



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

Report to:	Flood and Water Management Scrutiny Committee
Date:	22 February 2021
Subject:	Investigations Undertaken under Section 19 of the Flood and Water Management Act 2010

Summary:

This is a standing item to inform the Committee of the status of all current flood investigations being undertaken in the County.

Actions Required:

Members of the Flood and Water Management Scrutiny Committee are invited to review and comment on the investigations undertaken in the County under Section 19 of the Flood and Water Management Act 2010.

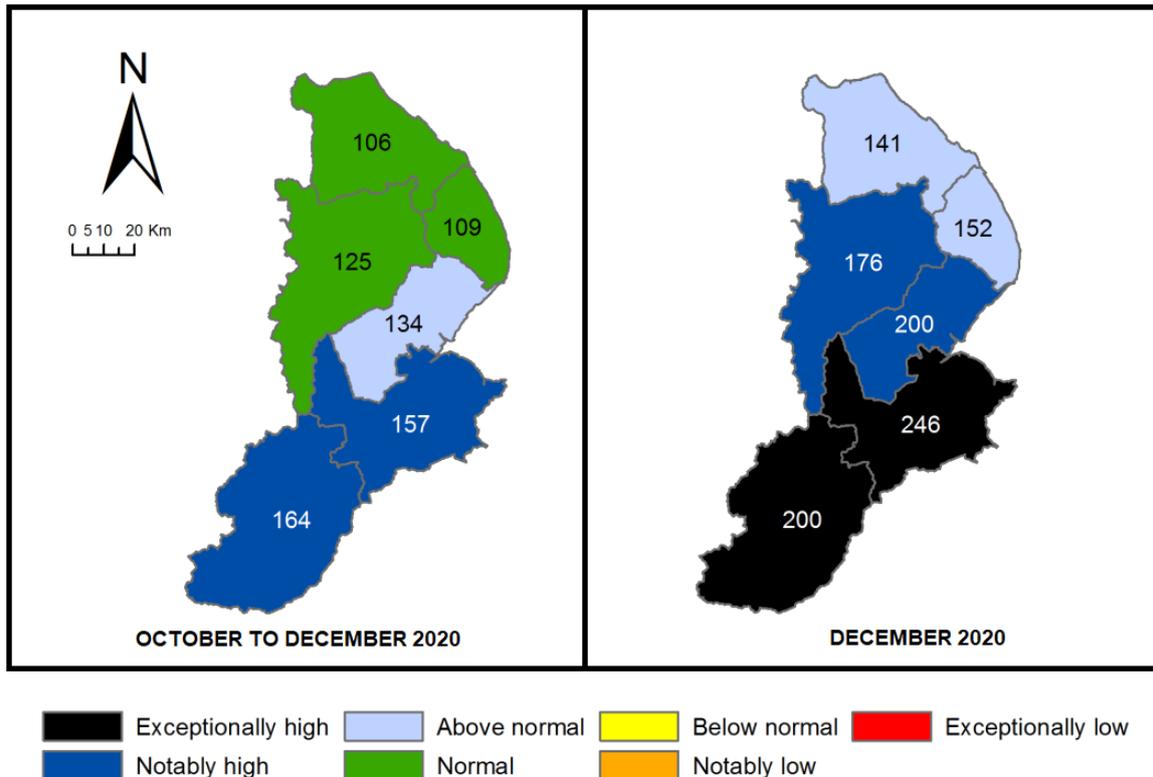
Members are asked to view the current list of completed and active flood investigations online at <https://www.lincolnshire.gov.uk/flood-risk-management/flood-investigations> (a list of active investigations is also included at Appendix A) and inform Democratic Services in advance if they wish to raise any particular sites at the forthcoming Scrutiny Committee meeting.

1. Background

This is a standing item to inform the Committee on the position of all current Section 19 investigations in the County, which are listed in Appendix A. It will be noted that in some cases the investigation is marked as being completed, but the flood incident will remain on Appendix A. This is because there may be outstanding works arising from recommendations in the investigation report which have not yet been completed or programmed by the relevant Risk Management Authority as identified in Appendix A.

In the three-month period October to December 2020, average rainfall in the County was reported by the Environment Agency (EA) to be normal to above normal on a north-south split, as illustrated in Figure 1 below (courtesy of EA). However, as can be seen, December rainfall was 'above normal' to 'exceptionally high', and was the wettest on record for the Lower Welland and Nene and the fourth wettest for the Upper Welland and Nene.

Figure 1: Rainfall as a percentage of long-term average



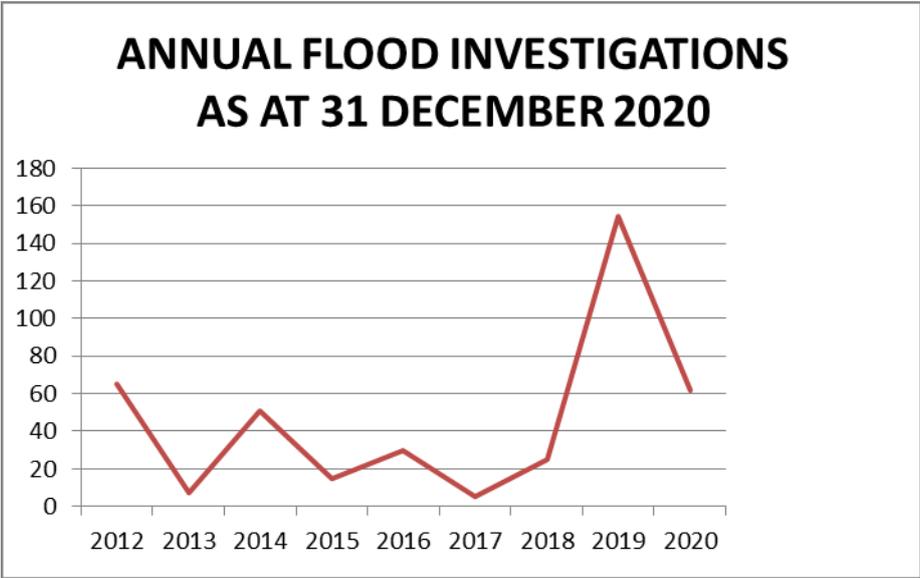
As a result of the high levels of rainfall in December, groundwater levels have increased across the region, and in most cases have increased sharply. At three sites the overall status has increased from normal to notably high, and one site (Dunholme Road, Scothern) has increased from below normal to above normal levels during the month of December. These four sites are in the clay and limestone aquifers, and along the limestone aquifer in particular it is apparent that there are a number of groundwater-related problems, such as inundation of underground assets, wet gardens, water laying on fields and elevated levels in watercourses.

Unsurprisingly, the saturation of soils follows a similar pattern to the rainfall and groundwater levels. This is important because the tendency is for surface run off to increase as the capacity of soils to absorb rainfall reduces. This often means that 'normal' levels of rainfall results in an unusually rapid response in drainage and subsequently watercourses, with potentially an increase in flood risk once the capacity of assets is exceeded.

The number of new flood investigations reflects the adverse weather and ground conditions outlined above. In Quarter 3 (October to December 2020), there were 23 Section 19 investigations started, all as a result of the high rainfall in December affecting at least 47 properties. All but two of these properties were in the south of the county. Note that there is a discrepancy between the number of investigations and the number of properties; this is because in some instances there was a cluster of properties which have been aggregated into a single flood investigation.

Figure 2 below illustrates the total number of flood investigations initiated in 2020 compared with previous years. While it is clear that 2019 was an exceptional year, it is also evident that last year resulted in a greater number of investigations than average. This has maintained the pressure on a finite resource, although steps are being taken to make the process more efficient by taking a proportionate approach to flood investigations where, for example, the source and cause is clearly understood. Where such a 'light touch' is considered to be appropriate, the Committee can be assured that the requirements of Section 19 are met in full as well as the additional output of recommendations being made for mitigating future flooding.

Figure 2: Annual Flood Investigations 2012 to 2020



2. Conclusion

2020 was a challenging year, coming as it did on top of the severity of the 2019 storms and consequent flooding. It is acknowledged that, because of the volume of flood investigations it has been necessary to carry out, final investigation reports are not being completed in as timely a manner as might normally be expected. The Committee's attention is drawn to the steps outlined above which are being taken to address this.

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	Active Flood Investigations

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 Paul Brookes, who can be contacted on 07787836877 or paul.brookes@lincolnshire.gov.uk.