



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

Report to:	Flood and Water Management Scrutiny Committee
Date:	22 February 2021
Subject:	December Surface Water Flooding and Improvements to Local Incident Response

Summary:

During 23rd and 24th December 2020, heavy rainfall led to a number of flooding incidents in the south of Lincolnshire. This report reviews the timeline and course of events over that period, and identifies lessons learned from the events informing improvements that have been and can be made between partner authorities.

Actions Required:

The Committee is invited to review and comment on the contents of the report.

1. Background

Forecast 23rd December

The Met Office issued a severe weather warning at 11:06 on 22nd December 2020. The forecast was for spells of heavy rain during the afternoon of Wednesday 23rd December and early Thursday, with 20-40 mm rain likely for many with some places seeing as much as 50-70 mm rain.

At 14:07 on 23rd December, a Flood Guidance Statement for the Lincolnshire Resilience Forum (LRF) area was released by the Environment Agency. This reported that heavy rainfall was moving into Lincolnshire from the South and the West and that it would continue until early hours of the morning on Thursday 24th December 2020. It gave a Best Estimate (Medium Confidence) of totals expected to be a widespread 10-15mm in 24 hours with a Reasonable Worst Case (Low Confidence) of totals expected to be a widespread 30mm in 24 hours with locally up to 40mm in 6 hours and 60mm in 24 hours.

There was considered to be the possibility of impacts from rivers and surface water. However, the risk for widespread flooding from river and surface water remained low. At the time, there was low confidence in the higher rainfall totals, bringing uncertainty to the forecast. This did not suggest that an event was likely enough to enhance resource availability in advance.

Any partner in the Lincolnshire Resilience Forum can, through Emergency Planning, request a precautionary Strategic Command Group meeting if the assessment warrants it. Emergency Planning will then consult with key responders (the Environment Agency, Fire and Rescue and the Police) and a collective determination of the need for convening a Strategic Command Group is then made, with Emergency Planning then organising and supporting the meeting.

In the event, heavy rainfall occurred during 23rd - 25th December which exceeded previous forecasts that had indicated a low likelihood of medium impacts in the south of the county (see **Appendix A**). This resulted in unexpectedly high surface water impacts. Because significant fluvial impacts had not been forecast and expected, and because the predicted rainfall was not unusual for the time of year, the normal precautionary teleconference that would be called by the Environment Agency was not triggered. As a result, unlike the subsequent forecast event for the third week of January, the event was not escalated to a multi-agency response.

Timeline

The flooding that occurred mainly affected South Kesteven and South Holland. The first call reached Emergency Planning at 5pm on 23rd December, with the last being received at 4.30am on 24th December.

Between 11:00 and 22:00 on the 23rd December, around 44.6mm of rain fell in the southern part of Bourne (*Meniscus MapRain*). This is an estimated annual probability of 14.5%. Over a similar period of time (12:00 to 21:45) 52.8mm of rain fell at Spalding, an estimated annual probability of 4.8% (see **Appendices C and D** for detailed rainfall data).

Communications and Response

The County Council receives requests for assistance from the public and elsewhere via the Customer Service Centre (CSC) and Fix My Street, the highest level of response being an emergency response to 'make safe' following a report of risk to public safety. The Highways Confirm system uses a range of options for prioritising incoming calls. For example, some highways safety defects require an immediate response because there is the potential for injury.

In the case of reports of flooding, the option that is used to generate an emergency response is 'investigate risk to life/property'. These priorities are initially assessed by the CSC after following the script, or alternatively the emergency services directly to the Winter and Emergency Duty Officer.

During the afternoon of 23rd December, 12 enquiries requiring an emergency response were received by the Winter and Emergency Duty Officers (WEDO) in which the incident was recorded as 'Flood Investigation: risk to life/property'. At the time, only three of these were considered by the Flood Risk Management Team to be clear incidents of internal flooding to property for which investigations were commenced under the Council's Lead Local Flood Authority (LLFA) duty.

Whilst a full multi-agency response was not triggered prior to the event, as the number of incidents increased and the scale of operations developed, Fire and Rescue continued to 'scale-up' response and management and maintained contact with the Emergency Planning Duty Officer. This included a formal declaration of 'spate conditions' as well as making contact with the National Resilience Assurance Team (NRAT), as an early heads-up of the potential for an emerging situation which could have required additional specialist support, such as high volume pumps. However, in the event, the volume of calls and incidents were manageable within existing Fire and Rescue resources.

Subsequently, overnight and during the morning of 25th December, Lincolnshire Fire and Rescue Control reported attendance at an additional 70 incidents at homes and some businesses, mainly on the 23rd but also into the 24th December. Of these reports, 40 were recorded as 'internal flooding' of homes and businesses, excluding garages, gardens and outbuildings. Formal investigations have commenced in these instances, in accordance with the LLFA duty (see map at **Appendix B**).

Following the Pitt Review of 2009, all Lincolnshire Risk Management Authorities have used call-taking scripts and First Contact Principles that mean the customer should not be passed from pillar to post, but put in touch with the most appropriate Risk Management Authority. In addition, since the events of December 2020, and learning from the advance preparations made in anticipation of heavy rainfall in January, greater use is made of Resilience Direct as a means of directly sharing information more quickly between authorities.

During localised incidents that do not trigger the multi-agency emergency threshold, requests for assistance to Lincolnshire County Council (LCC) are routed to the Highways Winter and Emergency Duty Officers, whether these originate through the LCC Customer Service Centre, Police, or Emergency Planning. At this level, the response available usually focuses on public safety of the highway, such as closing flooded roads and providing warning boards. Rescue and response to life threatening situations is provided by the Lincolnshire Fire and Rescue Service which can undertake pumping operations.

The role of LCC as Lead Local Flood Authority in these circumstances is to identify incidents of internal property and significant infrastructure flooding in order to investigate the cause and identify appropriate longer term measures for rectification. This is commenced as quickly as possible after the incident has been reported. The Fire and Rescue service provides Lincolnshire County Council's 'blue light' response to threats to property or to life. Other category 1 responders under the Civil Contingencies Act (2004) include the Police, District Councils, the Ambulance Service, some NHS organisations and others.

Sandbags are provided by the County Council as a discretionary service within the capacity of existing resources and in response to requests from members of the public and partner authorities. This provision is outlined in a draft Memorandum of Understanding prepared through the flood risk and water management partnership, which also outlines the positions of each District Council. Capacity of LCC Highways to undertake this role is limited by ongoing pressure to fulfil statutory

duties such as gritting during cold weather or other works to manage the public safety of the highways. In response to the recent flooding events, there is an opportunity to precisely define this service and to clarify linkages to existing District Council policies and stocks of materials.

On 23rd December, LCC highways assets were limited because of the holiday period. This is normal for this time of year, and is common throughout the construction industry. On the basis of existing forecasts, however, resources were available sufficient for a potential low-level incident, although it is possible that receipt of Confirm data referring to 'risk to life' may have created expectations of a response more closely aligned with multi-agency arrangements managed through the Lincolnshire Resilience Forum.

In summary, because the incident did not trigger the threshold to put full scale multi-agency arrangements in place, the resources available to the County Council consisted of the following:

- Winter and Emergency Duty Officer (Highways)
- Emergency Planning duty officer
- Two Highways work gangs
- Fire and Rescue assets and resources

This is considered sufficient in normal circumstances to cope with localised, low level incidents of surface water flooding.

Issues reported and recommendations

During the initial phase of the events on 23rd December, difficulties were reported in communications between Emergency Planning and the Highways Winter and Emergency Duty Officer. This was due to short term technical issues – the first experienced in the nine months since large scale redeployment of staff to home working – rather than a systemic problem. The issue has been rectified. At the time, alternative contact arrangements were put in place between Emergency Planning and Highways to compensate, and a temporary workaround was implemented to facilitate communications between partner organisations including requests for sandbags.

A more significant issue appears to have been a lack of clarity between partners on respective roles and resource availability in the event of an incident that falls below the well-rehearsed multi-agency emergency situation. While the relevant details are specified in a suite of documents developed since 2012, the status and visibility of these documents is not uniform across partner agencies, and there is a need to update and clarify these, including in relation to provision of sandbags and advice to residents on use of alternative property protection measures.

All strategic and tactical commanders are trained in emergency response procedures, and the definition of emergency used by the LRF is outlined in the Civil Contingencies Act (2004). The events of 23rd – 24th December did not reach this level, although the use of the term 'risk to life' in some contexts appears to have created expectations that an emergency level response should be expected. The Confirm system that is used by Highways to log and manage calls uses the term

'risk to life' as part of its prioritisation system but this does not necessarily relate to the overall status of the event as a whole. There is a need to ensure that consistent language is being used between partner organisations to help ensure a common understanding of appropriate level of response to a specific circumstance, and that the relevant resource is clearly understood by all parties.

Finally, while response to smaller scale incidents is part of ongoing service delivery for Highways, Fire and Rescue and other services, there needs to be capacity to enhance co-ordination during the event itself, especially if an unexpected event does not trigger the multi-agency arrangements that come into force during larger scale incidents.

To that end, provision is being trialled for a partnership local response co-ordination group within the existing incident response protocols that exist below the level of multi-agency emergency response arrangements. As with existing precautionary arrangements, co-ordination and support for such a group would be provided by Emergency Planning, although it would be expected that any member organisation of the LRF would be entitled to request it, and to request its facilitation through Emergency Planning.

2. Conclusion

In summary, partners responded to an unexpectedly severe surface water incident within the resources available and as planned for the event's forecast. A number of issues regarding communications have been identified and rectified. In addition, it is recommended that incident response protocols are updated and formally agreed by all partners, as soon as possible, including provision for inter-agency co-ordination during events that currently sit below the threshold that triggers multi-agency emergency response. Recommendations are summarised below:

- Update and clarify incident response procedures and responsibilities, including improving co-ordination and communication during incidents that do not trigger formal multi-agency emergency arrangements.
- Update and formally agree a clear statement of partners' responsibilities and resources in all response circumstances, including lead responsibilities.
- Review and agree a definitive approach to provision of emergency aid.
- Ensure that language used throughout is consistent and clear, to underpin common understanding of approach and capacity.

3. Consultation

a) Risks and Impact Analysis

Not Applicable

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Met Office Forecast 22-12-2020
Appendix B	Section 19 Flood Investigations Map
Appendix C	Rainfall in Bourne
Appendix D	Rainfall in Spalding

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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