



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

Report to:	Flood & Water Management Scrutiny Committee
Date:	27 November 2023
Subject:	Storm Babet and Flood & Water Team update (including Section 19 investigations)

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
Total	-	31	1	138	2	71	6	38	23	61	21	4	53	344
% Completed	100		99		97		86		73		16		87	

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

Storm Babet – October 2023

During 18th to 21st 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.

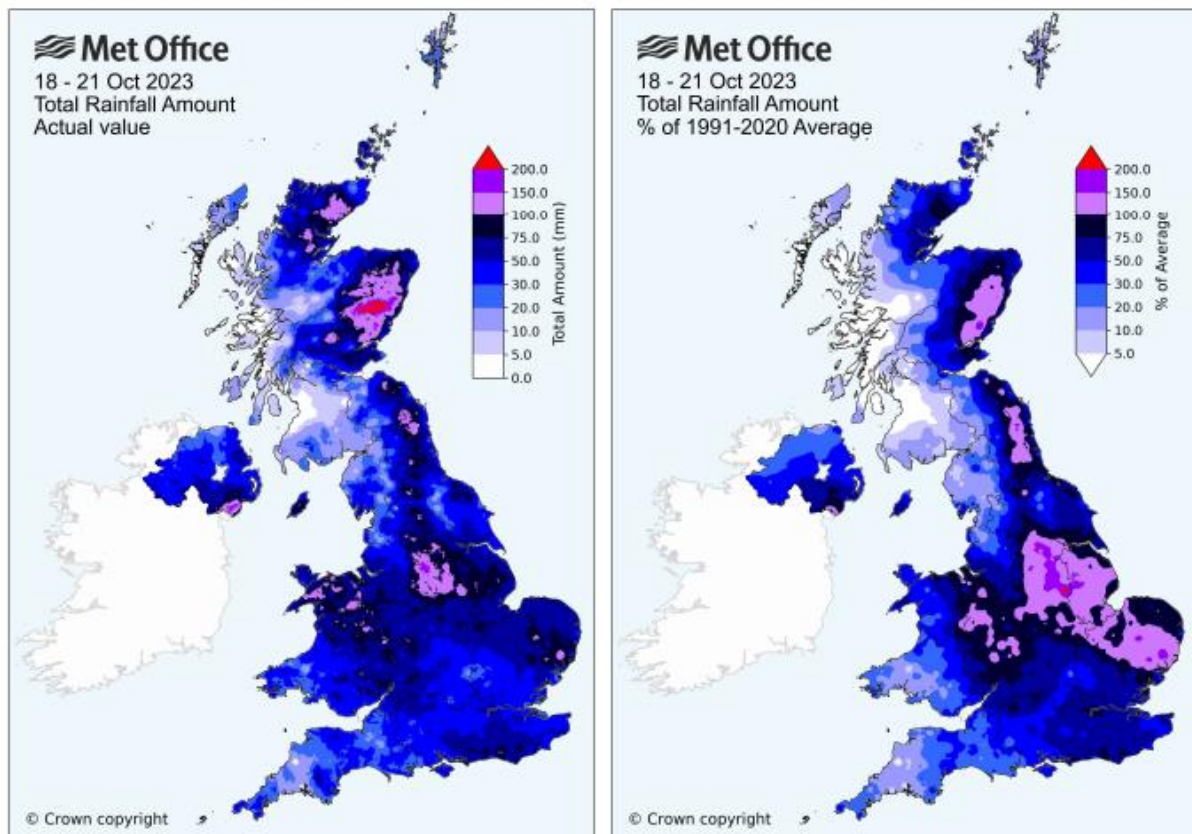
For some of the wider context with regards to the impact of the storm and the weather patterns experienced the below information is taken from the following source on the Met Office website - [Microsoft Word - 2023_08_storm_babet_v1.docx \(metoffice.gov.uk\)](#). Information has been extracted with more 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

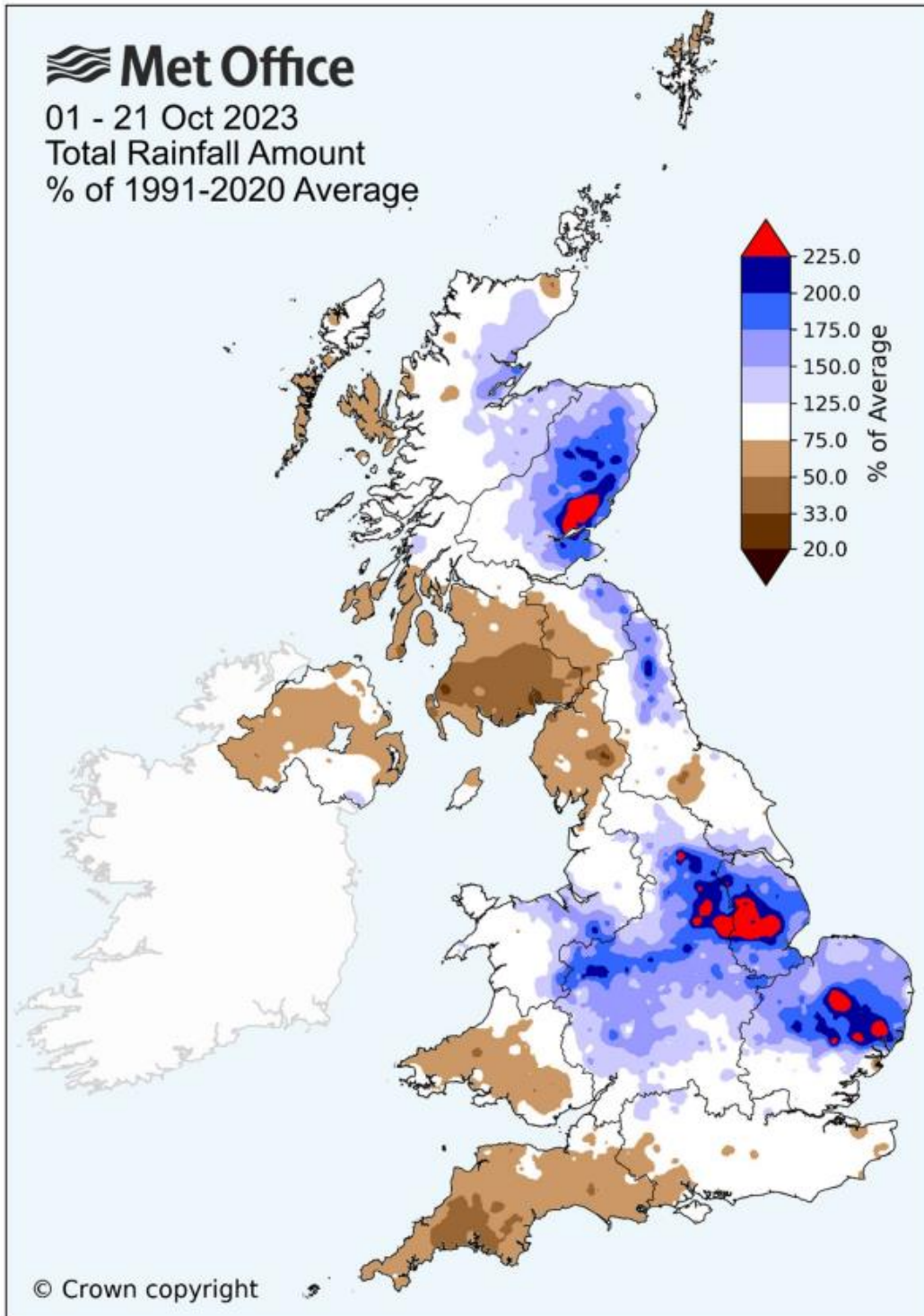
The sequence of analysis charts on 17th, 18th, 19th and 20th show storm Babet tracking north to the UK. Atlantic storm systems affecting the UK in the autumn and winter months normally track west to east, driven by the jet stream, clearing eastwards fairly quickly. In contrast, this storm was on an unusual 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 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.

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