

## Flood and Water Management Act 2010 Section 19

# FORMAL FLOOD INVESTIGATION REPORT Hawk Drive, Bedford

### 1.0 Background

The Flood and Water Management Act 2010, establishes unitary and upper tier authorities as Lead Local Flood Authorities (LLFAs). Section 19 of the Act gives LLFAs the duty to investigate a flood event when considered appropriate and to the extent it deems necessary. The LLFA will identify the relevant Risk Management Authority (RMA) and record any actions which have been taken or they are proposing to action in response to the flood event.

When an investigation is carried out under section 19 of the Act, the LLFA will publish the results of the investigation and notify any relevant risk management authorities.

## 2.0 Risk Management Authority Responsibilities

Table 1.1 shows RMAs responsible for managing the flood risk from different sources that the BBC investigation procedure applies to.

Flood Source	Environment Agency	Lead Local Flood Authority	Drainage Authority	Water Company	Highway Authority
		Bedford Borough Council	Bedford IDB	Anglian Water	Bedford Borough Highways
Main River	✓				
Surface Water		✓			
Surface Water (on or coming off the highway)					✓
Sewer flooding				✓	
Ordinary Watercourse		✓	✓		
Groundwater		✓			

Reservoirs ✓

Owners of land adjoining, above or with a watercourse running through it are termed 'riparian owners' and have responsibilities to maintain and allow the free flow of water through their land. Further information on riparian owner rights and responsibilities can be found in the Environment Agency publication 'Living on the Edge' here.

### 3.0 Flood Incident, Extent and Impact:

On the 9<sup>th</sup> March 2016 Bedford Borough experienced extremely intense and heavy rainfall. Bedford was the wettest place in the Country on the 9<sup>th</sup> March and received a month of rainfall in one day, receiving up to 38 mm in some locations. Heavy rainfall occurred from approximately 00:00 hours until 15.00 hours on 9<sup>th</sup> March 2016. Flooding was reported to Bedford Borough Council from residents on Hawk Drive and Stour Way at approximately 12:00.

Although no internal flooding occurred, two properties in Hawk Drive came close to flooding, with one property suffering from their porch flooding as well as their garage which flooded to a depth of approx.200mm.

Stour Way highway area also had extensive flooding across the road up to 100mm and to one garden.

An officer from the Corporate Safety and Resilience Team attended the areas as well as the Highways Team. Water was pumped by two Highway tankers until the early hours of 10<sup>th</sup> March 2016 to an adjacent pond to discharge the water to an existing double culvert.

Previous flood incidents of a similar nature have occurred according to our records but not on this scale. This event followed significant rainfall.

### 4.0 Likely Cause of Flood Incident

Surface water runs across the adjacent school field after picking up a large catchment into the ditch adjacent to Hawk Drive. The ditch drains partially uphill to a 300mm pipe that discharges into the adjacent pond.

On the 9<sup>th</sup> March 2016 the pipe became blocked up with debris, wood and logs forcing the water to back up and overflow the ditch onto Hawk Drive and beyond. The pipe was unblocked following over pumping of water from the ditch to the adjacent pond.

This has been investigated fully by the Flood Investigation Officer, Highways and Engineers. It was recommended that following these investigations the ditch needs a greater capacity to be able to hold the water more effectively. Therefore the ditch needs digging out deeper and additional exit pipes need laying to help discharge the water from the ditch.

#### 5.0 Responsible Risk Management Authority

It has been identified that the responsibility for resolving the flooding issue surround the blocking of the culvert and overflowing of the ditch lies with Bedford Borough Council as there is no other Risk Management Authority involved or responsible. The responsibility to maintain the open ditch lies with the school as riparian landowner on one side and an unknown landowner on the other side where the un-adopted track of Hawk Drive is.

#### 6.0 Recommended Action

Table 0.1 highlights the recommended actions by Bedford Borough Council for the responsible RMA and a suggested timescale of responses required to confirm that the RMA is aware of the flood incident and is taking appropriate action.

Table 0.1: Recommended actions for the responsible authorities and timescale for a response required.

Responsible Authority	Action	Timescale for response required
Bedford Borough Council Highways	To dig out the ditch deeper, place arising on bank and to fill the grips. To consider laying twin 300mm pipes from the ditch down the alley to Stour Way and outfall to the existing watercourse.	October 2016 prior to winter flooding season

#### 7.0 Next Steps

The next steps for the LLFA are to ensure the report is forwarded to the RMAs identified in table 5.1 and that these authorities are aware of their flood risk management responsibilities. The LLFA will follow up with the authorities to determine progress against the recommended actions.