



Section 19 Report November 2019 Floods

Version 1.0

06 May 2020

Produced By: Drainage Team

www.rotherham.gov.uk

CONTENTS

1.0	INTRODUCTION.....	2
1.1	Background.....	2
1.2	Flood Investigation Guidance.....	3
2.0	THE INCIDENT.....	3
2.1	When & Where?.....	3
2.2	Rainfall and River Levels.....	4
2.3	Affected Properties.....	5
3.0	IDENTIFICATION OF FLOOD RISK MANAGEMENT FUNCTIONS.....	7
3.1	Risk Management Authorities.....	7
3.2	Future Actions.....	10

1.0 INTRODUCTION

1.1 Background

Rotherham Metropolitan Borough Council, as the Lead Local Flood Authority (LLFA), has a responsibility under Section 19 of the Flood and Water Management Act 2010 to investigate significant flood incidents in its area. Section 19 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 have relevant flood risk management functions, and;
 - b. Whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.
2. Where an authority carries out an investigation under the above subsection it must:
 - a. Publish the results of its investigation, and;
 - b. Notify any relevant risk management authorities.

Risk Management Authorities (RMA) are defined in The Flood and Water Management Act 2010. In Rotherham, these are:

- Lead Local Flood Authority – Rotherham MBC
- The Environment Agency – Yorkshire and East Midlands Areas
- An Internal Drainage Board – Danvm Drainage Commissioners. In Rotherham this is only applicable to Hound Hill Dike and part of Brook Dike in Wath-Upon-Dearne.
- A Water Company - Yorkshire Water Services Ltd & Severn Trent Water Ltd
- A Highway Authority – Rotherham MBC & Highways England

The LLFA Investigating Officer will investigate the cause, publish the findings on the Council web site and notify the relevant parties. Private landowners have responsibilities in relation to land drainage and riparian ownership.

The LLFA Investigating Officer will determine whether an investigation should be carried out using the Flood Investigations Guidance detailed in Section 1.2, taking into account the available resources and significance of the event.

Investigation under the provisions of the Flood and Water Management Act does not include scrutiny of the emergency response to a flooding event. Investigations of this kind may take place under different provisions e.g. the Civil Contingencies Act or local authority scrutiny processes.

1.2 Flood Investigation Guidance

The Council's Local Flood Risk Management Strategy states that if 5 or more residential properties are flooded internally then the appropriate investigations will be carried out. Internal flooding is defined for this purpose as flooding which affects the living areas and excludes porches, conservatories, integral garages etc. Flood incidents which do not meet the above criterion may still be investigated under Section 19 due to other considerations, such as recurring problems or where critical infrastructure is affected. The decision about whether an investigation will be carried out will usually be made within 24 hours of learning of the flood.

The Investigating Officer(s) should consider whether there have been any reported cases of personal injury, the nature of the injury, and the number of people injured. The determining factors also include the depth and velocity of flooding and/or the source of flooding.

Where it is determined that an investigation should be carried out, the Investigating Officer will attend the location and complete an investigation to establish which risk management authorities hold relevant flood risk management functions in relation to the flood event. The response time by the Investigating Officer will depend on the circumstances and safety considerations of the flood event. The Investigating Officer will notify any relevant risk management authorities to establish if they have or are intending to exercise their function in response to the flood.

Following the investigation, the Investigating Officer will complete a Section 19 report on the results of the investigation and then publish the report on the Council's website.

2.0 THE INCIDENT

2.1 When & Where?

On Thursday 7th November 2019 a widespread band of heavy persistent rain fell over South Yorkshire including Rotherham. The catchments were already saturated following several periods on heavy rain in the proceeding weeks, particularly between 26th and 28th October 2019, when some flooding had occurred.

Peak rainfall intensities were not as high as during short summer storms, but the rainfall was prolonged, so the total rainfall depths were high. This combined with the wet catchments lead to a lot of runoff from undeveloped land and this type of rainfall affects mainly the rivers and larger watercourses, rather than small drains and sewers which are more affected by very intense rainfall.

River levels rose throughout the day as the band of rainfall remained over our region.

Extensive flooding occurred in Whiston and Laughton Common, then later along the Don Valley through Rotherham as water from the upper catchment reached the town. Water levels in the Don through the town centre peaked just after midnight 7th/8th November. Peak water levels in the Don were very similar to the previous major flooding in which took place in June 2007.

Flows in the River Rother are controlled by regulators which divert water into large flood storage areas. The river levels in Catcliffe were within 200mm of overtopping the river defences. Widespread flooding through Catcliffe was avoided by the Environment Agency regulating the river flows and the Council pumping surface water flows for several days, although 2 houses were flooded by a localised surface water issue.

The Barbot Hall and Parkgate areas of Rotherham were flooded from Greasbrough Dike and Boundary Dike, which with the town centre river flooding, caused widespread flooding to businesses.

Within Rotherham Borough:

- 68 Households were accommodated at an emergency rest centre (7th/8th Nov).
- 151 properties experienced internally flooded above the floorboards and/or were unliveable, whilst many more were flood externally or below floorboard levels.
- 277 Businesses were directly impacted and 92 Businesses indirectly impacted.
- 30 schools were closed, of which one Primary School remains closed and will potentially not reopen until September 2020.
- 38 strategic roads were closed and many other parts of the road network were impacted, with 46 roads requiring repairs, many of which are significant.
- Rotherham Central railway station was closed for four days with services to Sheffield and Doncaster disrupted due to flooding from the River Don.
- Tram-train services between Sheffield and Rotherham were disrupted for over a week and rail services along the Mexborough line were affected for three days.

2.2 Rainfall and River Levels

South Yorkshire experienced significant flooding associated with a weather front sitting over Yorkshire during the 7th and the 8th November 2019. Persistent rainfall started during the early hours of Thursday 7th November 2019 and lasted for approximately 24 hours.

The Woodhouse Mill Rain Gauge recorded 87.6mm in 24 hours, which is 146% of the average for the whole of November and equivalent to a return period of 70 years.

Met Office records show that in the 2 proceeding months the rainfall was 221% of the long-term average. This period of wet weather ensured the soils had become fully saturated by October.

The November 2019 peak is the highest on record at the river Don through the town centre, at the gauge still known as Rotherham Tesco. River levels were already elevated as a consequence of the event over the 25th and the 26th October 2019.

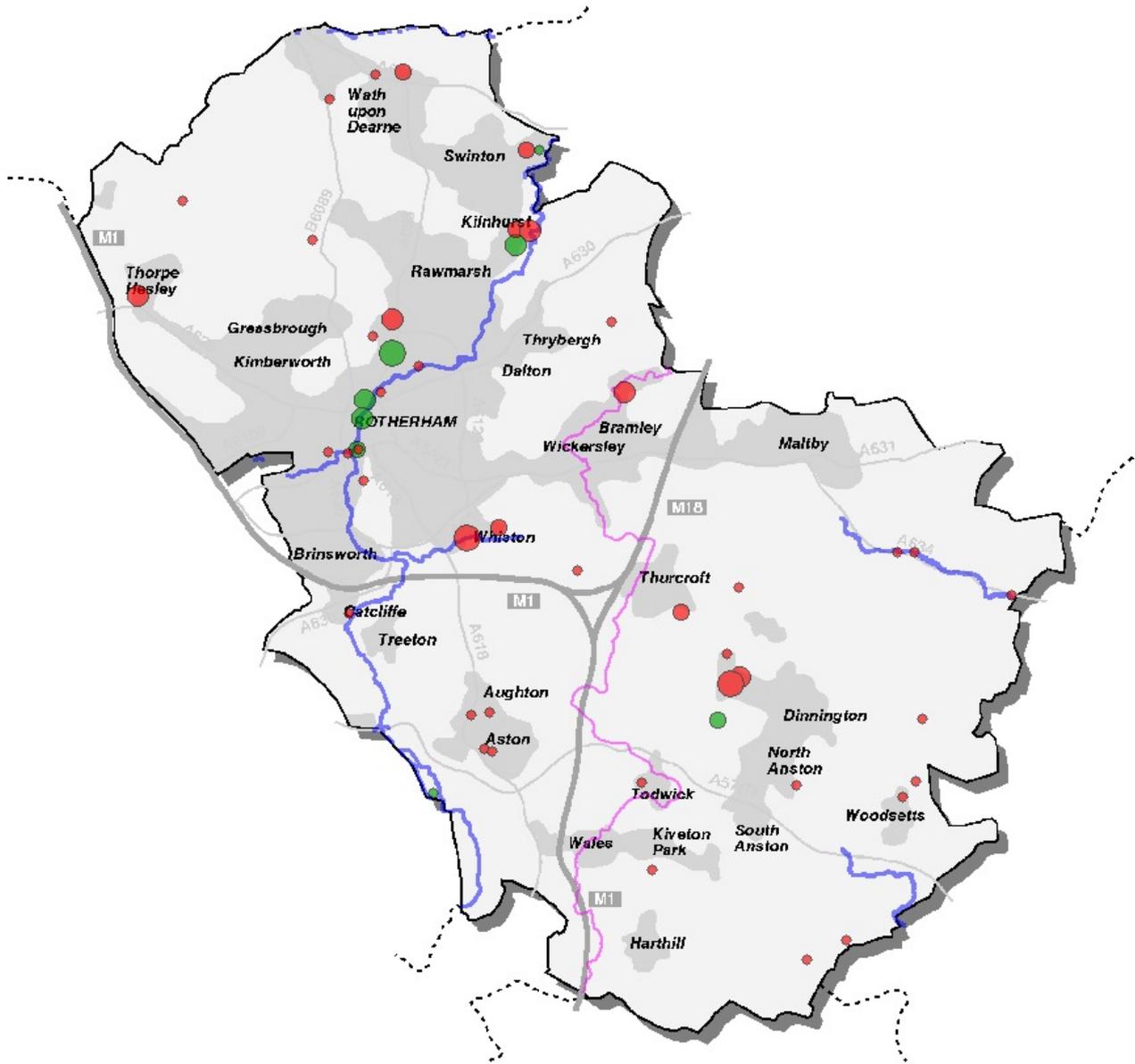
The November 2019 peak level was 3.322m, just very slightly higher than the June 2007 level of 3.271m. The calculated flow for a level of 3.322m is 593 m³/s, but due to out of bank flow there is considerable uncertainty in this estimate.

The return period for the flow recorded in the Don has been calculated to be in excess of 150 years. This is higher than the rainfall return period because it is due to a combination of the rainfall and the saturation of the catchment.

2.3 Affected Properties

The figure below shows the locations and distribution of residential and business flooding. Residential flooding occurred throughout the region, with Laughton Common, Whiston, Rawmarsh and Kilnhurst being particularly badly affected.

Business flooding was concentrated on the Don corridor, because that is where many businesses are located. There was also a significant flood at North Anston Industrial Estate.



Number Of Residential Properties Flooded

- Greater Than 20 (2)
- 5 to 19 (5)
- 3 to 4 (5)
- 1 to 2 (31)

Number Of Non-Residential Properties Flooded

- Greater Than 40 (1)
- 20 to 39 (3)
- 10 to 19 (2)
- 1 to 9 (2)

— Main River

— Yorkshire Water / Severn Trent Water Boundary

3.0 IDENTIFICATION OF FLOOD RISK MANAGEMENT FUNCTIONS

3.1 Risk Management Authorities

Risk Management Authorities (RMA) have flood risk management functions according to the type of flooding as follows:

Main Rivers	- Environment Agency
Ordinary Watercourses	- LLFA
Surface Water Flooding	- LLFA
Public Sewers	- Water Company
Highway Flooding	- Highway Authority

The identification of a RMA as having these functions does not imply that the RMA has responsibility or liability for the flooding, or for taking any action beyond investigation.

The Risk Management Authorities which have flood risk management functions relating to this flooding incident are:

Residential Property Address	Number of properties flooded internally	Risk Management Authorities with Relevant Flood Risk Management Functions	Risk Management Function Exercised or Proposed to be Exercised
Aldwarke Lane, Aldwarke	1	Environment Agency (Yorkshire Region)	Yes
Aughton Road, Aughton	2	Rotherham MBC as LLFA	Yes
Hepworth Drive, Aston	1	Rotherham MBC as LLFA	Yes
Main Street, Brookhouse	2	Rotherham MBC as LLFA	Yes
Chapel Walk, Frederick Street, Catcliffe	2	Rotherham MBC as LLFA	Yes
Rother View Road, Canklow	1	Rotherham MBC as Highway Authority	Yes
St Ann's Road, Eastwood	1	Environment Agency (Yorkshire Region)	Yes
The Yews, Firbeck	1	Rotherham MBC as LLFA	Yes
Kingswood Lane, Firbeck	1	Environment Agency (Trent Region)	Yes
Brinsworth Street, Ickles	1	Environment Agency (Yorkshire Region)	Yes
Burrs Lane, Gildingwells	1	Rotherham MBC as LLFA	Yes
Hard Lane, Kiveton Park	1	Rotherham MBC as LLFA	Yes
Hooton Road, Kilnhurst	6	Environment Agency (Yorkshire Region)	Yes
Glaisdale Close, Laughton Common	1	Rotherham MBC as LLFA	Yes

Residential Property Address	Number of properties flooded internally	Risk Management Authorities with Relevant Flood Risk Management Functions	Risk Management Function Exercised or Proposed to be Exercised
Carson Avenue (11), Dettori Mews (5), Laughton Common	16	Rotherham MBC as LLFA	Yes
Meadow Street (33) Princess Street (2) Laughton Common	35	Rotherham MBC as LLFA	Yes
Morthen Hall Lane, Morthen	1	Rotherham MBC as LLFA Rotherham MBC as Highway Authority	Yes Yes
Narrow Lane, North Anston	1	Rotherham MBC as LLFA	Yes
Scrooby Lane, Parkgate	1	Rotherham MBC as LLFA	Yes
Westfield Mews (5) Westfield Road (3), Parkgate	8	Rotherham MBC as LLFA	Yes
Moor Lane South, (4) Silvermoor Drive (1) Ravenfield	5	Rotherham MBC as LLFA	Yes
Hooton Lane (1) Church Lane (1) Ravenfield	2	Rotherham MBC as LLFA	Yes
Flat Lane, Stone	1	Environment Agency (Trent Region)	Yes
Florence Avenue, Swallownest	1	Rotherham MBC as LLFA	Yes
Wharton Avenue, Swallownest	1	Rotherham MBC as LLFA	Yes
New Station Road, Swinton	4	Environment Agency (Yorkshire Region) Yorkshire Water	Yes Yes
Sheffield Road, Templeborough	1	Environment Agency (Yorkshire Region)	Yes
Marsh Street, Rotherham	1	Environment Agency (Yorkshire Region)	Yes
Brook Hill, Thorpe Hesley	6	Rotherham MBC as LLFA	Yes
Common Road, Thorpe Salvin	2	Rotherham MBC as LLFA	Yes
Netherthorpe Road, Thorpe Salvin	1	Rotherham MBC as LLFA	Yes
Elmore Street, Thurcroft (2) Moorhouse Drive, Thurcroft (1)	3	Rotherham MBC as LLFA	Yes

Residential Property Address	Number of properties flooded internally	Risk Management Authorities with Relevant Flood Risk Management Functions	Risk Management Function Exercised or Proposed to be Exercised
The Pastures, Todwick	1	Rotherham MBC as LLFA Rotherham MBC as Highway Authority	Yes Yes
Moor Road, Wath-upon-Dearne	4	Danvm IDB Rotherham MBC as LLFA	Yes Yes
Vicar Road, Wath-upon-Dearne	1	Rotherham MBC as LLFA	Yes
Cortworth Lane, Wentworth	1	Rotherham MBC as LLFA	Yes
Main Street, Wentworth	2	Rotherham MBC as LLFA	Yes
Rotherham Road, West Melton	1	Rotherham MBC as LLFA	Yes
Alma Row (2) High Street (8) Moorhouse Lane (11) Norbrook Way (2) The Green (1) Whiston	24	Environment Agency (Yorkshire Region)	Yes
Howlett Close, Whiston	3	Rotherham MBC as LLFA Rotherham MBC as Highway Authority	Yes Yes
Gildingwells Road, Woodsetts	1	Rotherham MBC as LLFA	Yes
Hoades Avenue, Woodsetts	1	Rotherham MBC as LLFA	Yes
Beighton Road, Greenwood Road, Wheatley Road. Kilnhurst *	0*	Yorkshire Water	Yes

*Flood levels did not reach above floor level in habitable rooms of any of the properties in this area, so these are not counted in accordance with the criteria listed in section 1.2. Nevertheless, this has been included because it was a significant flood with many houses having flooding under floors, in garages and outbuildings and in gardens.

Businesses Flooded by Area	Number of Businesses flooded Internally	Risk Management Authorities with Relevant Flood Risk Management Functions	Risk Management Function Exercised or Proposed to be Exercised
Parkgate	124	Rotherham MBC as LLFA Environment Agency (Yorkshire Region)	Yes Yes
Northfield/ Effingham	37	Environment Agency (Yorkshire Region)	Yes

Businesses Flooded by Area	Number of Businesses flooded Internally	Risk Management Authorities with Relevant Flood Risk Management Functions	Risk Management Function Exercised or Proposed to be Exercised
Kilnhurst	26	Environment Agency (Yorkshire Region)	Yes
Town Centre	22	Environment Agency (Yorkshire Region)	Yes
Dinnington (North Anston Trading Estate)	10	Rotherham MBC as LLFA	Yes
Templeborough (9) / Canklow (6)	15	Environment Agency (Yorkshire Region)	Yes
Beighton	8	Environment Agency (Yorkshire Region)	Yes
Swinton	4	Rotherham MBC as LLFA Environment Agency (Yorkshire Region)	Yes Yes
Other	7	Rotherham MBC as LLFA Environment Agency (Yorkshire Region)	Yes Yes

3.2 Future Actions

This Section 19 Report identifies the Risk Management Authorities relevant to each flood location, but detailed consideration of further investigations and action is beyond the scope of this report.

Where the principal RMA identified is not Rotherham Council, the relevant RMA will be the primary contact for further information.

Where the Council has been identified as the principal RMA, investigations are ongoing. The investigations will identify where flood alleviation measures may be feasible and where applicable schemes will be promoted, but this is subject to funding being available.

For further enquiries about surface water flood risk please contact LLFA@rotherham.gov.uk or 01709 822152.