



# **Flood Investigation Report**

Storm Henk

2<sup>nd</sup> January 2024

**Braunstone**

## CONTENTS

<b>Flood Investigation Report .....</b>	<b>1</b>
<b>13 Braunstone Town .....</b>	<b>1</b>
<b>13.1 Local Drainage Context.....</b>	<b>1</b>
13.1.1 <i>Flood History.....</i>	2
13.1.2 <i>National Scale Predictive Flood Mapping.....</i>	3
13.1.3 <i>Flood Warnings.....</i>	4
13.1.4 <i>Hydrometry.....</i>	4
<b>13.2 What Happened and Why?.....</b>	<b>5</b>
13.2.1 <i>Monday Afternoon.....</i>	5
13.2.2 <i>Monday Night.....</i>	6
<b>13.3 What Has Been Done? .....</b>	<b>6</b>
<b>13.4 Braunstone Town Actions.....</b>	<b>7</b>
13.4.1 <i>Short-term actions (0 - 6 months).....</i>	7
13.4.2 <i>Medium-term actions (6 - 12 months) .....</i>	8
13.4.3 <i>Long-term actions (12 months +) .....</i>	9

## LIST OF FIGURES

Figure 13-1: Braunstone Town Location Plan, relevant Watercourse Catchment and Flow Routes through Flood Area (INSET 9).....	2
Figure 13-2: Braunstone Town EA Flood Map for Planning Flood Zones and Risk of Flooding from Surface Water Extents in Flood Area (INSET 9).....	3
Figure 13-3: River Soar at Freemans Weir Gauge (Station ID 4174) - Water Level from 12:00 hours on 27/12/2023 to 00:00 hours on 06/01/2024 .....	4

## LIST OF TABLES

Table 13-1: Local River Gauge Data .....	5
--	---

## 13 BRAUNSTONE TOWN

Braunstone Town is located approximately 4km to the south-west of central Leicester, within Blaby District but at the Leicester City boundary.

Figure 12-1 illustrates the focus area of this report following Storm Henk, centred around Amy Street adjacent to the County – City boundary.

**A formal investigation was not triggered for Braunstone because the source of the flooding is known. At the time of the flooding actions were already being progressed by RMAs to try to mitigate future flooding. For more information see the main Storm Henk report.**

### 13.1 LOCAL DRAINAGE CONTEXT

Amy Street (Flood Area A) is located at the edge of Aylestone Meadows, part of the River Soar floodplain (see Figure 13-1).

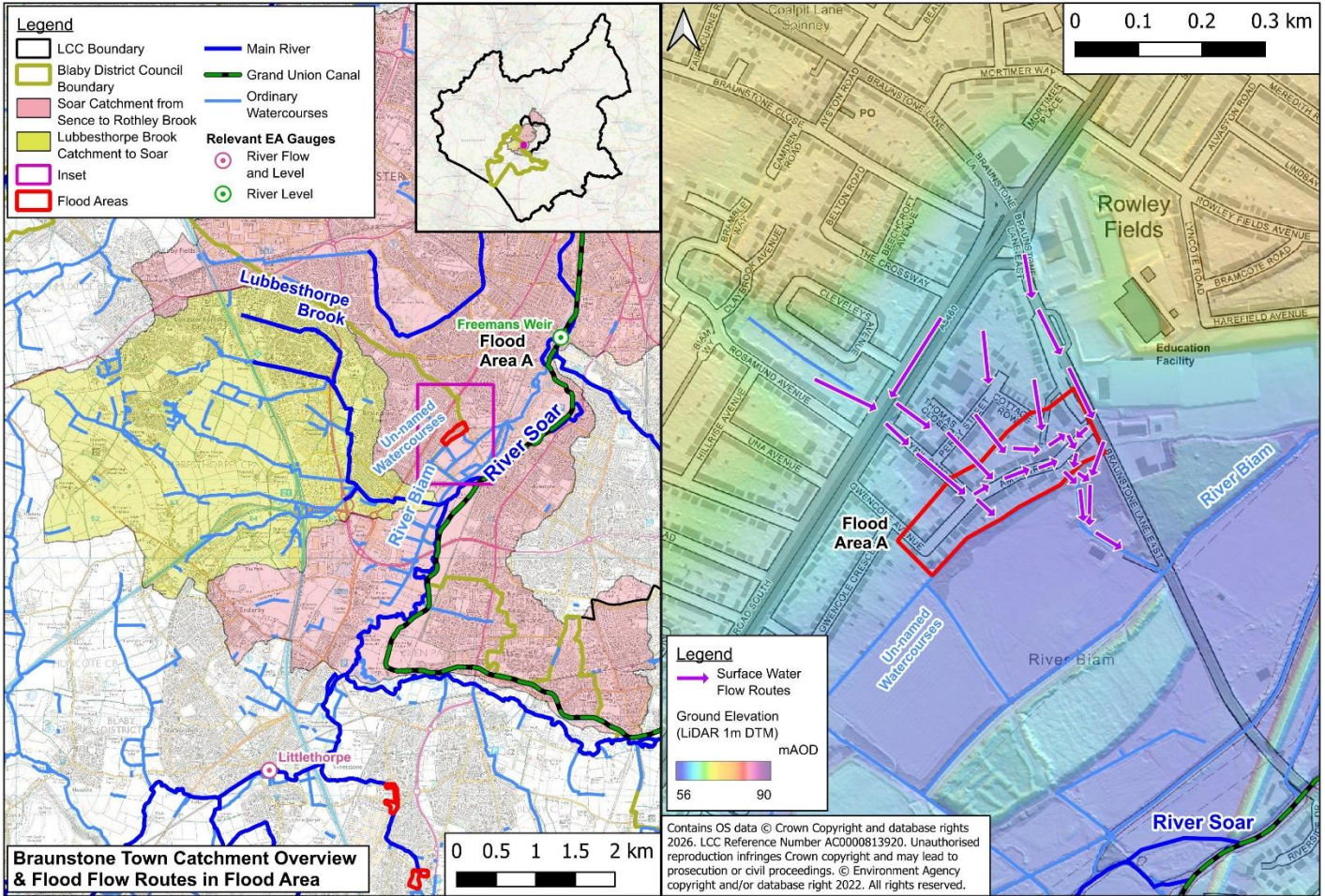
A local network of ditches within Aylestone Meadows discharge to the River Biam; an ordinary watercourse within the City Council's boundary and within the Soar floodplain. The River Biam discharges into the River Soar (a designated Main River) approximately 500m to the west of Amy Street. This network of watercourses has a shallow gradient which results in slow flow rates, exacerbated when the water table is high following long periods of wet weather. The responsible agency for managing the risk of flooding from Main Rivers is the Environment Agency (EA). Aylestone meadows is owned by the City Council, who are therefore the riparian landowner, and also manage risk from the ordinary watercourses. Details relating to RMA responsibilities can be found in Section 21 of the main Storm Henk report.

A public surface water sewer network outfalls into the ditch network in Aylestone Meadows south-east of Amy Street. It drains a large area extending west across Narborough Road as far as Franklin Park and Caldcote Community Primary School. The outfall can become partially submerged when the water table is high, and further restricted when the downstream river network is in flood (i.e. high river levels). A further large surface water sewer network discharges into Aylestone Meadows 500m to the south-east near 'The Poplars'.

The UK Centre for Ecology & Hydrology's Flood Estimate Handbook (FEH) Web Service<sup>1</sup> provides strategic level catchment mapping for the area. This identifies that two catchment areas of approximately 0.91km<sup>2</sup> and 0.73km<sup>2</sup> to the meadow south of Amy Street. However, the extents of these do not take into account the sewer network which can modify the catchment watersheds and routing of flows.

---

<sup>1</sup> Centre for Ecology & Hydrology (2026) FEH Web Service <https://fehweb.ceh.ac.uk/Map>



**Figure 13-1: Braunstone Town Location Plan, relevant Watercourse Catchment and Flow Routes through Flood Area (INSET 9)**

### 13.1.1 FLOOD HISTORY

Flooding at Amy Street in Braunstone had been reported on a number recent of occasions prior Storm Henk, and the Leicestershire County Council (LCC) Lead Local Flood Authority (LLFA) and Local Highways Authority (LHA), and responsible agencies were and are continuing to work together to resolve the issues prior Storm Henk. Much of the recent flooding was related to surface water flooding from Braunstone Lane East onto Amy Street.

13.1.2 NATIONAL SCALE PREDICTIVE FLOOD MAPPING

The EA provides flood risk mapping nationally for both rivers and surface water as detailed within Section 2.7.6 of the main Storm Henk report.

The EA’s Flood Map for Planning (NaFRA2) (illustrated in Figure 13-2) shows the area to be at medium to high risk of river flooding (Flood Zones 2 and 3 respectively) from the River Soar floodplain.

The EA’s Risk of Flooding from Surface Water (RoFSW) mapping (NaFRA2) illustrates that the Flood Area A is at low, medium and high risk of surface water flooding (see Figure 13-2). Surface water flows originate from the upstream urban catchments to the north-west.

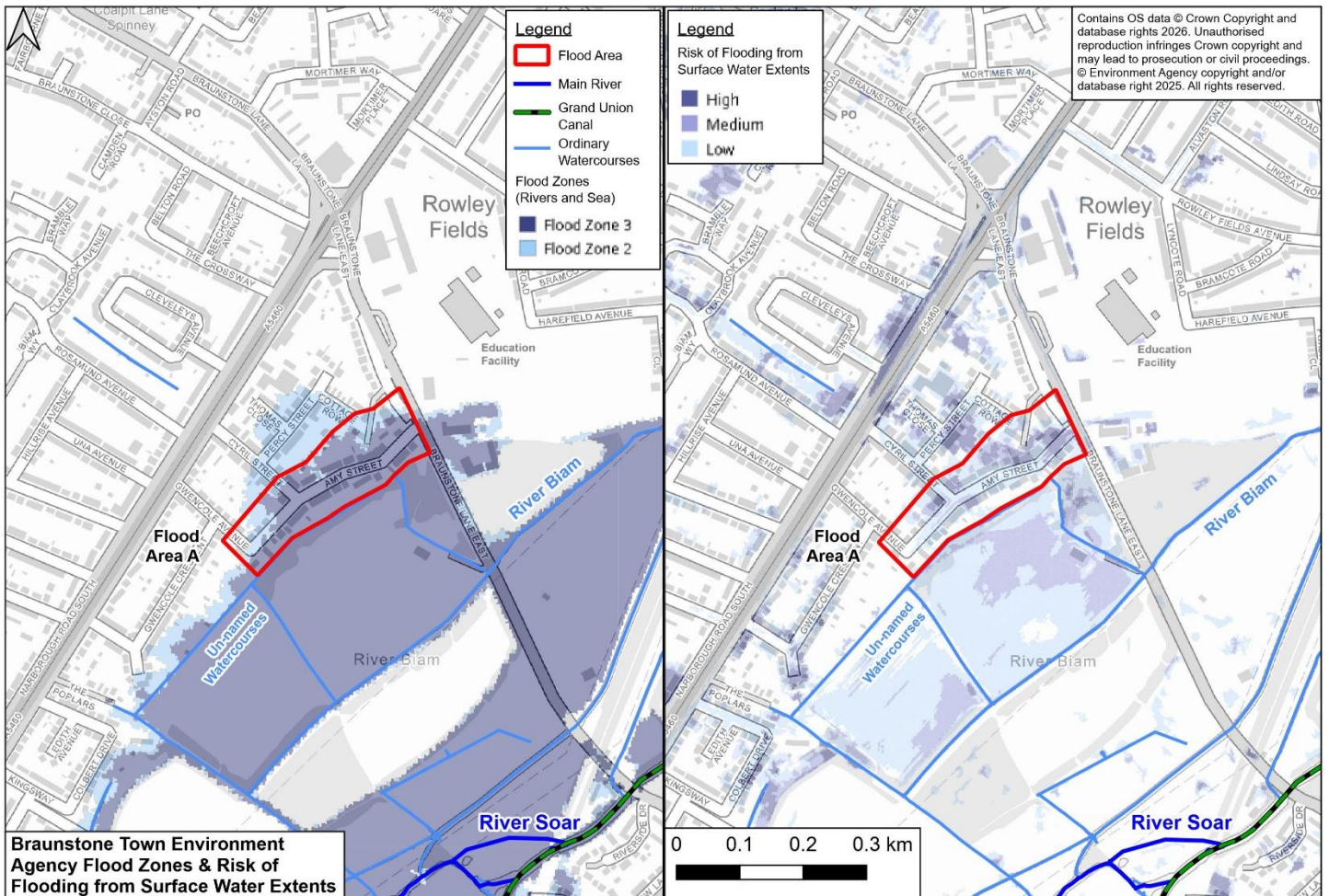


Figure 13-2: Braunstone Town EA Flood Map for Planning Flood Zones<sup>2</sup> and Risk of Flooding from Surface Water Extents<sup>3</sup> in Flood Area (INSET 9)

<sup>2</sup> Environment Agency (2026) Flood Map for Planning – Flood Zones <https://flood-map-for-planning.service.gov.uk/map>

<sup>3</sup> Environment Agency (2026) Risk of Flooding from Surface Water map. <https://check-long-term-flood-risk.service.gov.uk/map>

13.1.3 FLOOD WARNINGS

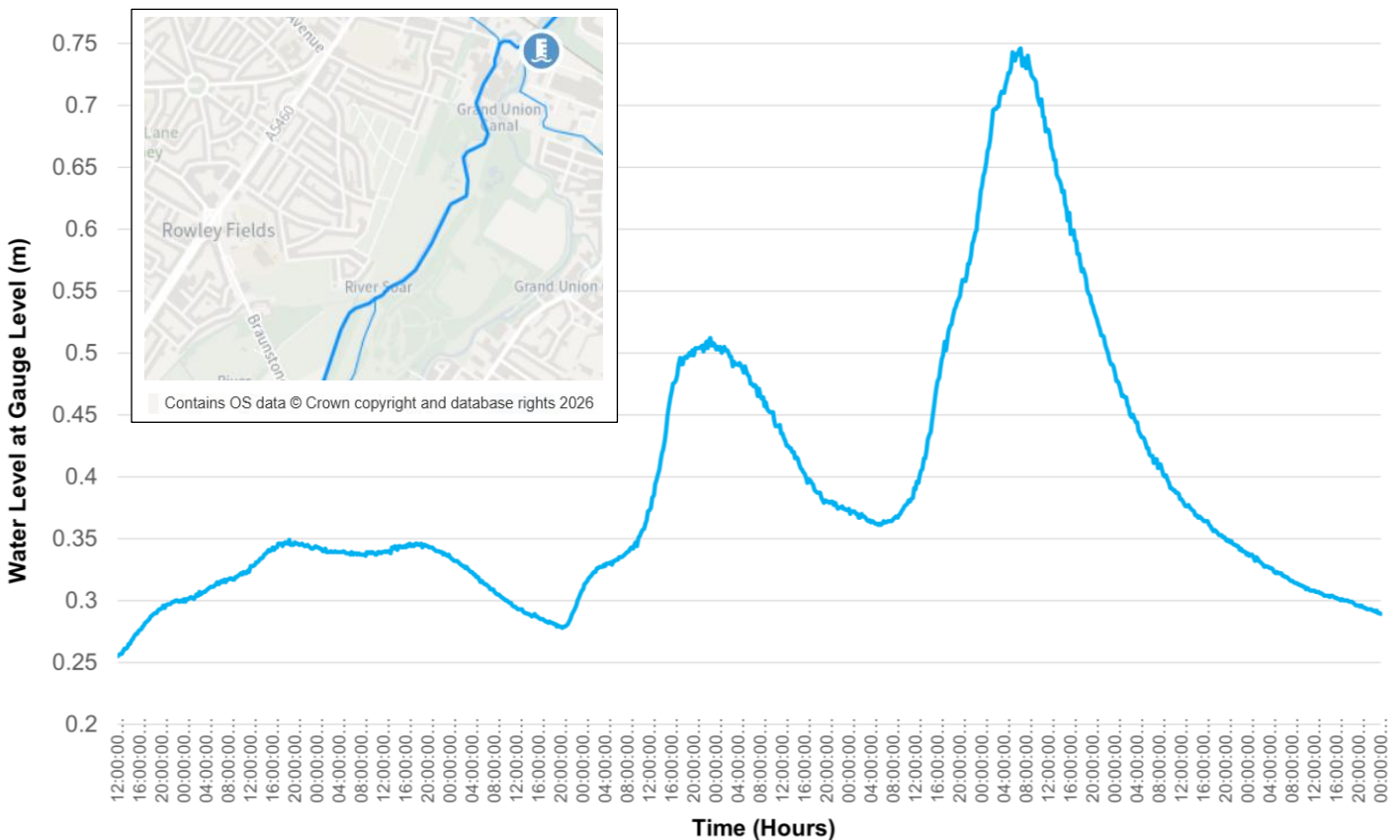
The area covered by the investigation is situated within an EA Flood Warning Area. A flood warning was issued at River Soar at Braunstone<sup>4</sup> (EA ref. 034FWFSOBRUNSTNE) including Fosse Park on the evening of Tuesday 2<sup>nd</sup> January 2024 at 22:34hrs (the area covered by the warning can be viewed via the link in the footnote).

13.1.4 HYDROMETRY

At Braunstone, the closest EA gauge at which they monitor river levels along the River Soar is at Freeman’s Weir<sup>5</sup> located approximately 2.5km downstream from Amy Street (Ordnance Survey national grid reference, OSGR SK 57880 02790) as illustrated in Figure 13-1.

Observed river levels (water depth in metres above the Freemans Weir gauge station datum (mASD)) from 12:00hrs on 27<sup>th</sup> December 2023 to 00:00hrs on 6<sup>th</sup> January 2024 are illustrated in Figure 13-3. The peak river level in the River Soar recorded as 0.746mASD occurred at 07:00hrs on 3<sup>rd</sup> January 2024.

More details of the flows measured at Freeman’s Weir and at the upstream gauge at Littlethorpe during the Storm Henk flood event are provided in Table 13-1 and Section 2.4 of the main Storm Henk report.



**Figure 13-3: River Soar at Freemans Weir Gauge (Station ID 4174) - Water Level from 12:00 hours on 27/12/2023 to 00:00 hours on 06/01/2024**

<sup>4</sup> Environment Agency (2026) River Soar at Braunstone flood warning area. <https://check-for-flooding.service.gov.uk/target-area/034FWFSOBRUNSTNE>

<sup>5</sup> Defra (2026) Hydrology Data Explorer –Freemans Weir. <https://environment.data.gov.uk/hydrology/station/bacf654e-5928-413b-a91e-e42ad11b454e>

Table 13-1 provides a comparison between the timings of the Storm Henk peak flows at two gauges; Littlethorpe (located along the River Soar upstream of Braunstone Town as illustrated in Figure 13-1), and Freemans Weir. Both, at the time of Storm Henk, were record river levels at each gauge. This data is commented on further in Section 13.2.

**Table 13-1: Local River Gauge Data**

	Gauge	
	Littlethorpe	Freemans Weir
<b>Start of record</b>	August 1971 (flow)	March 2002
<b>Location relative to Amy St</b>	6km upstream	2.5km downstream
<b>Storm Henk peak time on January 3<sup>rd</sup> 2024</b>	00:00 hrs	07:00 hrs
<b>Storm Henk peak level (mASD)</b>	2.76m	0.746m

*(Please note that the river levels themselves are not comparable; the river is much wider at Freemans Weir).*

## 13.2 WHAT HAPPENED AND WHY?

### WHO OR WHAT WAS AFFECTED?



*19 properties reported as internally flooded*



*At least 1 property reported as externally flooded*

### 13.2.1 MONDAY AFTERNOON

Rain began falling at around 08:00 hours on Tuesday 2<sup>nd</sup> January 2024, and continued for around 12 hours. One property reported flooding occurring at midday due to surface water flows from Braunstone Lane East.

Anecdotal reports were also made of highway flooding to the eastern part of Amy Street, caused by overland flow of surface water from multiple directions including from Braunstone Lane East. This is likely to be partially due to submerged surface water drainage outfalls (due to a high water table/river levels) which restricted the ability of surface water to discharge effectively. The capacity of the surface water drainage network was subsequently exceeded.

### 13.2.2 MONDAY NIGHT

Some properties reported their properties flooding in the early hours of Wednesday 3<sup>rd</sup>, between 03:00 and 05:00hrs. This corresponds with Soar river level gauges shown in Table 13-1, with the upstream Littlethorpe gauge peaking at 00:00hrs, and downstream gauge at Freemans weir at 07:00hrs.

Flood water was reported as backing up the surface water drainage network. The River Soar flooded into its floodplain across Aylestone Meadows, with floodwaters then entering the drainage network. Residents reported the flood water contained sewage.

According to the EA, prior to Storm Henk, nearly 50% of those reported to be at risk in the Flood Warning area were signed up to received alerts and warnings. Despite the issuing of the Flood Warning, the occurrence of flooding in the early hours of the morning during Storm Henk is likely to have affected the ability of property occupiers to have taken mitigative measures such as moving belongings to safer locations.

### 13.3 WHAT HAS BEEN DONE?

A summary table of the actions undertaken by the relevant RMAs across Leicestershire is provided in Section 2.7 of the main Storm Henk report. A summary table of actions and any relevant next steps specific to south Braunstone is provided in Section 13.4.

Whilst the actions from this investigation will help to reduce flood risk, communities should also take steps to be prepared for future flooding, especially with climate change increasing the risk of occurrence. More information can be found in Section 21.8 of the main Storm Henk report.

## 13.4 BRAUNSTONE TOWN ACTIONS

The following actions will be monitored by LCC as the LLFA through their local coordination role. This action plan is live and will be subject to change as actions are progressed.

Actions taken during and in the immediate aftermaths of the event, such as the closure of roads and set-up of rest centres are not detailed. Further details on RMAs and their roles, and how they work in partnership, can be found in the Leicestershire Local Flood Risk Management Strategy<sup>6</sup>.

### 13.4.1 SHORT-TERM ACTIONS (0 - 6 MONTHS)

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
<b>Refuse Collection and Street Cleansing</b>	Provide street cleansing and bulky waste collections	Blaby District Council (BDC)	Complete
<b>Braunstone Lane East Highway Drainage</b>	Investigate connectivity and condition of highway drainage assets on Braunstone Lane East. Following on from STW connectivity investigations, further investigation is required by City Council regarding City maintainable assets.	Leicester City Council	Ongoing
<b>Braunstone Lane East Sewer Network</b>	Investigate condition of the STW surface water sewer on Braunstone Lane East, and outfall to the River Biam. Outfall often affected by high water table. New manhole installed to assist future maintenance. Repairs made.	STW	Complete
<b>Amy Street Highway Drainage</b>	Post event gully cleansing	LCC LHA	Complete

<sup>6</sup> Leicestershire County Council (2024) Leicestershire Local Flood Risk Management Strategy - <https://www.leicestershire.gov.uk/environment-and-planning/flooding-and-drainage/lead-local-flood-authority/flood-risk-management>

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
<b>Community Drop-in Sessions</b>	<p>A number of public flood drop-in sessions were arranged and attended by all Risk Management Authorities including EA, CBC, LCC LHA, LCC LLFA and the LRF.</p> <p>The aim of these sessions was to better understand what happened after the flood events but also to promote flood resilience for future events.</p>	LCC LLFA	<p>Complete</p> <p>Following Storm Henk five drop in events were arranged in Loughborough, Blaby, Melton and Syston.</p>
<b>Henk Flood Recovery Framework Support</b>	BDC administered the National Flood Recovery Grant tax relief, business rates relief and also one-off sums of funding to affected homeowners in the immediate aftermath of Storm Henk	BDC	Complete

13.4.2 MEDIUM-TERM ACTIONS (6 - 12 MONTHS)

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
<b>Watercourse Maintenance</b>	Inspection and maintenance of ordinary watercourses including the River Biam, and the ditch network that drains to it.	Leicester City Council	Ongoing

13.4.3 LONG-TERM ACTIONS (12 MONTHS +)

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
<p><b>Highways Gully Prioritisation</b></p>	<p>Completed targeted gully cleansing (in addition to routine maintenance) after Storm Henk across Braunstone (and many other affected parts of the County).</p> <p>The data collected from this process was used to help reprioritise gully cleansing in flood affected areas.</p> <p>Gullies on Amy Street were upgraded from a Priority (P) 2 (every 20 months) to a P1 cleanse (every 10 months). The same was change was made at Gwencole Avenue, Gwencole Crescent, Kingsway, Cyril Street, Edenhurst Avenue, Percy Street, Turnbull Drive and Monica Road.</p>	<p>LCC LHA</p>	<p>Complete</p>
<p><b>Property Flood Resilience Scheme</b></p>	<p>Deliver a Property Flood Resilience Scheme to 32 properties, including the 19 internally flooded during Henk. Scheme development preceded Henk. PFR was identified as the preferred option.</p> <p>Note: BDC supplemented funding to the EA scheme in addition to the funding obtained via the Henk Property Flood Resilience Repair Grant.</p>	<p>EA</p>	<p>Ongoing</p>
<p><b>Henk Property Flood Resilience Repair Grants</b></p>	<p>Administer the PFR Repair Grant. 29 Grants were claimed from Defra, of which 3 were issued directly to property owners, and 26 were issued to the EA as a contribution to the PFR Scheme following the approval of property owners. <i>The number is higher than the number of flooded properties, as some properties newly flooded in January 2025 were claimed, as this was compliant with the special rules for ‘community schemes’.</i></p>	<p>LCC LLFA</p>	<p>Complete</p>