Nottingham City Council

Flood Investigation Report:

12th June 2019 Flood Event

Athorpe Grove, Old Basford, Nottingham

Prepared under Section 19 of the Flood and Water Management Act 2010





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FLOOD INVESTIGATION REPORT SUMMARY

Nottingham City Council is a Lead Local Flood Authority (LLFA) under the Flood and Water Management Act (2010) (FWMA).

Section 19 of the FWMA states that on becoming aware of a flood the LLFA must, where appropriate, investigate which Risk Management Authorities have relevant flood risk management functions and whether they have, or are proposing to, exercise those functions in response to the flood.

Flooding occurred at Athorpe Grove, Old Basford on 12th June 2019. It was considered necessary to undertake a formal investigation because Nottingham City Council's thresholds were surpassed, as more than 5 properties reported internal flooding. This Flood Investigation Report has been completed by the City Council under our duties as the LLFA and summarises the formal investigation that has been undertaken.

The flooding occurred as a result of a prolonged period of rainfall followed by a more intense rainfall event on the 12th June. Subsequently, river levels of the Day Brook rose sharply, resulting in the watercourse overtopping and flooding Athorpe Grove. The Day Brook is designated as a Main River, and is therefore overseen by the Environment Agency.

It is recommended that Property Level Resilience (PLR) measures are installed onto the affected properties as part of the wider improvements to the Day Brook corridor under the Blue Green Infrastructure scheme. Both Nottingham City Council and the Environment Agency will seek to improve maintenance of local drainage and the watercourse.

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1 INTRODUCTION

1.1 What is a Formal Flood Investigation?

Flooding has a devastating impact that affects people, property, business, the environment and transport. There are many different sources of flooding including rivers, sewers, surface water and groundwater and there are a number of Authorities and organisations involved in managing the risk of flooding from these different sources. Flooding can be caused by a complex interaction of different sources that can be difficult to resolve, particularly in urban areas.

Nottingham City Council is a Lead Local Flood Authority (LLFA) under the Flood and Water Management Act (2010) (FWMA). In recognition of the complex nature of flooding and the number of different Authorities that can be involved, Section 19 of the FWMA places a duty on LLFA's to investigate flooding in their area, as appropriate. The legislative requirements of Section 19 are included below.

Flood and Water Management Act (2010) - Section 19

- (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 subsection (1) it must—
 - (a) publish the results of its investigation, and
 - (b) notify any relevant risk management authorities.

This report has been prepared in response to this legislative requirement.

1.2 Which Authorities are involved?

The Flood and Water Management Act (2010) identifies organisations that have flood risk management responsibilities as 'Risk Management Authorities'. Table 1 shows the key responsibilities of Risk Management Authorities that operate in the Nottingham City area.

Due to the number of different organisations involved, the City Council is responsible for the leading on flood investigations and works in partnership with relevant Risk Management Authorities. Through leading the investigation, the City Council will identify which Risk Management Authorities have flood risk management functions in relation to the flood event and what actions they propose to take, if any, to reduce flood risk in the future.

Risk Management Authority	Flood Risk Management Functions
Lead Local Flood Authority & Highway Authority: Nottingham City Council	River (fluvial) flooding from minor watercourses ('Ordinary Watercourses')
	Surface water (pluvial) flooding

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	 Groundwater flooding Provision and maintenance of highway drains and road gullies
Water and Sewerage Company: Severn Trent Water	Providing effectual drainageMaintaining adopted public sewerage network
Environment Agency	 River (fluvial) flooding from large watercourses ('Main Rivers') Flooding from the Sea and estuaries Reservoir flooding

Table 1: Risk Management Authorities in Nottingham City Council's administrative area.

1.3 When are Formal Flood Investigations undertaken?

Nottingham City Council has developed thresholds and triggers for when a formal investigation will be undertaken following a flood event. These thresholds relevant to this Flood Investigation are shown below:

Nottingham City Council Thresholds for Initiating Flood Investigations

For a residential dwelling such as houses or flats, including Nottingham City Homes properties, a Section 19 flood investigation shall be carried out where:

• Internal (over the doorstep) flooding affects five or more properties and the properties are either in close proximity, or the flooding is hydraulically linked.

1.4 Flood Investigation Report

The flood event on the 12th June 2019 caused the internal flooding of 9 properties at Athorpe Grove. This Flood Investigation Reported has been compiled because the number of properties that experienced internal flooding exceeds the thresholds that been set by the City Council.

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2 SITE INFORMATION

2.1 Location of the flooding incident and the local area

Athorpe Grove is located approximately 4 km north-west of Nottingham City centre, in the area of Old Basford. Old Basford is a predominantly residential area, with some open spaces adjacent to Athorpe Grove (see Figure 1.0), both greenfield and brownfield. This includes Vernon Park and vacant land, which was historically a Dye and Bleach works. The area developed alongside the industry by the early 1900's. Prior to the residential development, the land was open fields.

Athorpe Grove is directly adjacent to the Day Brook, a 4 km long main river. The Day Brook is a tributary of the River Leen, with a combined catchment of 42 km².

The Day Brook originates from agricultural land (outside of Nottingham City Council's administrative area, to the north). It then flows through Arnold, a largely residential region and follows the busy Valley Road (A6514) through Sherwood and Basford, where it then passes Athorpe Grove. As the Day Brook passes through multiple residential areas, its catchment is heavily urbanised. It has been historically modified resulting in sections of the watercourse being canalized, culverted and re-profiled. The combination of the catchment topography, the modifications and the impervious residential areas, results in a flashy catchment prone to flood risk.

A combined sewer network serves Athorpe Grove. Severn Trent Water's public sewer records show the pipes flow by gravity, taking both foul and surface water from Athorpe Grove and down Rydal Grove, away to Vernon Avenue. The combined sewer on Athorpe Grove is 225 mm in diameter, moving into a 375 mm pipe on Rydal Grove.

Athorpe Grove and the Day Brook are separated by a wall which keeps the Day Brook within its channel. At low water levels, this prevents water ingress onto Athorpe Grove, however, in certain flood events, the water level exceeds the height of the wall, therefore overtopping and causing flooding.

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Figure 1: Site location
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2.2 Historical Flooding

This location has flooded in the past. Nottingham City Council have records of flooding of 10 properties on 6th June 2010. Seven of these properties flooded internally because of extreme rainfall, high flows and a blocked trash screen.

2.3 Predicted Flooding

The Environment Agency's Flood Map is a national dataset which shows the areas in England and Wales predicted to flood from rivers and the sea. The dataset was made publicly available and is published on the Environment Agency's website ⁽¹⁾.

The EA's flood map show that Athorpe Grove is situated within Flood Zone 3. This means that Athorpe Grove is predicted to be at High Risk by the EA's Flood Maps. High Risk means that each year, this area has a chance of flooding greater than 1 in 30 (3.3%).

An extract from the Environment Agency flood maps is included in **Appendix A.** Areas at Medium risk (chance of flooding between the 1 in 30 and 1 in 100), Low risk (chance of flooding between the 1 in 100 and 1 in 1000) and Very Low risk (chance of flooding of less than 1 in 1000) are also indicated on the map.

(1) https://flood-warning-information.service.gov.uk/long-term-flood-risk

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3 FLOOD INVESTIGATION

3.1 Weather conditions before and during the event

Conditions during the week leading up to the 12th of June were wet with a continuous period of rainfall.

Nottingham City Council own a network of 4 rain gauges across the city. The nearest rain gauge to the location of the flooding incident is at Hucknall Road, approximately 1 km away. The Hucknall Road rain gauge measured a total of 99.2 mm across the three days leading up to the flooding at Athorpe Grove. The rainfall data shows that between $10^{th} - 12^{th}$, four rainfall events occurred in close succession to each other (see Figure 2). The fourth rainfall event was of higher intensity, resulting in a sharp rise in the water level of the Day Brook (see Figure 3).

The average precipitation for Nottingham in June is 56 mm ⁽²⁾. This means that over the 3 days prior to the flooding incident, 43.2 mm more than the total average for June fell onto the Day Brook and River Leen catchment.

As there was a prolonged rainfall event prior to the flooding, the ground across the catchment and upstream storage areas would have been saturated, and the continued precipitation would have been less able to infiltrate. Given the urbanised nature of the catchment, there would have been a significant amount of runoff and increased discharge rate into both the Day Brook and the River Leen, resulting in a high water level.

(2) https://en.climate-data.org/europe/united-kingdom/england/nottingham-128/

Date	Total rainfall (mm) - Hucknall Road	
10/06/2019	15.8	
11/06/2019	50.4	
12/06/2019	33.0	
Total	99.2	

Table 2: Total precipitation measured at Bulwell and Hucknall Road Rain Gauge prior to the flooding on the 12th June

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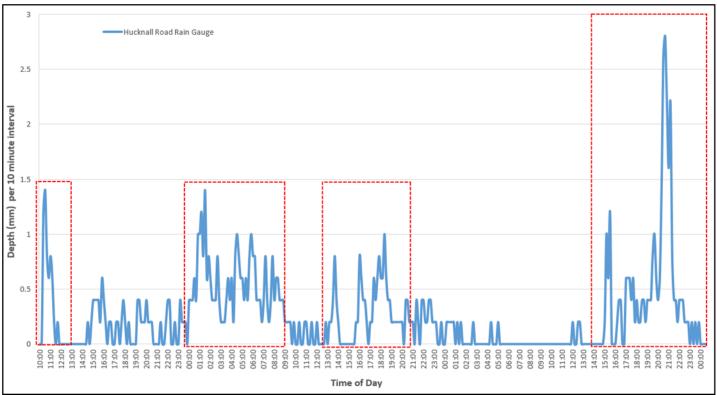


Figure 2: Rain gauge data from Hucknall Road from the evening of the 10th June through to the 12th June

3.2 Flooding Source and Mechanism

The flooding of properties on Athorpe Grove occurred during and after the heavy rainfall event at 20:30 on 12th June 2019. It is likely that the prolonged period of rainfall across the 3 days prior to this event had saturated the areas of green space and upstream storage sites within the catchment. As this is an urban catchment, the drainage network may have been at a reduced capacity.

It is likely that the water levels in the River Leen were higher due to the volume of water that had discharged into the river prior to the storm event. This may have affected the ability of the Day Brook to freely outfall into the River Leen prior to, during and after the rainfall event, which therefore contributed to an increase in the level of the Day Brook.

Upstream storage areas such as the Thackeray's Lane Recreation Ground and Valley Road Water Meadow store storm water during flood events, however, given the long period of rainfall prior to the incident, it is likely that the ground would've been saturated and if the Day Brook breached at these locations, the storage locations were at capacity.

Due to the high water level, water overtopped the wall to the rear of the properties on Athorpe Grove, therefore creating a flood route to the rear. The force of the floodwater caused damage to the wall, allowing more water to surpass it. The watercourse continued to overtop at the rear of Athorpe Grove, until the water level dropped to lower than the threshold of the wall. Flooding also occurred at the front of the properties. On Athorpe Grove, there is an alleyway that joins the rear to the front of the properties. It is likely that water at the rear of the properties flowed through the alleyway and onto Athorpe Grove at the lowest point, where it pooled at the front of the affected properties. Due to the low thresholds of the doors on the properties on Athorpe Grove, water entered causing internal flooding from the front in addition to the rear.

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Status [Final] Page 10 of 21 Residents reported that the water at the front of the properties was unable to drain away via road gullies. This meant that floodwater remained above the threshold level of some properties. It is likely that these were blocked with debris (both existing silt and debris from floodwater), as once unblocked by Nottingham City Council, water drained away freely.

The Day Brook River Gauge (1) recorded a level of 1.205m at the time of the flooding (Figure 3).



Figure 3: River Level (m) of Day Brook during the flood event on 12th June 2019

(1) https://www.gaugemap.co.uk/#!Map

3.3 Preventative Measures

The Day Brook is located within an Environment Agency Flood Warning Area, and Athorpe Grove is a Flood Warning Rapid Response area. This means that the EA provides a free 24-hour flood warning service (Floodline) for properties at risk from river and tidal flooding in England in Wales, and is a central source for information on past floods, flood maps, and practical guides on protecting your home during a flood.

In order to issue flood warnings, the Environment Agency monitor the water level on both the Day Brook and the River Leen, by utilising river gauges and patrolling the watercourses. The Environment Agency issues flood warnings when certain thresholds for water levels are breached. On this occasion, the Environment Agency issued an Orange Warning (Flooding is possible – be prepared) for the River Leen and Day Brook. These warnings allow the public to prepare for the flooding, with the aim of minimising the impact of a flood.

The Environment Agency have installed a "grabbing" system at the High School Playing fields where the Day Brook becomes culverted. This section often becomes blocked due to the presence of a trash screen. This grabber removes rubbish, allowing the Day Brook to pass effectively through the culvert, preventing flooding, and inhibits the risk of debris reducing the capacity of the culverted watercourse. The Environment Agency also carry out routine checks and debris/blockage clearance in the surrounding area.

Highway Services of Nottingham City Council provide a 24/7 call out service. This meant that there was an on-call operative available to aid with the flood response. This involved utilising a gully wagon on site to clear the gullies on Athorpe Grove and prevent further flooding at the front of the properties.

Historically, works have been undertaken on the Day Brook in order to create more upstream storage as a preventative measure. This includes the formation of water meadows along Valley Road and the provision of an additional channel and storage area at Thackeray's Lane

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3.4 Flooding Impacts

The number of properties that flooded internally was 9. This meant of a number of residents were displaced as the properties were uninhabitable during the repairs to damage. Damage varied between properties, but generally, there was unrepairable damage to furniture, furnishings, floorboards and carpets. Externally, there was damage to gardens e.g. outdoor furniture, decking and planting. The floodwater also caused damage to the wall separating the watercourse and Athorpe Grove.

3.5 Potential Solutions

Potential solutions have been explored as part of an existing scheme, the Blue Green Infrastructure Project. Nottingham City Council has led this scheme in partnership with the Environment Agency and Severn Trent Water, with joint funding from the European Regional Development Fund (ERDF). This project sought to determine cost effective flood mitigation measures utilising blue green (natural) infrastructure, along the corridor of both the Day Brook and the River Leen, whilst improving connectivity through the city along these watercourses. Although proposed works on the River Leen were deemed unaffordable, some elements of the proposed scheme on the Day Brook have been taken forward, and a Long Term Strategy for the River Leen is being explored.

Solutions being undertaken in order to better protect residents at risk of flooding from the Day Brook include:

- Jubilee Ponds partial refurbishment of the Severn Trent Water asset, to bring one of the existing ponds back into operation to encourage more water in the larger pond and therefore maximise upstream storage,
- Valley Road Park re-naturalisation of the watercourse in order to slow the water in a fast responding catchment,
- Jason Spencer Sports Ground re-naturalisation of small elements of the watercourse, in attempt to slow the water in a fast responding catchment.

The project has a completion date of February 2021.

As well as these "Blue-Green" elements of the scheme, some properties were identified as eligible for "Property Level Resilience" (PLR). PLR is where various measures are installed in order to prevent water ingress into the property. This includes the installation of flood doors, smart airbricks, non-return valves, and sealing possible entry points for water. Although this does not guarantee that the properties are protected, PLR will give residents more time to prepare and move valuables and furniture above ground, therefore reducing the impact of flooding.

The properties that are being investigated as part of this S19 Flood Investigation Report, are included in the existing scheme, and the majority of the properties had been surveyed prior to this flood event to determine the most suitable PLR products for installation. Therefore, the affected properties are all included in the scheme to have PLR measures installed to better protect them from flood risk. These measures will be installed by the end of February 2020. Another solution that had been explored under the Blue Green Infrastructure Project study, was to alter and re-profile the Day Brook where it runs adjacent to Athorpe Grove. There is a plot of vacant land on the opposite side of the watercourse, which is historically the site of a Dye and Bleach works. The watercourse could be diverted away from Athorpe Grove to a more central location through this site. The watercourse would be re-naturalised and removed from the

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current canalised channel, with the creation of wetland areas and an embankment on both sides of the watercourse. However, although this solution was explored, only a small section of the land is owned by NCC, and the majority is privately owned for development. This solution is very costly and it currently un-fundable.

Increased maintenance of the watercourse and upstream storage areas may have a positive impact on reducing flood risk. The land adjacent to the Athorpe Grove has been difficult to access in order to maintain the watercourse. If access can be provided to the land, the EA may be able to maintain the watercourse and therefore remove any obstructions to allow the water to pass through effectively and away from Athorpe Grove. This includes tree and bush works on the channels and sides, up to 8 metres inland of the left of the Day Brook on the derelict land adjacent to the Day Brook.

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4 RIGHTS AND RESPONSIBILITIES

Which Risk Management Authorities have flood risk management functions in relation to the flood event?

4.1 Lead Local Flood Authority (Nottingham City Council)

The FWMA places a number of responsibilities on LLFAs in relation to flood risk management. As stated in Section 1, LLFAs have a responsibility to investigate flood incidents, as appropriate, under Section 19 of the Act. Whilst we can investigate flood events, work with our professional partners and make recommendations for reducing the risk of future events, LLFAs do not have a responsibility or the funding to solve all flooding issues.

4.2 Highways Authority (Nottingham City Council)

NCC as the Highways Authority have a duty to maintain all highways classed as being "maintainable at public expense" that fall within their area of control. They have the lead responsibility for providing and managing highway drainage and roadside ditches under the Highways Act 1980. The owners of land adjoining a highway also have a common-law duty to maintain ditches to prevent them causing a nuisance to road users.

The Highways Authority are required to ensure that the drainage system is adequate and ensure they are maintained.

4.3 Public Sewer (Severn Trent Water)

Water companies are Risk Management Authorities (RMAs) and play a major role in managing flood and coastal erosion risks. They manage the risk of flooding to water supply and sewerage facilities and flood risks from the failure of their infrastructure.

The main roles of water and sewerage companies in managing flood and coastal erosion risks are to:

- Ensure their systems have the appropriate level of resilience to flooding, and maintain essential services during emergencies.
- Maintain and manage their water supply and sewerage systems to manage the impact and reduce the risk of flooding and pollution to the environment. They have a duty under section 94 Water Industry Act 1991 to ensure that the area they serve is "effectually drained". This includes drainage of surface water from the land around buildings as well as provision of foul sewers.
- Provide advice to LLFAs on how water and sewerage company assets impact on local flood risk
- Work with developers, landowners and LLFAs to understand and manage risks for example, by working to manage the amount of rainfall that enters sewerage systems.
- Work with the Environment Agency, LLFAs and district councils to coordinate the management of water supply and sewerage systems with other flood risk management work.

4.4 Main River (Environment Agency)

The Environment Agency is a key flood risk management operating authority. It has a strategic overview of all sources of flooding and coastal erosion. It is responsible for flood and coastal erosion risk management activities on both main rivers and the coast, as well as regulating reservoir safety and working in partnership with the Met Office to provide flood forecasts and warnings. It has the power (but not legal obligation) to manage flood risk from designated main

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rivers, such as the Day Brook. This means that the Environment Agency is responsible for managing flood risk of Main Rivers by carrying out maintenance, improvement or construction work.

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RECOMMENDATIONS FOR THE PUBLIC

Recommendations to the public:

- Where available, sign up to the EA's flood warnings (Floodline) by calling 0345 988 1188 or by registering online https://www.gov.uk/sign-up-for-flood-warnings.
- Where available, monitor online river gauge information as well as flood warnings https://flood-warning-information.service.gov.uk/river-and-sea-levels.
- Owners of affected properties should consider preparing a Household Emergency Plan and an emergency kit containing essential items.
- Implement resilience infrastructure inside of the property e.g. tiles instead of carpets, PVC doors instead of wood, water compatible walls, flooring and kitchen fittings, sump and pump systems, and raised electrics/meters.
- With support from Flood Risk Management Authorities, the community should make efforts to form a local resilience/flood group and communicate with their neighbours to help each other during an event. This should including appointing Community Flood Wardens and preparing a Community Emergency Plan.
- Seek support for insuring your property https://www.floodre.co.uk/
- Regularly inspect drainage systems in the area. Report blockages or other issues to the responsible owner and the LLFA.
- Home owners who live adjacent to the watercourse should be aware of their maintenance responsibilities through Riparian Ownership.
- Any works to be undertaken by landowners on or adjacent to the watercourse requires consent and a permit from the Environment Agency.
- For further information, please see the Environment Agency's "What to do before, during and after a flood" document (3).
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen t data/file/403213/LIT 5216.pdf

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6 CONCLUSIONS & AGREED ACTIONS

A total of 9 residential properties were flooded internally on Athorpe Grove in Old Basford. A prolonged period of rainfall across 3 different events passed over the city over a period of 3 days prior to the flooding event. The fourth event at 20:30 on the 12th June resulted in the rapid rise in water levels in the Day Brook, breaching the walls of the watercourse, and therefore flooding Athorpe Grove.

Nottingham City Council and the Environment Agency are the Risk Management Authorities that have flood risk management functions in relation to the flood event. Nottingham City Council is responsible for managing highway drainage and for investigating the flood event and the Environment Agency is responsible for responding to flooding of and maintaining "Main" rivers. Nottingham City Council and the Environment Agency have worked in partnership to agree an action plan.

Nottingham City Council has been undertaking a flood risk management scheme along the Day Brook with final landscaping works completed in Spring 2021. This involved undertaking natural flood management along the Day Brook and implementing property level resilience on the affected properties.

A number of recommendations have been made for residents to improve their level of preparedness and resilience. It is also important for residents to report any future flooding issues to Nottingham City Council and the Environment Agency.

6.1 Agreed Action Plan

As the road gullies on Athorpe Grove prevented the drainage of floodwater once the Day Brook overtopped, they are to be added to Nottingham City Council's "Targeted Gully Cleaning Routes" list (TGCR). The Targeted Gully Cleaning Routes aim to inspect and clean gullies more frequently than the normal annual cycle. They are to be cleaned 3 times a year and are inspected when weather warnings are in place. This therefore seeks to ensure that the gullies on Athorpe Grove are more likely to be clear, should another flood event occur.

Property Level Protection has been installed on the affected properties as part of the Blue Green Infrastructure Project. This included the installation of flood doors, smart airbricks, non-return valves, pumps and the sealing of service entry points.

Nottingham City Council will ensure access of the vacant land adjacent to Athorpe Grove for the Environment Agency, in order to improve maintenance along this stretch of the Day Brook.

Nottingham City Council will ensure the completion of the Blue Green Infrastructure Project. This project aims to "slow the flow" and increase the storage capacity upstream of Athorpe Grove. Works are to be completed at Jubilee Ponds (a Severn Trent Water asset), Valley Road Park and Jason Spencer Sports Ground.

Nottingham City Council will seek the support of planning with the aim of co-operating with future developers to enhance the Day Brook through the vacant land adjacent to Athorpe Grove.

Nottingham City Council will continue to offer a free bulky waste collection service to residents to ensure any items damaged by floods can be taken away from the property, to aid with recovery.

Nottingham City Council will support Nottinghamshire County Council in any future schemes in the upper Day Brook region.

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Nottingham City Council (LLFA) Actions	Status
Continue to maintain road gullies on a regular basis to ensure that they are clear for floodwater to drain away. Gullies on Athorpe Grove will be added to the Targeted Gully Cleaning Routes.	Ongoing maintenance activity. Gullies have been placed on Targeted Gully Cleaning Regime.
Provide access through the plot of land for the Environment Agency adjacent to Fox Grove PH, to allow for maintenance.	Complete. Details of access provided to EA by NCC to enable maintenance.
Undertake Flood Risk Management Scheme in the area.	Complete.
Install PLR measures to the affected properties.	Complete.
Liaise with planning and future developers to seek improvements to Day Brook through the vacant land adjacent to Athorpe Grove.	Ongoing.
Environment Agency Actions	Status
Improve the maintenance of the watercourse.	Ongoing maintenance activity.
Ensure residents are signed up to Floodline to receive flood warnings	Ongoing.

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7 DISCLAIMER

This report has been prepared by the Council solely for the purpose of complying with its duties under Section 19 of the Flood and Water Management Act 2010 to establish:-

- 1. Which risk management authorities have relevant flood risk management functions, and
- 2. Whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.

Nottingham City Council does not accept any liability arising from reliance on or the use of this report or its contents by any third party for any other purpose.

The findings of the report are based on a subjective assessment of the information available by those undertaking the investigation and should not be considered as a definitive statement of all factors that may have triggered or contributed to the flood event.

Nottingham City Council expressly disclaim responsibility for any error in, or omission from, this report and the supporting technical assessment Report and for any error in, or omission from, this report arising from or in connection with any opinion, conclusion and recommendations expressed.

Although the Council may have commented upon contextual issues related to the flood event, it is not the purpose of this report to determine any private rights arising from the flood event. Nor is the purpose of this report to reach conclusions as to whether any Risk Management Authority or other stakeholder (e.g. private land owners, public bodies or government agencies) has breached any duty of care (whether statutory or common law) that they may have held.

Any party wishing to assert any rights or cause of action related to the flooding event or in the process of buying/selling or insuring property should not place reliance on this report but should conduct and rely on their own investigations.

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CONTACTS & USEFUL LINKS

Nottingham City Council Contacts & Links			
Nottingham City Council	0115 915 5555	https://www.nottinghamcity.gov.uk/reportit	
Flood Risk Management Team	0115 876 5275 Monday to Friday 9:00- 16:30	Advice on improving the level of protection to your property	
Highway Services Team	0115 915 2000	https://myaccount.nottinghamcity.gov. uk/service/report_itreport_a_block ed_gully	
Bulky Waste Collection	0115 915 5555	Free of charge bulky waste collection http://www.nottinghamcity.gov.uk/bulk ywaste	
Useful Web Pages	https://www.nottinghamcity.gov.uk/information-for- business/environmental-health-and-safer-housing/flooding/flood- document-library/		
Environment Agency Contact & Links			
Environment Agency	https://www.gov.uk/report- flood-cause	Reporting a flood	
	0800 80 70 60	Environment Agency incident hotline (24 hours)	
	0345 988 1188	Floodline	
Severn Trent Water Contacts & Links			
Severn Trent Water	https://www.stwater.co.uk/in -my-area/report-a-problem/	Report a drainage problem (non- emergent)	
	0800 783 4444	Emergencies (24 hours) e.g. leaking water main causing flooding	

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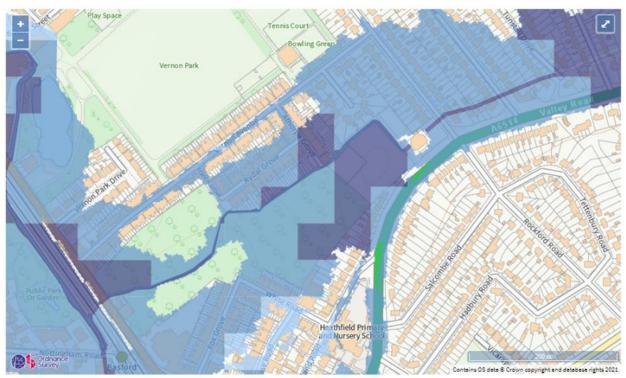
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9 APPENDICES

Appendix A: Predicted Flood Risk Maps (Source: https://flood-warning-information.service.gov.uk/long-term-flood-risk/postcode)



Extent of flooding from rivers or the sea

High Medium Low Very low

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