

Section 19 Report Bolton House Road, Bickershaw

May 2025

Revision Schedule

Wigan Council

Flood Investigation Report

Revisions

Rev	Date	Details	Prepared	Reviewed	Approved
1	May 2025	First publication	LM	MB	РВ

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Executive Summary

This Flood Investigation Report has been completed by Wigan Council, in partnership with United Utilities, under our duties as the Lead Local Flood Authority (LLFA).

Section 19 of the Flood and Water Management Act 2010 (FWMA) states that on becoming aware of a significant flood in our area, when appropriate, we must investigate the relevant flood risk management authorities involved and find out which flood risk management functions have been, or will be taken, if any.

This report is a factual record of the flooding event that occurred on January 1st 2025 and how relevant risk management authorities responded.

1. Introduction

On January 1st 2025 residents from Bolton House Road reported internal flooding to 1 property, later increased to 6 upon further investigation. The Council activated the Forward Incident Officer who attended site and confirmed the properties affected and had discussions with residents.

The causes of the flooding resulted from multiple flooding mechanisms occurring and interacting. In brief this interaction can be summarised as follows:

- The intensity of the rainfall was unable to infiltrate into the ground, resulting in surface water flooding.
- The design standard of the local highway drainage networks was exceeded by the severity of the rainfall.
- The public sewer network reached hydraulic capacity
- Issues on with the privately owned culverted watercourse running to the rear of the properties, meant water was unable to get away.

Although the purpose of the report is to provide a factual account of the contributing factors, impacts and responses to the flooding, it also includes a number of recommendations about how to manage the future flood risk. It will require the involvement of a number of organisations and communities working together in partnership.

Section 19 Investigation requirement

The AGMA Policy for Investigating Flood Incidents can be found in Appendix A.

Section 19 - 'Local authorities: investigations' 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 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.

In accordance with Section 19(2), Flood and Water Management Act, 2010, Wigan Council LLFA will provide access to this published investigation report via a link on its website.

Purpose

This document has been produced as a factual record of the flooding to meet the requirements of Section 19 of the Flood and Water Management Act, 2010. Flooding on the scale experienced takes time to investigate and between January 2025 and publication of this report the Authority has focused much of its activity on supporting those most affected by the flooding throughout the wider Borough.

This report does not include options and actions to reduce flood risk, but the Risk Management Authorities (RMAs) involved in this report will continue to work together. It is important that this is done thoroughly to ensure the full range of flood risk management options is explored and the right solutions brought forward as part of further works after the publication of this report.

Information has been collated from the following sources:

- Previous investigations
- Personal observations from initial responders and Council/Utility company staff.
- Use of photos, from various sources, taken during or after the flood, and records of properties flooded.
- Assessments from United Utilities
- Topographical surveys of flood levels and extents.

Whilst every effort has been made to verify flooding at the locations identified, the nature of the data and the methods used to collate this information means that it does not include every occurrence of flooding. This data only identifies where flooding has been reported and is indicative only.

Scope

This report covers the flooding that occurred on 1st January 2025 and describes what happened when 'significant' flooding occurred. The definition of 'significant' is provided within a policy adopted by the Greater Manchester Combined Authority (GMCA) on behalf of all 10 Greater Manchester Lead Local Flood Authorities (LLFAs). This policy provides the following thresholds:

- Risk to life
- Weight of public, media, political and planning interest
- Impact on critical services such as hospitals, care homes, schools and emergency services

- Internal residential property flooding of more than 5 properties 2 or more commercial properties were affected.
- Economic disruption
- Impact on critical infrastructure and installations
- Frequency of flooding

The occurrence of 'significant flooding' as defined above triggers the production of an Investigation Report under section 19 of the Flood and Water Management Act (2010).

2. Location

Bolton House Road sits within the village of Bickershaw, located approximately 4 miles from Wigan Town Centre, and falls under the Abram ward.

The nearest township is Platt Bridge which is approximately 2 miles north-west of Bolton House Road.

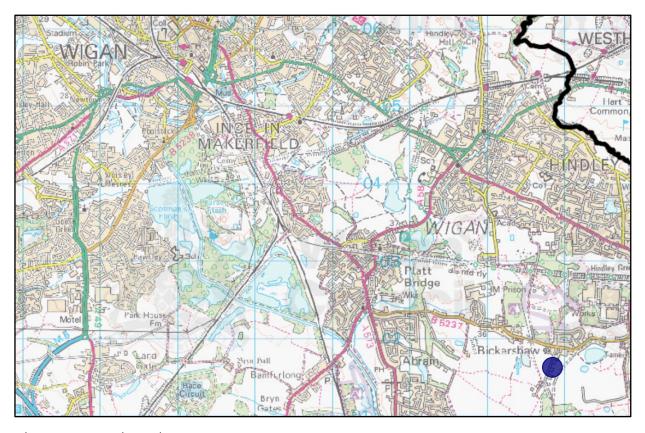


Figure 1. Location Plan

3. Catchment Characteristics

3.1 River network

There are a number of un-named ordinary watercourses near to Bolton House Road, as shown in figure 2 below. These are the responsibility of the council, as they form part of the former Albert Colliery site, and are maintained by the Corporate Land Management Team. The overall site is approximately 247 hectares in size consisting of a mix of previously remediated colliery land and three large water bodies, Diggle Flash in the north, and Firs Flash and Nevison's Flash in the south.

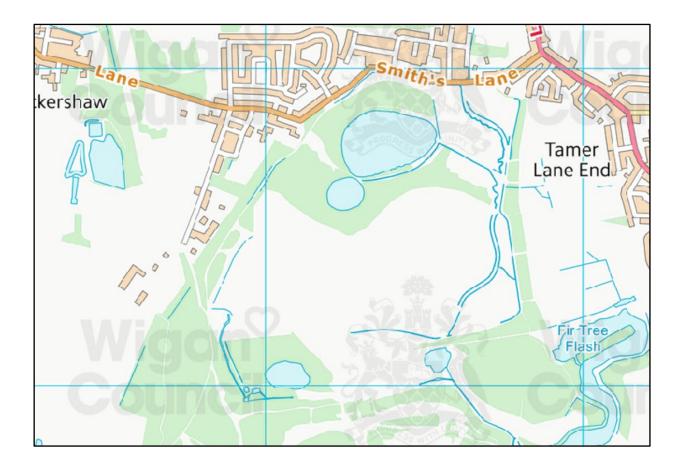


Figure 2. Watercourse Map

The location does not fall within a flood zone area from river flooding.

3.2 Drainage System

The houses are served by a combined sewer network, owned and operated by United Utilities. Figure 3 below shows the approximate location of the public sewer network. The red/grey dashed line indicates the combined system. The blue line shows the approximate location of the culverted watercourse.

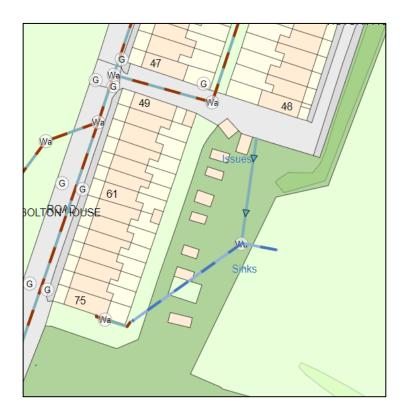


Figure 3. Sewer Location Map

3.3 Topography

The land to the rear of the Bolton House Road has a slight elevation towards the school field.

The map below shows an approximate difference of 4m from the former railway embankment to the highway on Bolton House Road.

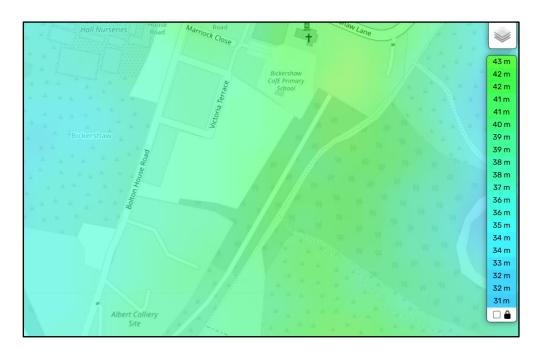


Figure 4. Topography Map

Due to the topography of the area, there is a high risk of flooding from surface water.



Figure 5. Flood Risk from Surface Water

3.4 Geology

Due to its previous mining heritage, the bedrock geology at this location is formed of Pennine Middle Coal Measures Formation - Mudstone, siltstone and sandstone.

The superficial geology is classified as Till, Devensian - Clay, sandy, gravelly, silty. This would suggest little opportunity for infiltration of soil.

4. Flood History

Victoria Terrace and Bolton House Road are highlighted as Flood Hotspot areas due to historic issues with flooding from the culverted watercourse.

The council have had contact with a number of residents over a long period of time but as the issue is on a private asset the council have been unable to carry out any works to resolve the issue.

Extensive works have been completed to identify the landowner and make contact. However, as it was discovered that the last known land agent had gone into receivership enforcement action was halted.

5. Roles and Responsibilities

The Flood and Water Management Act (2010) defines flooding as any case where land not normally covered by water becomes covered by water, despite what caused the flooding. Flood risk is a combination of two components: the chance (or probability / likelihood) that a location will flood from any source or type of flooding, and the impact (or consequence) that the flooding would cause if it occurred.

The responsibility for managing flooding in the UK is divided between different Risk Management Authorities (RMAs) as defined in the Flood and Water Management Act, 2010. RMAs have powers and duties to manage the different forms of flooding that can occur. The Environment Agency is responsible for taking a strategic overview of the management of all sources of flooding and coastal erosion.

Managing flood risks and flooding requires RMAs to work together. Wigan Council's LLFA hold quarterly Making Space for Water meetings where all RMAs can attend and discuss issues and works planned.

Figure 6 describes different sources of flood risk and the managing authorities.









Source	Description	Responsibility
Fluvial flooding	Fluvial flooding (from either a main river or an ordinary watercourse) occurs when the flow capacity of a watercourse is exceeded, causing water to spill out of the channel into nearby areas of floodplain.	Main river – Environment Agency Ordinary Watercourse – riparian owners
Surface Water Flooding	Surface water flooding is caused by overland flow during periods of sustained or heavy rainfall, causing ponding of water where it becomes obstructed or collects in low lying areas. Local drains and infiltration into the ground are unable to cope with the volume of water present. More impermeable areas can increase the risk of surface water flooding occurring, which is mitigated by drainage systems, but these have a design capacity which may be overwhelmed in times of heavy rainfall.	Due to nature of flooding there is no one agency responsible for surface water flooding. If a blockage is present on the network, the owner becomes responsible. Land drainage – riparian ownership Public sewer network – United Utilities Gully network – Wigan
		Council
Groundwater Flooding	Groundwater flooding occurs when the water held underground rises to a level where it breaks the surface in areas away from watercourses and drainage pathways. It is generally a result of extended periods of very heavy rain, but can also result from reduced abstraction, underground leaks or the displacement of underground flows.	All residents/landowners are responsible for protecting their property against groundwater flooding

Highway Flooding	Highway flooding occurs when the highway drainage system or the sewers they discharge into cannot cope with the amount of rainfall entering the system. This can be due to the size of the pipes or a blockage in the system.	Wigan Council
Sewer Flooding	Flooding from a public or transferred sewer (including former Section 24 sewers) which enters a building or passes below a suspended floor'. A sewer is classed as overloaded (hydraulic flooding) when the flow from a storm is unable to pass through it due to a permanent problem (e.g. flat gradient, small diameter). Temporary problems such as blockages, siltation, collapses and equipment or operational failures are classed as "flooding other causes" (FOC).	United Utilities
Canals	Canals can flood by overtopping or from a breach of a structure, or collapse of a culvert beneath a canal.	Canal and River Trust

Figure 6 Table of causes and RMA's

5.1 Lead Local Flood Authority

Wigan Council work closely with other risk management authorities to ensure flood incidents are reported, managed and assessed, as well as ensuring that any assets which have a significant effect on flood risk are recorded on the asset register.

While Wigan Council can suggest possible causes of flooding and make recommendations to ensure flood risk is mitigated as far as possible, the Flood and Water Management Act does not provide Wigan Council with the mandate or funding to tackle all identified causes of flooding.

Wigan Council also have powers under Section 25 of the Land Drainage Act 1991 to serve notice on any persons impeding the flow of a watercourse and causing an increase in flood risk.

5.2 Environment Agency

The Environment Agency has a strategic overview of all sources of flooding. They are responsible for flood and erosion risk management activities on Main Rivers and the coast, regulating reservoir safety, and working in partnership with the Met Office to provide flood forecasts and warnings.

The EA has permissive powers to carry out maintenance work on main rivers under Section 165 of the Water Resources Act.

The EA will also encourage third party asset owners to maintain their property in appropriate condition and take enforcement action where it is appropriate. They may consider undertaking maintenance or repair of third part assets only where it can be justified in order to safeguard the public interest and where other options are not appropriate.

The frequency of EA maintenance activities is primarily risk based, and activities comprise of vegetation management and clearance of blockages as and when is required.

5.3 United Utilities

United Utilities are responsible for managing the risks of sewer flooding from their infrastructure. Sewerage systems are not, however, designed to accommodate flows from severe weather events. During severe weather the capacity of the sewerage network may be exceeded and result in localised surcharging and/or flooding. UU classify severe weather as rainfall that has an annual probability of occurrence of 1 in 30 or greater. Larger, more intense storms would therefore be expected to result in surcharging of the sewer network.

UU investigates all flooding incidents that are reported to them and undertakes a verification exercise to understand the issues and flooding mechanisms. This may include a site visit and CCTV survey to determine if there were any blockages in the network. Any blockages encountered during the investigations are cleared to ensure that the sewer has maximum capacity.

United Utilities also works in partnership with Wigan Council as the LLFA; and the Environment Agency, on how surface water can be managed more sustainably to aid all drainage assets.

5.4 Riparian Owners

Riparian landowners are those who own land with a watercourse running though it or adjoining to it. Riparian landowners have certain rights and responsibilities, including the following:

- They must maintain the bed and banks of the watercourse, and also the trees and shrubs growing on the banks
- They must clear any debris, even if it did not originate from their land. This debris may be natural or man-made
- They must keep any structures that they own clear of debris. These structures include culverts, trash screens, weirs and mill gates
- If they do not carry out responsibilities, they could face legal action

Riparian landowners must understand and act upon these responsibilities and must be aware that any works in, over, under of withing 8 metres of main rivers require formal consent from the EA under the Water Resources Act and associated byelaws. They must not carry out work without consent. If they do, the EA could reclaim from them the cost of removing, altering or pulling down works.

The culverted watercourse running to the rear of 49-75 Bolton House Road is riparian owned.

5.5 Residents

Wigan residents who are aware that they are at risk of flooding should take action to ensure that they and their properties are protected. Community resilience is important in providing information and support to each other if flooding is anticipated.

Actions taken can include installing temporary or permanent flood defence measures and moving valuable items to higher ground, raising electrical sockets and fitting non-return valves on pipes.

Anyone affected by flooding should try to document as much information about the incident as possible. Wigan Council should be contacted and will make a record of the details provided.

If flooding occurs due to a main river residents are advised to report incidents to the EA, by calling the Floodline on 0345 988 1188.

5.6 Highway Authority

Wigan Council is responsible for maintaining the roads and pavements of adopted highways in the Borough. An adopted highway is one where the local authority has taken on the legal responsibility for maintenance. The Council is responsible for the drainage of surface water from the adopted highways.

In addition to this regular cleaning programme, the Council will attend to any reports of blocked gullies to investigate the problem and take remedial action to restore them if resources allow.

6. Summary of event.

6.1 Antecedent Conditions

Information from the Met Office shows that December was milder than average, with the UK experiencing a provisional mean temperature of 6.2°C, 2.0°C above the long-term average. This was provisionally the fifth warmest December on record for the UK. All four countries saw temperatures above average overall. Rainfall had been above average for the UK, provisionally recording 139.4mm of rainfall, 110% of the long-term average.

The 23rd to 29th December saw mild, benign conditions predominate, but the 30th and 31st saw a slide back to more unsettled weather with western Scotland very wet and a slow-moving band of heavy rain becoming anchored across northern Wales and northwestern England later on New Years Eve.

The persistent rain across northwest England late on the 31st resulted in numerous flood warnings being issued

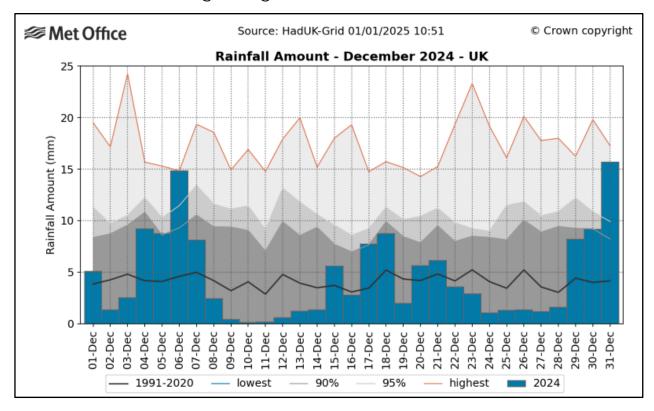


Figure 7. December 2024 Rainfall Data

6.2 Rainfall Records

The Environment Agency (EA) monthly water situation report stated that between the 1st and 7th January 2025 the north-west received 35% of the long term average rainfall for the time of year. England as a whole received just over half of the long term average rainfall for the whole of January in the first week alone.

The nearest Environmental Agency rain gauge in at Billinge recorded approx. 40mm of rain on 1st January 2025.



Figure 8. Taken from the EA Rainfall API demonstrator

7. Source, Pathways and Receptors

7.1 Source of flooding

The mechanism of flooding was due to heavy down-pours and flash flooding, causing high run off of water, with fifteen out of the twenty five Borough Wards in Wigan reported flooding incidents during this period.

The flooding mechanism at Bolton House Road was surface water flooding caused by intense rain falling within a short space of time leading flooding, combined with a possible mis-connection of the privately owned culverted watercourse into the public sewer system United Utilities have also reported overland flow reaching the gully behind no. 75 Bolton House Road, as well as entering the combined system via other overland routes.

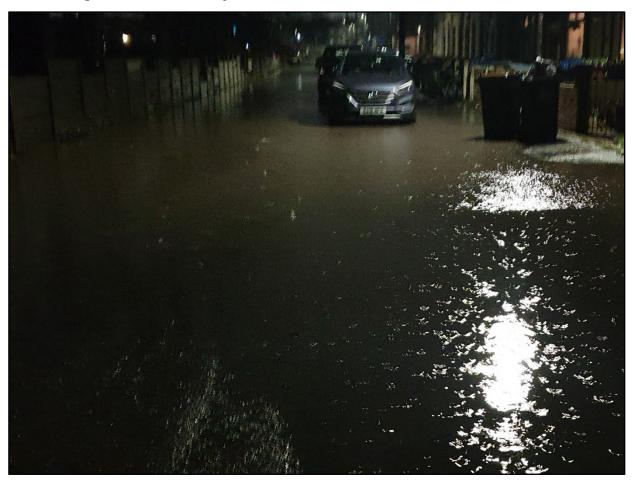


Figure 9. Flooding to Bolton House Road on Jan 1st 2025

7.2 Pathways

The flow follows the topography of the land, flowing from higher to lower ground, creating an area of flooding to the rear of the properties on Bolton House Road.

7.3 Flood Receptors

The area impacted by flooding is primarily residential. Wigan Council received reports of four properties being affected internally. This later increased to six following United Utilities site visit.

8. Actions Taken

Prior to the flood event:

Highways gullies on Bolton House Road were cleared on 23rd January 2024, it is not believed that the gullies contributed to the flooded. Further investigation following the event showed only 50% silt was removed, most of which may have been deposited during the flood event.

During the flooding event:

- 1. A request for service was received from residents via the Contact Centre.

 The Councils Forward Incident Officer was on site for 5.11am.
- 2. United Utilities attended site 2nd January

Following the flooding event:

- 1. A S19 Report was commissioned.
- 2. The highway gullies have been checked and cleared on 2nd January 2025 with no issues raised.
- 3. Communication with Land Registry to try and confirm who was responsible for the land following the insolvency of the owner named on the title plan.

4. Site visit with United Utilities and Corporate Land Management in regard

to the drainage network and possible works or improvements to existing

infrastructure.

Communications and Community Engagement

Communications within the community will be undertaken via Elected Members

and a resident newsletter.

All residents affected by flooding on the 1st January have been contacted by our

Councils teams to offer advice and inform the residents of funds and grants

available to them.

9. Recommendations

The method for prioritising works on watercourses varies for each risk

management authority involved, is dependent on factors such as resources

available, operational area, and interpretation of flood risk.

Highlighted below are some of the recommendations following the investigation

into flooding at Bolton House Road.

1. Wigan Council to ensure adequate maintenance of highway drains.

Prior to the flooding, highways gullies on Bolton House Road were cleared on

23rd January 2024, (as part of the annual clean schedule), with a reactive clean

completed on 2nd January 2025. Following the recent flooding the gullies have

been put on a 6 monthly cyclic clean schedule, it is not believed that the gullies

contributed to the flooded.

Timescale: Ongoing

2. Wigan Council to identify potential projects for funding for those affected by internal flooding.

Wigan Council will continue to work in partnership with other risk management authorities to apply for funding opportunities to help properties at Bolton House Road.

Timescale: Ongoing

3. United Utilities to maintain efficient operations of sewers.

An essential flood risk management duty is defined under the Section 94 of the Water Industry Act 1991, which states that Water and Sewerage Companies (WaSCs) have a duty to provide, maintain and operate systems of public sewers and works for the purpose of effectually draining an area.

Timescale: Ongoing

4. Property owners should consider installation of property level protection measures.

The responsibility to protect property lies with the property owners. Installing property level protection measures can help reduce the impact and damage caused in the event of a flood. There are a number of different measures available which may be used in a 'flood resistant' or 'flood recoverability' approach.

Timescale: Ongoing

5. Wigan Council to confirm ownership of the culverted watercourse and ensure a sufficient maintenance regime is in place to reduce further risk.

Wigan Council have been working to identify the new owners of the land to the rear of Bolton House Road. Unfortunately, the previous owner has gone into receivership meaning we have been unable to enforce any action to date. We will continue to investigate who is now responsible for the culverted watercourse.

Timescale: End of 2025

6. Wigan Council to consider works upstream of the culvert in the school

field to slow the flow of water.

Wigan Council will look at further works upstream of the school, and if possible

incorporate slow the flow measures to reduce surface water runoff.

Timescale: Summer 2026

10. Conclusion

The recommendations and ongoing actions within this report will be taken

forward by the identified responsible Risk Management Authority.

Recommendations and actions will be prioritised in line with other

commitments and subject to available funding and resources, any major works

requiring capital investment will be considered through the Defra funding

programme.

• Wigan Council's LLFA Team will identify funding allocation for minor

schemes that are short to medium term solutions not in high value.

Funding for medium to long term solutions that are high in value will be

sought externally from bodies such as the Environment Agency.

• Investigate ownership of the culverted watercourse to determine the

cause and remedy of this flooding mechanism.

Flood mechanism upstream upland catchment areas to be investigated

for the implementation of decelerating the flow of water.

The cause of the flooding in January 2025 resulted from multiple flooding

mechanisms occurring and interacting dynamically. In brief this interaction can

be summarised as follows:

- The intensity of the rainfall was unable to infiltrate into the ground, resulting in overland flow and surface water flooding.
- The design standard of the local drainage networks was exceeded by the severity of the rainfall.
- Possible blockage on the culverted watercourse.
- Water levels rose within the public sewer network due to overland flow finding its way into the network, preventing the local drainage from discharging.
- This combination of flooding mechanisms is technically very difficult to predict and to develop effective flood warnings. The management of combined flooding mechanisms also requires input from all of the Risk Management Authorities as it cannot be attributed to a single source.

Useful Contacts and Links

Environment Agency

General Enquiries 03708 506 506 (Mon-Fri, 8am - 6pm)

Incident Hotline 0800 80 70 60 (24hrs)

EA Floodline 0845 988 1188 (24hrs)

e-mail: enquiries@environment-agency.gov.uk

Environment Agency Flood Warning Service – link to sign up

https://www.gov.uk/sign-up-for-flood-warningsgs - GOV.UK

The Flood Hub

https://thefloodhub.co.uk/e Flood Hub

Land Drainage in Wigan

http://www.wigan.gov.uk/Services/Environment/DrainsSewers/Landdrainagedit chesandstreams.htm

Prepare your Property for Flooding:

Prepare for flooding: Protect your property - GOV.UK

Wigan Council

The Environment Services Helpline Tel: 01942 404364

E-mail: NetworkManagement@wigan.gov.uk

Out of office hours in an emergency, Central Watch – 01942 404040

United Utilities

Tel 08456020406 (24Hrs)

http://www.unitedutilities.com/default.aspx

Appendix A

AGMA Policy for Investigating Flood Incidents

THE LEGISLATION

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

- (1) On becoming aware of a flood in its area, a lead local flood authority (LLFA) must, to the extent that it considers 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 carried out an investigation under subsection (1) it must
 - (a) Publish the results of its investigation, and
 - (b) Notify any relevant risk management authorities

NB. The term 'flood' includes any case where land not normally covered by water becomes covered by water (from natural sources). It does not include flooding from a burst water main or any part of the sewage network (unless caused by the volume of rainwater entering the system).

1.0 RATIONALE

There has been no guidance provided on how to discharge this duty and many elements remain highly subjective. As a result, and to avoid inconsistency across the conurbation; this policy has been drafted for local implementation to improve the understanding of flood risk and flood risk management uniformly.

The focus of this policy is not solely around the identification of the necessity to instigate an investigation but to ensure that a process is place to gather supporting evidence. Initially from the information received relating to a flood incident it may be deemed a full investigation is not appropriate but by having a process in place as outlined in this document the supporting evidence is in situ if the incident escalated to one of much greater significance once the impact of the flooding is known.

1.1 REPORTING PROCEDURES

Depending on the circumstances, flooding may be reported to the LLFA through a number of different sources, including: The Contact Centre; Highways and Engineering Service; Emergency Planning Service; Housing Management Services and the Emergency Services, any of which may take the initial notification of the incident. It is therefore vital to ensure that one nominated contact (the Lead Local Flood Officer or the relevant team) is identified, and that training and awareness sessions are put in place to ensure reports and details of the incident are all correctly directed and are not missed. A secondary contact should also be nominated to ensure cover during absences, and a system should also be put in place to cover flood incidents which occur outside of normal office hours.

CALL INTO LLFA Fig 1 - Process for dealing with flood reports: Stage 1 - LOG CALL & See section 3.1 Incident Notify appropriate RMA if not Recording **FOLLOW EXISTING INCIDENT/ EMERGENCY LLFA** remit **RESPONSE PROCEDURES IMPACT - DOES IT MEET** See section 2.1 Impact See section 3.2 Site **INVESTIGATION CRITERIA** Information Stage 2 – Where appropriate No YES arrange post event data **DOES THE** collection **INCIDENT REQUIRE TEMPORARY RE-**YES **HOUSING OR** Stage 2 - SITE VISIT, **IS EMERGENCY** INTERUPTED **RECORD DETAILS OF** 2 1 **ACTION REQUIRED? MAJOR PARTIES, TAKE RECORD TRANSPORT PHOTOGRAPHS AND NOTES YES** No **INFORM** No **INFORM LOCAL CIVIL RESPONSE CONTINGENCIES DUTY TEAM FIO VIA SECURITY AND RESPONSE** If investigation criteria triggered and investigation complete -**UPDATE INCIDENT DATABASE**

de **32** of **40**

COMPILE AND PUBLISH
REPORT

2.0 CRITERIA FOR UNDERTAKING INVESTIGATION

Not all flood incidents will justify a full investigation. Despite this, it is necessary to collect focal information from all incidents, even where the impact of the incident is minimal. All data gathered can be used to inform and predict the consequences of more serious incidents, not doing this may hinder a comprehensive understanding of risk across an LLFA area.

Where the incident has impacted on resources it may be decided that data is gathered post event when resources allow. Information such as photographs, flow paths and sources should be recorded where possible and even if they are not required as part of an investigation will become useful evidence especially to support and quantify the identified risk areas.

The information should be recorded and retained to ensure that any future flooding can be cross referenced against any previous incidents. If it is found that flooding occurs on a frequent basis to a property/area it may be that frequency rather than the scale of the incident triggers an investigation in the future.

2.1 IMPACT/CONSEQUENCE

It is recommended that an incident be defined as 'significant' based on any of the following factors and would potentially trigger a full investigation (see assessment matrix section 5.0):

Trigger	Consequence.
Risk to life	Death, accident/injury.
Weight of public, media, political and planning interest	Reputation.
Impact on critical services	Critical services include schools, hospitals, nursing homes and emergency services.

Internal residential property flooding - ≥ 5/6	'Internal' flooding includes flooding inside the main property and any outbuildings which provide living accommodation. Any flooding of other outbuildings and garages etc should be classed as 'external', except where they are integral to the main property and accessible via an internal door. – It is important to collect accurate records of what properties did flood internally, to support any decisions on flood defence funding. Also this information will be accessible by future property purchasers. Inaccurate data could prejudice a sale and lead at least to a serious complaint and possibly legal action.
Economic disruption	Consider the relative impacts of flooding of commercial property . In some cases, flooding of a single commercial property could no more warrant investigation than flooding of a single residential property; but in other cases, the serious flooding of a large, single property could be extremely disruptive to the economic functioning of a community or have significant impact on a local or regional economy, and would therefore certainly trigger an investigation. Other causes of economic disruption should be covered by consideration of impacts upon infrastructure.
Impact on critical infrastructure and installations	Critical infrastructure includes motorways, 'A' roads, rail links, port facilities, utility installations, bridges, flood defences etc.
Frequency of flooding	Also consider depth of flooding, were residents displaced and the duration of such.

• Effective deployment of defensive measures should also be recorded.

Consideration should also be given to any locally significant flood incidents which the LLFA may choose to investigate regardless of the criteria above.

3.0 SCOPE OF EVIDENCE GATHERING

Regardless as to whether a flood incident will result in a full and formal published investigation gathering information relating to the cause and impact of the flooding is necessary at all stages of the event.

Whilst the amount of data required to provide an insight into the cause of the flooding should remain **proportionate** to the size of the event it is imperative that all LLFA's ensure a process is embedded to support this. It is each districts responsibility to nominate a Flood Officer and provide training and incident response procedures which capture the essence of this policy.

If there are issues around the nominated Flood Officer having the capacity or correct training to attend, this should be overcome through training and awareness sessions between all involved directorates and a strong Flood Risk Management Working Group.

Part of the process should also identify the means of capturing this data and in what format it should be recorded and stored to ensure the information can be viewed and shared for use by any relevant parties. This will not only ensure relevant data is captured in a timely manner but evidence is available to support future bids within the GM investment programme.

3.1 STAGE 1 - Incident Recording

The following information should be gathered at the time the incident is reported:

Information type	Information required
<u>Caller details:</u>	Name
	• Address
	Telephone number
	• e-mail

By what route	Direct from the caller
was the call received:	• 3 rd party
ieceivea.	o family or friends of the person affected
	o other RMA's
	o Emergency services
	 Councillor on behalf of their constituency
	o Other – please state
Incident details:	Reference no:
	Address/ location:
	Date and Time of incident:
What is/has flooded:	 Property – internal – If Yes, ask whether basement or Ground floor
	Property – external
	 Level of flooding (if already occurred) – approximate depth
	Highway
	Open space (define)
	Other (define)
Where is/was the	Overflowing Manhole/Drain
water coming from:	Overflow from a river or stream
1101111	Water running off the highway
	Water running off a field
	Other (define)
	Don't Know
Additional risk information:	 Is/was there a danger to life? (if yes advise caller to contact the emergency services immediately)
	Is/was there a foul smell?
	Is/was there evidence of sewage in the water?
	Is the water still rising? If so, how deep is it?

 Is there a watercourse nearby? If so, what is it called?
Is there ongoing traffic disruption?
Other factors (define)

3.2 STAGE 2 - Site Information Data Gathering

This information whilst again being proportionate to the size of the event is necessary to validate initial reports received from the public or 3rd parties including the media and would be included in the final report if a full investigation is required. Each LLFA should aim to gather the following information:

Information type	Information required
Incident details:	Reference no:
	• Location:
	Date and time of incident:
	Date and time of site visit
What is/has	number and type of receptors affected;
flooded:	extent, depth and velocity of flooding
	extent of damage to critical infrastructure
Where is/was the water coming from:	source and cause of flooding and any interactions with other sources of flooding;
Additional risk	duration of event;
information:	 topographic / land use / drainage infrastructure information associated with the affected site;
	 any immediate resolution, and any links to longer term mitigation / management measures;
	previous similar and historic incidents

 any measures taken during the event to limit damage and their apparent effectiveness
 photographic evidence of flooding

4.0 PUBLISHING

If a Formal Investigation has been undertaken, the LLFA has a legal Duty to publish a report of its findings. Local procedures for approval and publishing of public documents should apply.

Special consideration should be made for cross-boundary incidents, and the format of reporting and sharing of information should be agreed between neighbouring LLFAs.

5.0 ASSESSMENT MATRIX

The following table provides guidance as to determine whether a full investigation is required:

NUMBER	FLOODING IMPACT	IF 'YES' GO TO:	IF 'NO' GO TO:
	Has a flood incident occurred?Internal property flooding -		
	residential/commercial		
	Economic disruption		
1	Risk to life or public health		
	 Affecting critical services, infrastructure and or installations 	4	2
	Deployment of defensive measures		
	Has a flood incident occurred to;		
2	Non-priority highways?		
	 Parks, gardens or open space (posing no threat to life or public health)? 	3	
3	Is there a local/ political desire to investigate the incident?	4	12
	Identify the relevant risk management authority.		
4	If necessary, arrange a meeting of the local flood risk management partnership (A meeting may only be necessary for major events – minor events may only need information circulated by phone or email between LLFA, the Environment Agency and United Utilities)	8	5
5	Notify the relevant flood risk management authority	6	

6	Is the risk management authority exercising their functions in relation to this incident?	7	4
7	Log the correspondence in the incident file and request copies of the outcome if/ when appropriate.		
8	Is there a history of flooding in the area?	9	13
9	Has this been investigated before?	10	13
10	Is the cause and extent the same as previous incidents?	11	13
12	Log incident details; promote self-help and community resilience.	12	
	REVIEW SITE VISIT & DATA COLLECTION		
13	Is a full investigation required based on information available?	13	11
	FULL INVESTIGATION – AND PUBLISH		
14	Consider scope for Flood Defence Grant in Aid application for property-protection scheme.		