

## London borough of Croydon Flood investigation protocol

This document relates to the investigation of significant flood events.

Croydon Council, within their role as Lead Local Flood Authority, have a responsibility to investigate certain flood incidents, as detailed in Section 19 of Part 3 of the Flood and Water Management Act 2010. This section states:

### **PART 1 FLOOD AND COASTAL EROSION RISK MANAGEMENT**

#### **3. Supplemental powers and duties**

##### **Section 19: Local authorities: investigations**

- 1) On becoming aware of a flood in its area, a lead local flood authority must, to the
- 2) 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 flood.
- 3) Where an authority carries out an investigation under subsection 1) it must –
  - (a) publish the results of its investigations; and
  - (b) notify any relevant risk management authorities.

This document outlines the process that the London Borough of Croydon will follow to determine the need for investigation. Figure 1 demonstrates how flood reporting will be dealt with in the council. All reports should be added to the incident register even if they do not require formal investigation.

#### **Investigations**

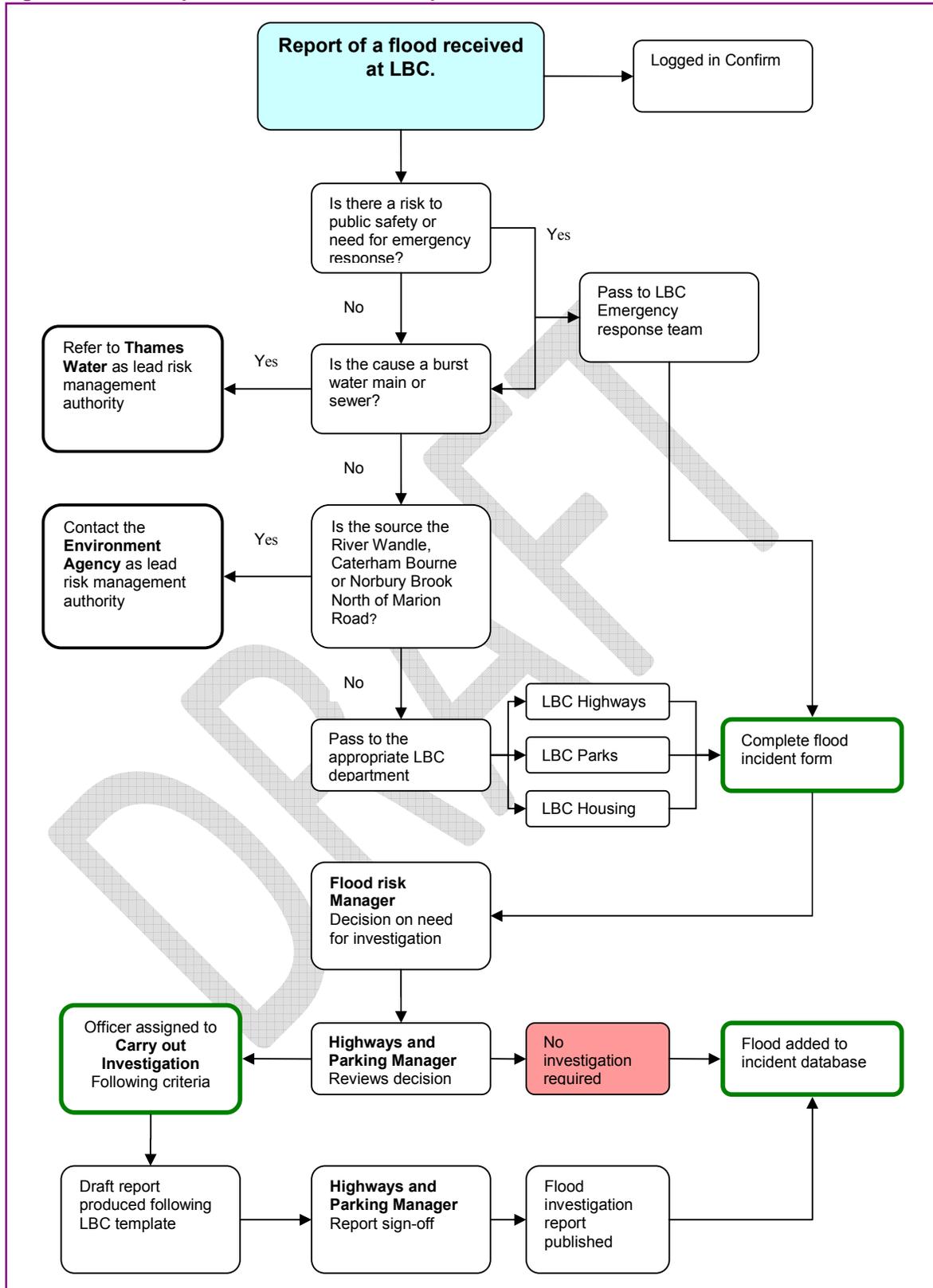
Once made aware of a flood event, Croydon Council will then consider whether an investigation should be carried out under Section 19 of the Flood and Water Management Act.

Each situation should be assessed on a case by case basis considering all factors such as the source of flooding numbers of properties affected. Threshold levels should be considered a guide only and will remain under review. All floods are different and a certain amount of officer judgement will be required.

#### **Criteria for investigating**

The following chart (Table 1) should be used as a 'first glance' tool to help determine whether the incident warrants investigation. The guidance in Table 2 should also be consulted to aid decision-making. An investigation may be required merely because the cause and responsibilities are unclear.

**Figure 1: In-house procedure when a flood report is received**



**Table 1: Determining the need for investigation**

1. Has there been a fatality or a serious injury as a direct result of flooding?	<b>Yes</b>			Formal Investigation
	<b>No</b>	Go to 2.		
2. Has there been flooding in residential property?	<b>Yes</b>	<u>Depth greater than 0.10m over ground floor threshold or more than 3 properties</u>	Yes	Formal Investigation
			No	Go to 4
	<b>No</b>	Go to 3		
3. Has there been flooding of critical infrastructure?	<b>Yes</b>	Has flooding prevented the operation of the critical infrastructure for <u>more than 2 hours</u> ?	Yes	Formal Investigation likely. Officer confirm with guidance
			No	Investigating officer to decide whether investigation is necessary. If no, Continue to 4.
	<b>No</b>	Go to 4.		
4. Have vulnerable individuals been seriously affected?	<b>Yes</b>	Has there been internal flooding at a facility which supports vulnerable communities?	Yes	Formal Investigation likely. Officer confirm with guidance
			No	Investigating officer to decide whether investigation is necessary. If no, Continue to 5.
	<b>No</b>	Go to 5		
5. Has there been flooding of commercial property?	<b>Yes</b>	Have more than <u>3 properties</u> been affected? Or is the flooding deemed to have caused significant economic disruption?	Yes	Formal Investigation likely. Officer confirm with guidance
			No	Investigating officer to decide whether investigation is necessary. If no, Continue to 6.
	<b>No</b>	Go to 6		
6. Has there been damage to a protected environmental site or a pollution incident?	<b>Yes</b>	Is the impact deemed to have a lasting effect on the local environment and/or biodiversity?	Yes	Formal Investigation likely. Officer confirm with guidance
			No	Investigating officer to decide whether investigation is necessary. If no, Continue to 7.
	<b>No</b>	Go to 7		
7. Is this a recurring incident?	<b>Yes</b>	Has a flood been reported at this location at <u>least 3 times in the last 6 months</u> ?	Yes	Formal investigation may be required. Investigating officer to decide whether investigation is necessary.
			No	Go to 8.
	<b>No</b>	Go to 8		
8. Have there been requests for formal investigation from the public or political representatives	<b>Yes</b>	Does the weight of public interest justify the need for investigation in this case? (consult guidance)	Yes	Formal investigation
			No	No formal investigation. Incident should be recorded and mapped in Croydon's incident database
	<b>No</b>	Formal investigation unlikely to be required. Incident should be recorded and mapped in Croydon's incident database		

**Table 2: Guidance notes on determining need for investigation**

<b>Human safety – Fatalities, injuries and public health</b>
<p>Human safety is of primary concern during extreme weather events. If a flood event has directly led to a fatality or serious injury, an investigation should be carried out. Public health could also be put at risk indirectly if sewage gets into the flood water. In the event of a foul water flood, a judgement should be made as to whether there was a serious threat to the public. In this case an investigation should ensure the sewerage undertaker (likely to be the RMA in the majority of cases) has adequately addressed the problem.</p>
<b>Internal flooding to residential property</b>
<p>Flooding in residential homes is incredibly distressing for those affected, not only in the more obvious loss or damage of property and impacts on insurance but also longer lasting effects on people's lives. Flooding of residential property is likely to need investigation although this will be situation-specific. Flooding of a residence should be considered over the ground floor threshold NOT the basement.</p> <p>If the flood has affected more than three separate properties (not within the same building), an investigation is likely to be required. The depth of the water and severity of impact should also be considered however and a final judgement made by the investigating officer.</p>
<b>Flooding of Critical infrastructure</b>
<p>Critical infrastructure includes routes and installations that could have a severe impact on a wider population if taken out of action as a result of a flood. This could include as some examples; water and power services, railway lines, major roads, electricity substations, police and fire stations, hospitals, schools or care homes. If critical infrastructure is flooded above ground level or there is a loss of services as a result of a flood, it is likely that an investigation should be carried out. Officers should use their judgement on the need for full investigation if the incident is of short duration and clear cause.</p>
<b>No Clear Responsibility</b>
<p>The purpose of the duty to investigate is to ensure that the correct risk management authorities are appropriately responding to the incident. The causes of flooding can often be complex leading to ambiguity as to who is responsible. As Lead Local Flood Authority, LB Croydon must take the lead in establishing the causes of a flood and ensuring it is being correctly managed. This in itself may trigger a formal investigation.</p>
<b>Frequency of flooding</b>
<p>Frequency is a factor that may influence the decision to investigate. A minor flood may not be considered serious as an independent event but if it occurs regularly causing a nuisance, it suggests an underlying cause has not been dealt with and may warrant further investigation.</p> <p>Equally a more serious flood with a clear cause may not warrant investigation if it is deemed to be extremely rare.</p>
<b>Vulnerable communities</b>
<p>Vulnerable communities can represent a number of groups including younger people, older people or those with disabilities or health problems. If flood event impacts on facilities serving these groups such as schools, hospitals or care homes. It may support the requirement for investigation. It is important that a judgement is made based on the severity of the incident. Internal flooding at support facilities, disruption of essential services or risk to well-being of vulnerable individuals are likely to warrant investigation.</p>

**Economic disruption**

Although more difficult to quantify, serious economic disruption could be a justifiable cause for investigation and the investigating officer should use their judgement in each case. Flooding to a single shop is unlikely to be deemed more serious than flooding to a single residence. However if a large commercial property was affected, there could be knock-on effects for the wider community. Economics should also be considered alongside effects on infrastructure for example where transport routes have been affected.

**Environmental damage**

Consideration should be given to investigation if a flood has threatened a protected environmental site, particularly if it is deemed a lasting negative impact has occurred. Croydon may wish to prioritise principle habitats or species identified in the Local Biodiversity Action Plan (BAP) or the threat posed by polluted water to biodiversity.

**Weight of public interest**

As a democratic institution, the council may add weight to considering carrying out an investigation if a significant number of requests are received from the public or there is widespread interest from councillors and local MPs. Officers should bear in mind the stated legal purpose of an investigation is to establish which risk management authorities have a flood management function and whether they have appropriately exercised those functions in response to the incident to guide a consistent approach.

**Who are the Risk management Authorities?**

Risk Management Authority (RMA)	Areas of responsibility
<p><b>London Borough of Croydon</b></p> <ul style="list-style-type: none"> <li>Lead Local Flood Authority</li> </ul>	<ul style="list-style-type: none"> <li>Management of floods from ordinary watercourses <i>This may include identifying riparian owners who are responsible for the maintenance and clear flow of an ordinary watercourse through their land.</i></li> <li>Management of surface water flooding <i>This usually occurs during periods of heavy rainfall, when drainage systems become overwhelmed. It can often combine with sewer floods and/or groundwater.</i></li> <li>Management of flooding from groundwater</li> </ul>
<p><b>London Boroughs of Bromley, Sutton, Merton and Lambeth. Surrey County Council</b></p> <ul style="list-style-type: none"> <li>Neighbouring Lead Local Flood Authorities</li> </ul>	<p>Any cross-border issues related to the above or where the source of flooding is within their borough but affecting Croydon</p>
<p><b>London Borough of Croydon</b></p> <ul style="list-style-type: none"> <li>Highways Authority</li> </ul>	<ul style="list-style-type: none"> <li>Management of flooding on the public highway</li> </ul>

<b>Transport for London</b> <ul style="list-style-type: none"><li>• Highways authority</li></ul>	<ul style="list-style-type: none"><li>• Management of flooding on red routes</li></ul>
<b>Thames Water</b> <ul style="list-style-type: none"><li>• Water and sewerage undertaker</li></ul>	<ul style="list-style-type: none"><li>• Management of flooding from sewers or burst water mains</li></ul>
<b>Environment Agency</b>	<ul style="list-style-type: none"><li>• Management of flooding from Main Watercourses</li></ul>

**Appendix A: Flood investigation report template**

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