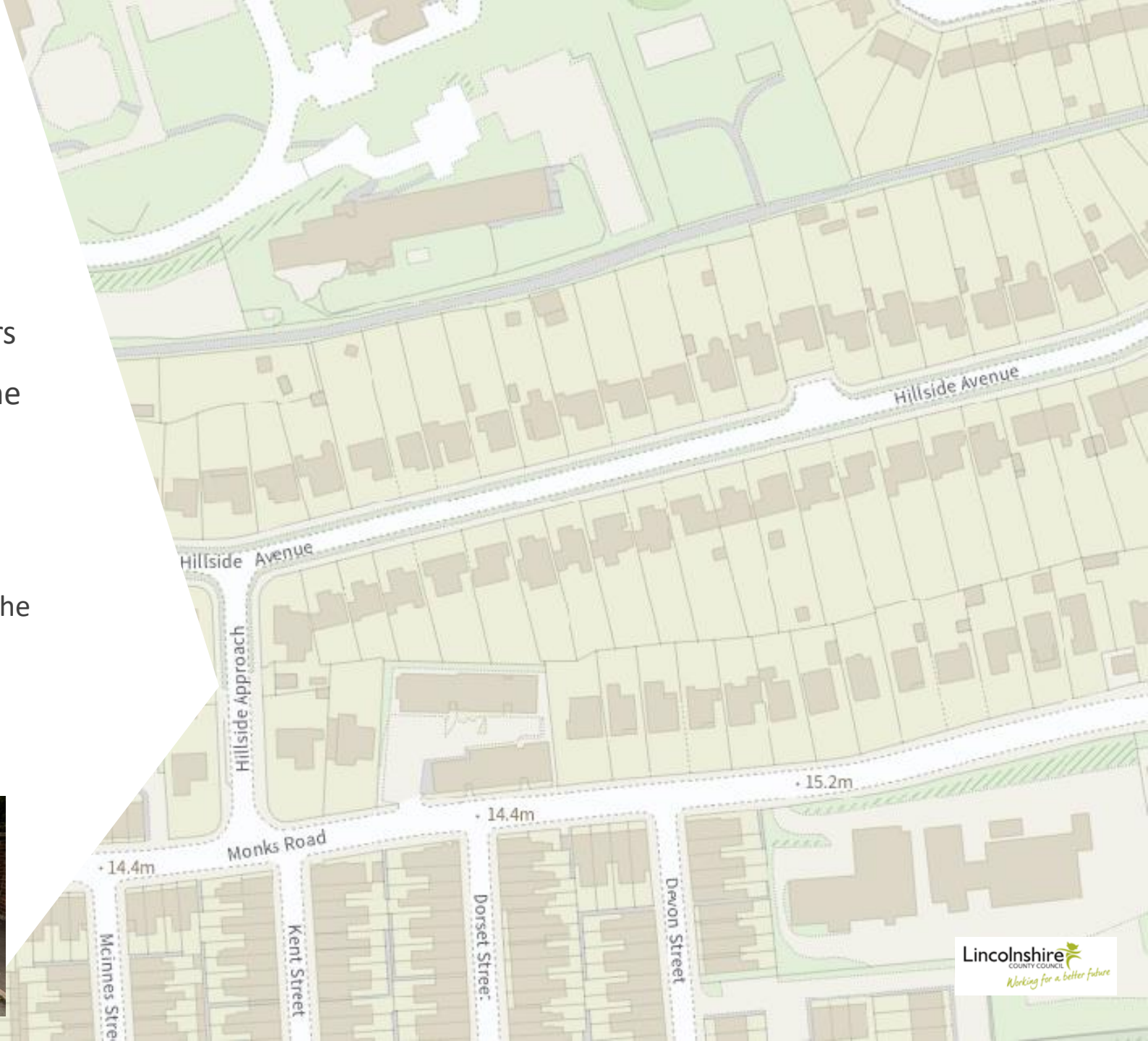


# In go the clearance team

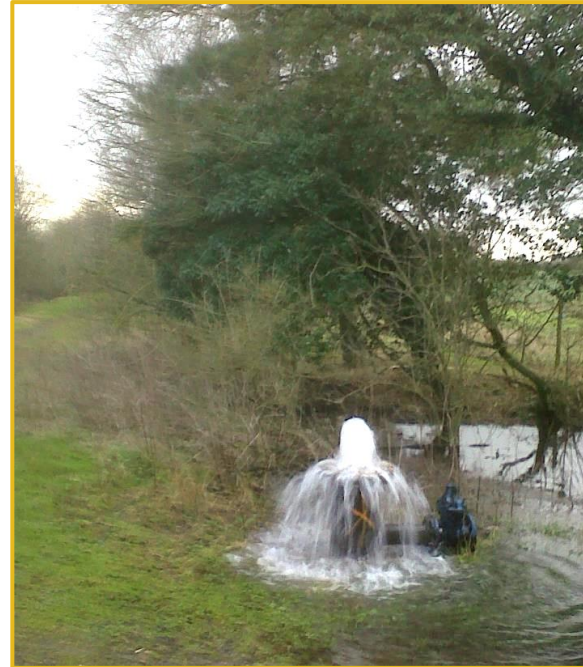


# Lincoln / Hillside Avenue

- ▶ Groundwater escaping from front of properties, ongoing issue for several years
- ▶ Atkins to undertake an investigation of the location in a 4 step approach
  1. An in-depth analysis of the location
  2. Engagement with residents
  3. Update the Hydrogeological Model for the area
  4. Propose recommendations and actions



# Bourne Boreholes

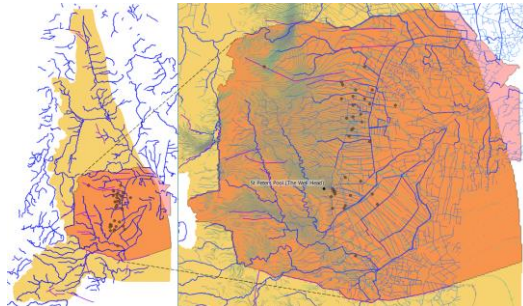
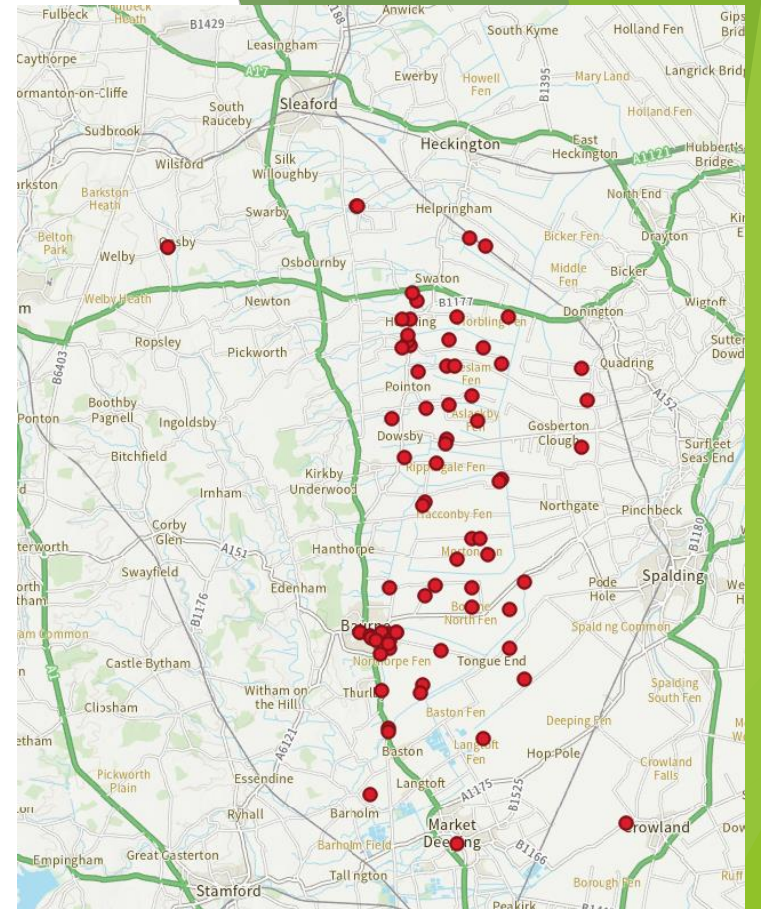


# Borehole Legislation

Borehole  
project is  
getting  
Bigger

# Bourne Boreholes

- ▶ Initial walkover survey conducted 27<sup>th</sup> / 28<sup>th</sup> September, limited number of residents uptake, only 2 leaking boreholes, neither from the historical list
- ▶ Due to the need to focus on those with historical data, the original 75 are the main focus of the NFF going forward
- ▶ Door knocking has commenced to engage better with residents on the list that have yet to be contacted, letters have been provided for leaving in case residents aren't home
- ▶ Any on the list of 75 that have previously stated not interested, are being sent a separate letter by LCC to just confirm the scope of the project and the desired outcome from a walkover survey to hopefully re-engage them
- ▶ Hydrologists are currently refining and re-running the models to better increase knowledge and predictivity

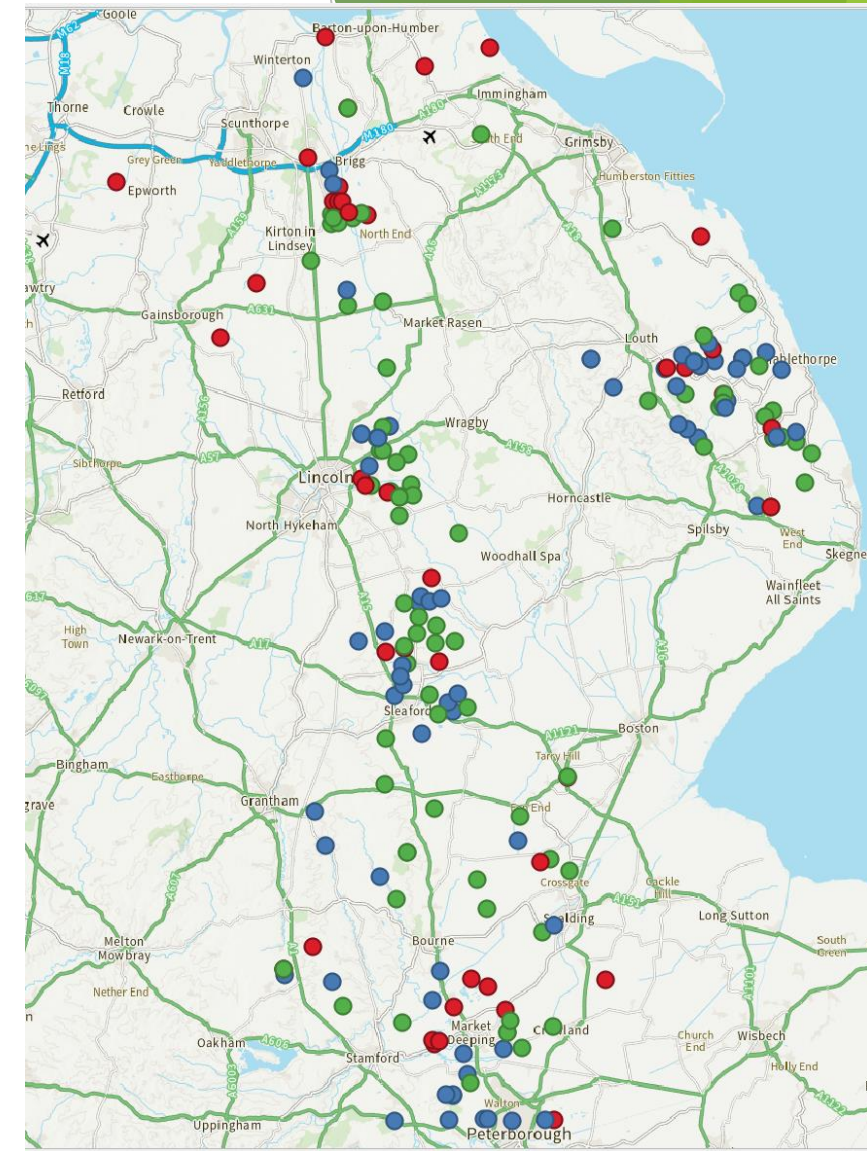


# Borehole Legislation

Project GW is liaising with Wilkin Chapman LP to begin proceedings to create a legal document defining ownership and maintenance responsibilities of Borehole

Key areas of identification are:

- ▶ Liability for historic boreholes
- ▶ Review current system for the creation of new boreholes against engineering advice and other factors such as climate change to see if still fit for purpose.
- ▶ Develop a register of all boreholes – who would maintain this and how could it be searched.
- ▶ Is a better monitoring and inspection regime needed for current boreholes?
- ▶ Impose a system for checking caps on known historic boreholes and possibly impose obligations of repair. Who would pay - landowner / operator / grants?
- ▶ Raising public awareness and how?
- ▶ Consider whether there are any other existing regulatory regimes we could learn from



Working with Tetrattech who are currently in the process of identifying and decommissioning existing EA boreholes to gain a wider and better understanding of borehole conditions and water loss.

# Lincoln University

- ▶ Expansion to Salinisation project:-
  - ▶ Significantly increased area of investigation from Holbeach fen to the whole of the Lincolnshire Fens
  - ▶ Economic value for Field to Fork

How will this be achieved

1. Identify the type of salinisation process across the county and effect of climate change
2. Quantify the degree, length and severity of salinity and effect of climate change
3. Assess the types (and value) of crops grown
4. Estimate the loss of yield (and value) from salinisation for Lincolnshire crops
5. Assess farm level decisions/choices such as the use of salt tolerant crops and other adaptation mechanisms
6. Qualitatively assess the effects of historical salinisation on community.

By answering these questions will enable us to quantify the economic impact from field to fork

# Lincoln University

- ▶ Although there is a wide variation between and within crop types, farm-level studies show crop yield losses on salt-affected lands of 36 – 86%
- ▶ (40–63% in India, 36–69% in Pakistan and 71–86% in Kazakhstan (Qadir et al. 2014)).

## Economic Costs of Salt-Induced Land Degradation in Different Parts of the World

Study Authors	Country	Methodology	Equivalent in Million USD per Year
Marshall and Jones (1997)	Australia	Opportunity costs based on dose response method and mitigation costs	0.83
Janmaat (2004)	India	Opportunity costs (forgone agricultural income)	46
Marshall (2004)	Australia	Transaction costs	20.03
John et al. (2005)	Australia	Opportunity costs	0.09
Aslam and Prathapar (2006)	Pakistan	Opportunity costs	267
McCann and Hafdahl (2007)	Australia	Transaction costs	102
Winpenny et al. (2010)	Spain	Mitigation costs	810

Source: Negacz (2018).

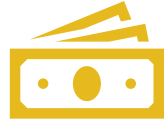
- ▶ We are sharing knowledge with IGRAC and Fens 2100+ to understand and shape the wider impact of salinisation on farmland, agriculture and food production
- ▶ [Katarzyna Negacz. Future of Sustainable Agriculture in Saline Environments]



# Overview of the next 6 months



Start clearance of saltings allotment vegetation and soil to create the basis of the wetland nature park to capture water as and an asset



Funding agreements all in place for all work projects



Initial preliminary thoughts from modelers



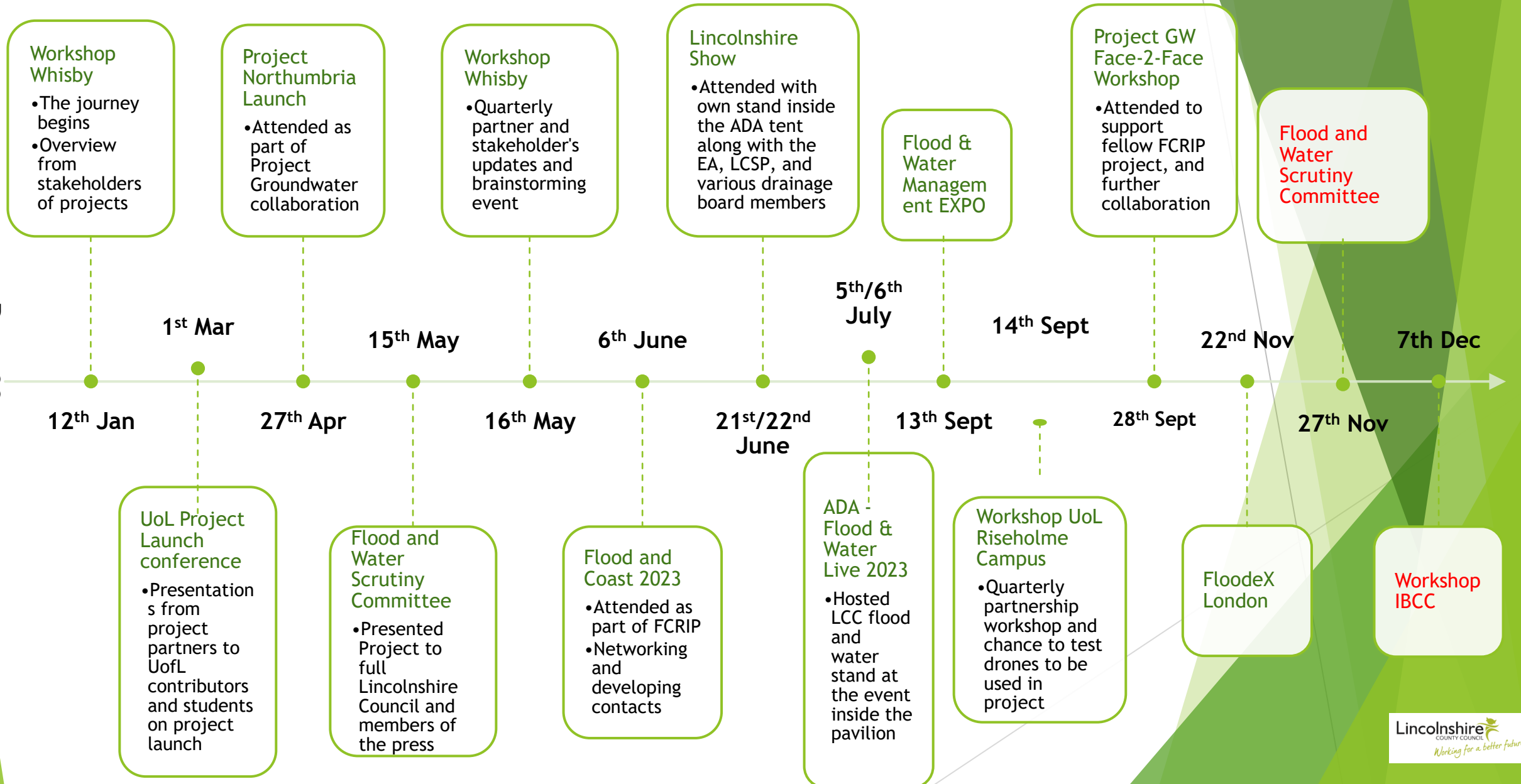
Update on legal position of borehole risks and responsibilities



Commencement of expanded salinisation project to deliver economic field to fork cost



# Events, Shows and Workshops



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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>27 November 2023</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 and the actions available to the County Council determined.

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; and
- (2) 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. Background: 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.”***

## **1. 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.

## **2. 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)



**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>27 November 2023</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.

**Actions Required:**

The Committee is invited to: -

- (1) review its work programme; and
- (2) 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.

**1. Work Programme**

<b>27 NOVEMBER 2023</b>		
<b>Item</b>		<b>Contributor</b>
<b>1</b>	The Impacts of Storm Babet (October 2023)	Matthew Harrison, Flood Risk Manager, Lincolnshire County Council
<b>2</b>	Flood and Water Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager, Lincolnshire County Council
<b>3</b>	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency

<b>27 NOVEMBER 2023</b>		
<b>Item</b>		<b>Contributor</b>
<b>4</b>	Anglian Water Update	Jonathan Glerum, Regional Flood Risk Manager, Anglian Water
<b>5</b>	Greater Lincolnshire Groundwater Project	Vicky Jones, Flood Resilience Programme Co-ordinator, Lincolnshire County Council, Brett Rycroft-Jones, Flood Resilience Programme Coordinator, Lincolnshire County Council
<b>6</b>	County Council Resolution on Sewage Discharges	Simon Evans, Health Scrutiny Officer

<b>19 FEBRUARY 2024</b>		
<b>Item</b>		<b>Contributor</b>
<b>1</b>	Floods Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager, Lincolnshire County Council
<b>2</b>	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency
<b>3</b>	Anglian Water Update	Jonathan Glerum, Regional Flood Risk Manager, Anglian Water
<b>4</b>	Natural Flood Management	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency
<b>5</b>	Sustainable Urban Drainage Schemes – Approving body Update	Warren Peppard, Head of Development Management, Lincolnshire County Council
<b>6</b>	Reports from Working Group Activity on Autumn 2023 Storms	Simon Evans, Health Scrutiny Officer

<b>24 JUNE 2024</b>		
<b>Item</b>		<b>Contributor</b>
<b>1</b>	Floods Team Update (including Section 19 Investigations)	Matthew Harrison, Flood Risk Manager
<b>2</b>	Environment Agency Update	Morgan Wray, Area Flood and Coastal Risk Manager, Environment Agency

24 JUNE 2024	
Item	Contributor
3	Anglian Water Update
	Jonathan Glerum, Regional Flood Risk Manager, Anglian Water

## 2. Items to be Programmed

- South Lincolnshire Water Partnership and Water Resources East - Progress Update (*to be confirmed*)
- Coastal Adaptation Strategy
- Lincolnshire Reservoirs - Update

## 3. 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'.

## 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 Simon Evans, 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).

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