

APPENDIX A

SECTION 19 REPORT – RAVENSHEAD – APRIL 2023

Introduction

Section 19 of the Flood and Water Management Act 2010 states:

1. On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate:
 - (a) Which Risk Management Authorities (RMAs) have relevant flood risk management functions.
 - (b) Whether each of those RMAs has exercised, or is proposing to exercise, those functions in response to the flood.
2. Where an authority carries out an investigation under subsection (1) of Section 19 it must:-
 - (a) Publish the results of its investigation.
 - (b) Notify any relevant RMAs.
3. The objective of this report is to investigate which RMAs had relevant flood risk management functions during the flooding in April 2023 and whether the relevant RMAs have exercised, or propose to exercise, their risk management functions (as per section 19(1) of the Flood and Water Management Act 2010).
4. The Risk Management Authorities for this area of Nottinghamshire are the Environment Agency (EA) (Derbyshire, Nottinghamshire and Leicestershire), Gedling Borough Council (GBC), The Nottinghamshire County Council (NCC) as Lead Local Flood Authority (LLFA), VIA East Midlands Ltd as Highways Authority on behalf of NCC, Severn Trent Water Ltd. (STW) and Nottinghamshire Fire and Rescue.
5. It should be noted that this duty to investigate does not guarantee that flooding problems will be resolved and cannot force others into action.

Background

6. Ravenshead is a village within the Borough of Gedling, Nottinghamshire. It has a population of approximately 5,366 people according to the 2021 census.
7. On the evening of 29th of April 2023, areas of Ravenshead suffered a flood event caused by short duration, intense rainfall. Over a three-and-a-half-hour period, 29.4mm of rainfall was recorded at the Newstead Abbey rain gauge, which is approximately 3km from Ravenshead (Figure 1). During the event, 24.2mm of rainfall was recorded within a 60-minute period and at its maximum intensity, 14.2mm of rainfall was recorded within 15 minutes. Consequently, 7 residential properties and 1 business were subject to internal flooding with more suffering flooding to gardens and outbuildings.

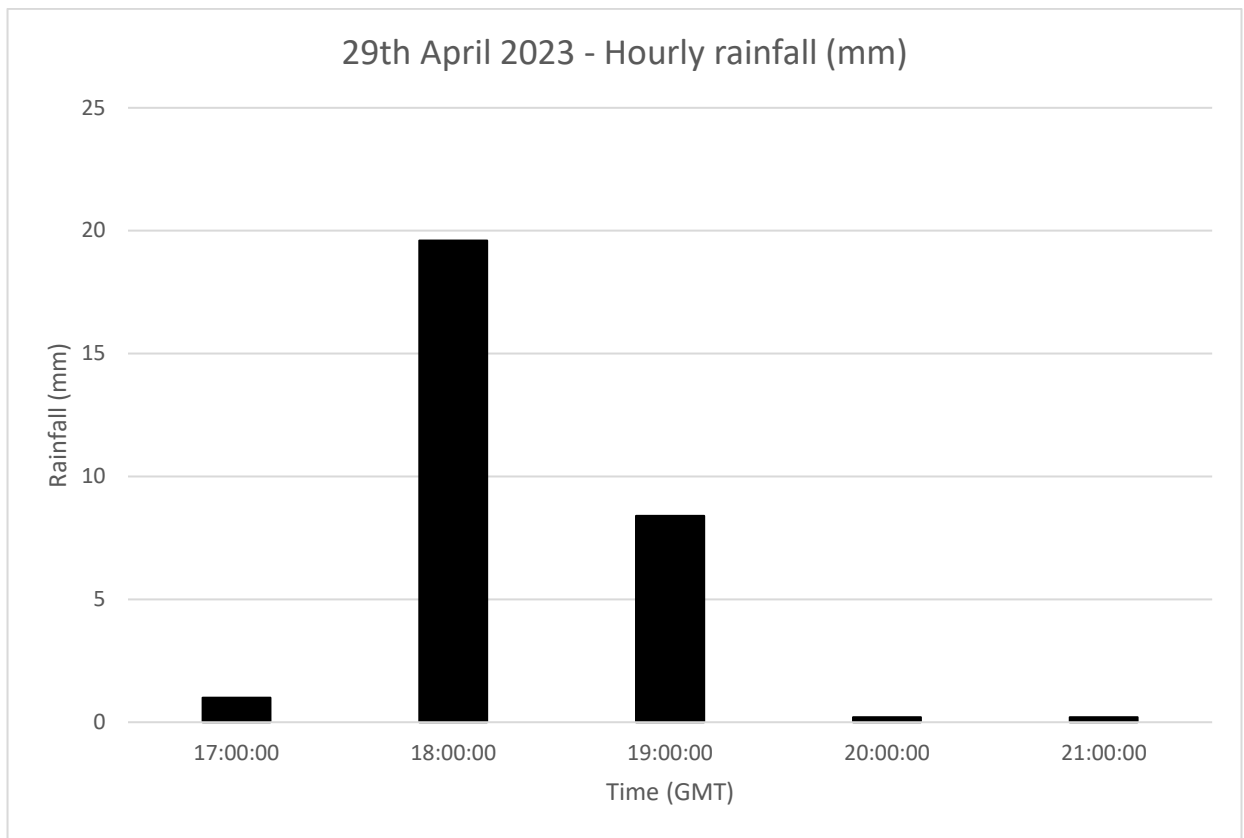


Figure 1. Newstead Abbey Hourly Rainfall 29th April 2023. Data supplied by the Environment Agency.

8. A location map of Ravenshead is shown in Figure 2. The areas affected were:

- Main Road
- Southview Gardens
- Rigg Lane
- Haddon Road



Figure 2. Map of Ravenshead and flood affected areas.

Summary of flooding and its causes

9. Main Road

Four residential properties and one business were internally flooded on Main Road with more properties suffering from external flooding. As shown in Figure 3, a surface water flow path is present to the north of Main Road. Water was observed to flow along this flowpath during the flood event. However, water flowing from agricultural land, as well as along the highway was also observed. Several properties along Main Road are built at a lower elevation than the road itself and as a result, in some locations water flowing along the highway flowed through property boundaries.



Figure 3. Predicted Surface Water Flood Extents – Main Road

10. Southview Gardens

One residential property was internally flooded on Southview Gardens (Figure 4). Water flowed west along Swinton Rise before following the lower elevation of highway into Southview Gardens. Water then pooled at a low spot on Southview Gardens, which when it reached a sufficient depth flowed down a residential driveway and into the property.



Figure 4. Location Plan – Southview Gardens

11. Rigg Lane

At Rigg Lane One residential property was internally flooded. As shown in Figure 5, a surface water flow path is present which flows from northwest to southeast along Longdale Lane. The flow path then flows south along Rigg Lane. Due to the high intensity rainfall experienced, this flow path was observed by residents to overwhelm drainage systems.

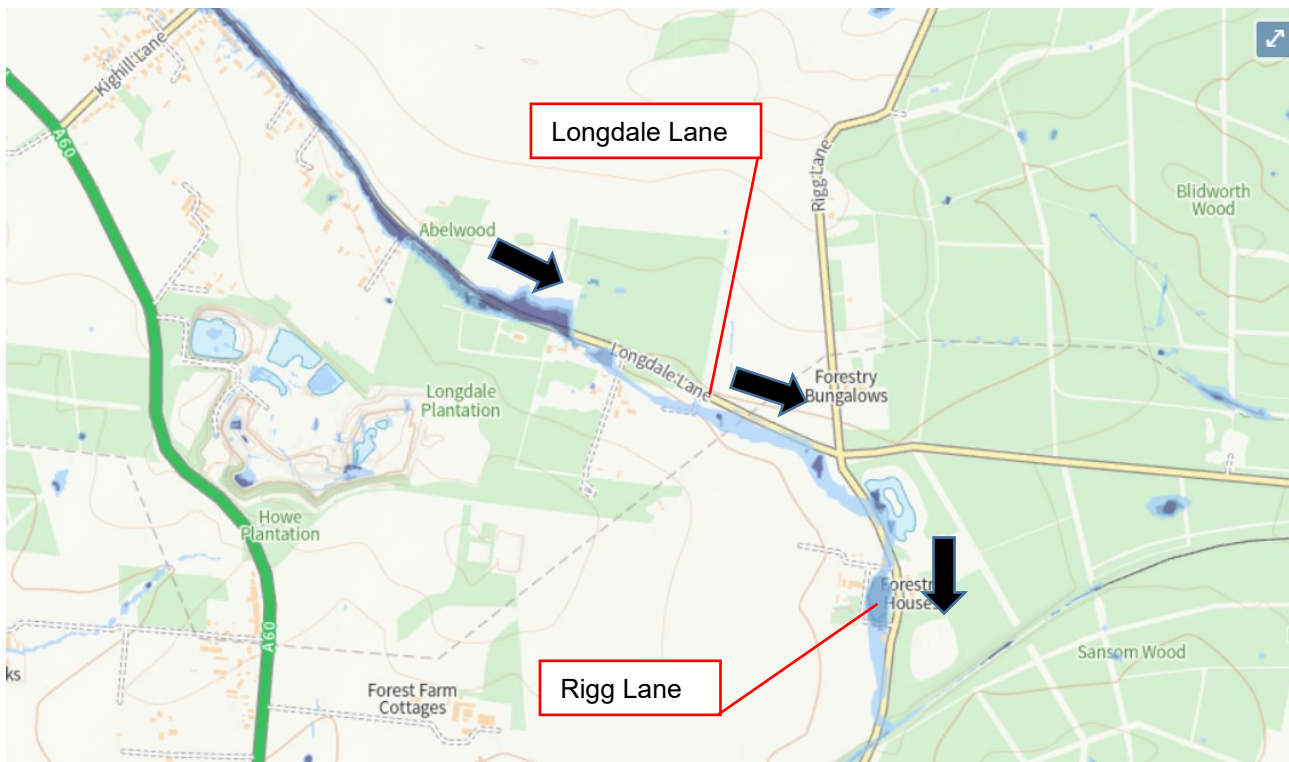


Figure 5. Predicted Surface Water Flood Extents – Rigg Lane

12. Haddon Road

One residential property suffered internal flooding on Haddon Road. As shown in Figure 6, a surface water flowpath flows perpendicular to Haddon Road before flowing downhill along Doveridge Court and reaching Main Road. During the high intensity rainfall experienced, water flowed along this flowpath and into a residential property.

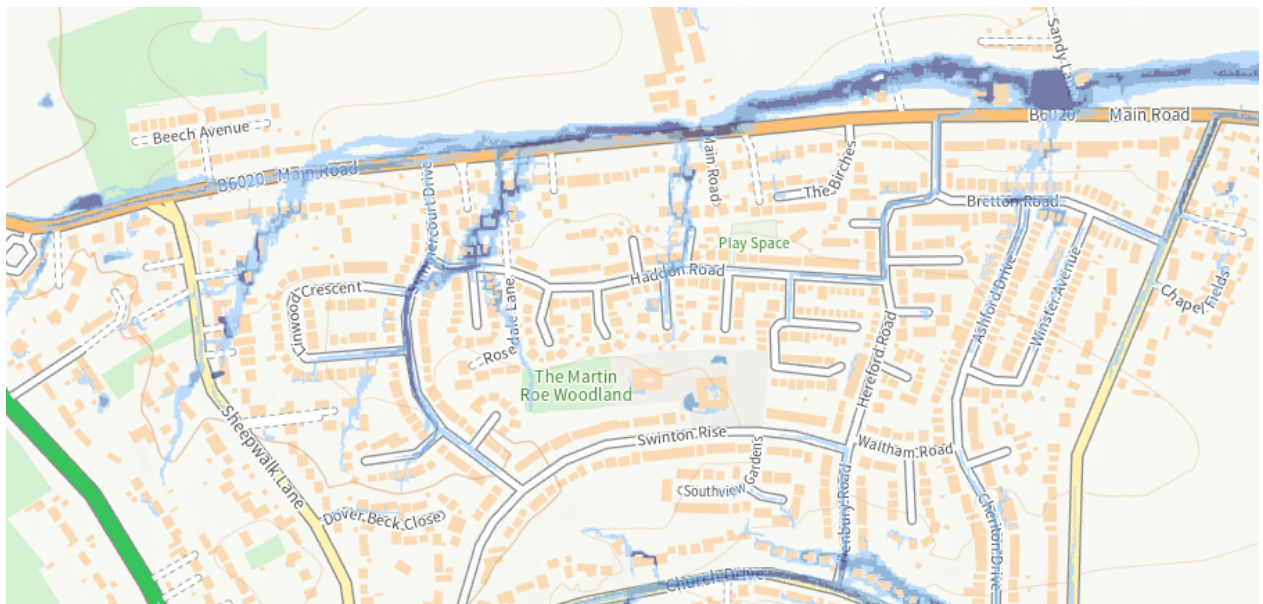


Figure 6. Predicted Surface Water Flood Extents – Rigg Lane

Risk Management Authorities and their responsibilities

13. The Nottinghamshire County Council.

a) Lead Local Flood Authority.

- i. Investigate significant local flooding incidents and publish the results of such investigations.
- ii. Play a lead role in emergency planning and recovery after a flood event.
- iii. As the Lead Local Flood Authority, we have a new duty to determine which risk management authorities have relevant powers to investigate flood incidents to help understand how they happened, and whether those authorities have or intend to exercise their powers.
- iv. By working in partnership with communities, Lead Local Flood Authorities can raise awareness of flood risks.
- v. Lead Local Flood Authorities should encourage local communities to participate in local flood risk management.

b) Emergency Planning.

- i. If a flood happens, all local authorities are 'category one responders' under the Civil Contingencies Act. This means they must have plans in place to respond to emergencies and control or reduce the impact of an emergency.

c) Highway Authority (NCC/VIA East Midlands Ltd).

- i. Maintenance of the public highways including highway drainage assets.
- ii. Provided site-based presence and investigations immediately following the event.

14. Gedling Borough Council.
 - a) Category one responder under the Civil Contingencies Act. This means they must have plans in place to respond to emergencies and control or reduce the impact of an emergency.
15. The Environment Agency.
 - a) Category one responder under the Civil Contingencies Act. This means they must have plans in place to respond to emergencies and control or reduce the impact of an emergency.
16. Severn Trent Water Ltd. (STW).
 - a) Maintenance of the public sewerage system.
 - b) As a water and sewerage company, STW manage the risk of flooding from their water supply and sewerage facilities. This includes;
 - Surface water sewers – these carry rainfall and surface water away from properties to watercourses;
 - Foul water sewers – these carry wastewater away from properties to be treated;
 - Combined water sewers – these drain both wastewater and surface water from properties along with run off from highways.
 - c) Managing the impact of flooding to their networks by ensuring their systems have the appropriate level of resilience to flooding.
 - d) Engage with RMAs on how water and sewerage company assets impact on local flood risk.
 - e) STW are Category 2 responders under the Civil Contingencies act, providing emergency response and supporting the management of flooding events.

Risk Management Authority Responses to Flood

17. The following lists the actions taken by each RMA in response to the flooding both in the immediate aftermath as well as in the longer term:
18. The Nottinghamshire County Council.
 - b) Lead Local Flood Authority
 - i. Attended site immediately after flooding occurred, visiting flood affected residents and business, to discuss flood sources and pathways.
 - ii. Initiated and led the Section 19 Flood Investigation.
 - iii. Liaised with partners to coordinate sandbag delivery, gully cleansing and street cleaning following the flooding.
 - iv. Investigated the condition of land drainage measures adjacent to the flood affected areas.
 - v. Added internally flooded properties to the Property Flood Resilience Program for feasibility assessment.
 - c) Highway Authority (NCC/VIA East Midlands Ltd)

- i. Attended Main Road on the 10th May. All assets were cleared on Main Road from The Little John Inn to Calverton Lane/Fishpool Road. The gullies and offlets were generally found to be full or blocked on arrival. Further work on two ditches in this area has been identified as a requirement and responsibilities are being investigated.
- ii. Attended Southview Gardens on Friday 12th May. All gullies were cleared to help against any further flooding. A further visit on Monday 15th of May was also required to clear gullies on Swinton Rise, these run to old non-serviceable soakaways.
- iii. Attended site at Rigg Lane and with ditch and grip works to be arranged at this site.
- iv. Participated in the Section 19 investigation.

19. Gedling Borough Council

- I. Delivered sandbags to affected residents following the event. This was due to gully cleaning activities still being completed and a forecast of heavy rain in the days following the event.
- II. Participated in the Section 19 reporting process.

Additional Information and Future Actions

20. All the Risk Management Authorities involved in this event are committed to continuing the investigations into the causes of this incident. Those investigations may identify further actions not listed below.
21. Via East Midlands Ltd, (on behalf of Nottinghamshire County Council) will continue to undertake routine maintenance on the drainage assets in the vicinity to ensure they are working at the intended capacity.
22. Further investigation into the local surface water drainage will be undertaken to assess options for managing the Main Street and Rigg Lane flow paths.
23. As the Lead Local Flood Authority we have witnessed and have experience of how flooding devastates communities. The most vulnerable in the community will be our priority. Nottinghamshire County Council will continue to work closely with partners and communities to identify ways of proactively reducing the risk, likelihood and consequences of future flooding events.