

Caldecote

1.1 Background

As the Lead Local Flood Authority (LLFA) for Cambridgeshire, it is Cambridgeshire County Council's duty to investigate flood incidents as detailed within Section 19 of the Flood and Water Management Act 2010.

Flood and Water Management Act 2010 Section 19 – Local Authorities: Investigations

- 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.

The County Council carries out flood investigations in order to comply with current legislation. Unfortunately owing to very limited resources it is not possible to investigate every incident, and as such thresholds for investigation have been set within the Cambridgeshire Flood Risk Management Strategy.

1.2 Risk Management Authority

The flood investigation reports have been produced in partnership with the relevant Risk Management Authorities (RMA). RMAs are defined by the Flood and Water Management Act 2010, as they have responsibilities for flood risk management. The RMAs have a duty to carry out flood risk management functions in a manner consistent with national and local strategies.

The RMAs in Cambridgeshire are listed below; Table 1 highlights the relevant RMA that will take the lead in managing the risk from various local sources of flooding.

- Environment Agency (EA)
- Lead Local Flood Authority (LLFA) – the County Council
- Sewerage Undertaker - Anglian Water (AW)
- City and District Councils (C&DC)
- Internal Drainage Boards (IDBs)
- Highway Authority (HA) – the County Council other than for the A1, A1(M), M11, A14 and A428 for which Highways England are responsible.

The flood investigation reports determine which RMA(s) have exercised their flood risk management functions in response to flooding.

Table 1 Relevant flood Risk Management Authorities that will take the lead in managing the risk from various local sources of flooding.

Flood Sources	EA	LLFA	C&DC	AW	HA	IDBs
WATERCOURSES						
Main River	✓					
Ordinary watercourse		✓				✓
Awarded watercourse			✓			
SURFACE RUNOFF						
Surface water		✓				
Surface water originating on the highway					✓	
Surface water sewer flooding from water company systems				✓		
OTHER						
Groundwater		✓				
Foul sewer flooding				✓		
Reservoirs	✓					
The sea	✓					

In the case of Caldecote, the relevant RMA's are South Cambridgeshire District Council, Cambridgeshire County Council Highways Authority and Anglian Water.

Riparian owners also often have an important role to play. A riparian owner is a landowner with a watercourse running through or alongside their land. Riparian owners have responsibilities to maintain and allow the free flow of water through their land. Further information on riparian owner rights can be found on the [Cambridgeshire County Council website](#).

Flood Incident, Extent and Impact:

Table 2. Formal Flood Investigation Report

Date of incident	8th/9 th August 2014
Reference Number	FI/14/000049
Location of incident	Various, Caldecote
Risk Management Authority reported to	South Cambridgeshire District Council, Anglian Water and Cambridgeshire County Council Highways Authority.
Incident reported by	South Cambridgeshire District Council
Historical flooding	It has been reported that flooding occurred in 2001.

Source of flooding

Multiple sources that included drains, local ditches and surface water runoff.

Location

Figure 1. Location of flood incident

Note: The above map is indicative and does not represent the precise extent of flooding.

Likely cause of incident

Extremely high levels of intense rainfall falling in a short time period onto a localised area. Flooding occurred as a result of an extreme rainfall event. The average expected rainfall for Caldecote for the whole month of August is 46mm. On the 8th of August 2014 three times the monthly long term average rainfall fell (equivalent to three months rainfall in six hours). This equated to a rainfall event with an annual probability of 1 in 330. Contributing factors include:

- Owing to the extreme rainfall, the capacity of all drainage networks were overwhelmed; and
- The volume of rain water inundated the watercourses and road network in the village, resulting in flooding from a range of sources that included surface runoff on roads, the overtopping of watercourses and surcharging of local drains.

Summary of impact

A total of 12 properties were reported by the community as having flooded internally. It was also reported that 17 residents were evacuated from a residential care home.

Action taken by relevant Risk Management Authorities	
HA	Following the extreme rainfall event, Cambridgeshire County Council Highways arranged for the cleansing and surveying of the relevant surface water drains for which they have responsibility.
SCDC	South Cambridgeshire District Council carries out annual maintenance on the ditches known as 'awarded watercourses' drains which are identified as their responsibility. An assessment of the awarded watercourses was made after the flood event and no additional maintenance was required. South Cambridgeshire District Council is not aware of any issues with their network. All relevant maintenance work was completed by December 2014.
AW	Anglian Water recently installed a storm tank at the pumping station at Highfields, Caldecote to afford more retention time in times of extreme rainfall. The pumps to the pumping station have also been updated to achieve extra flow. Flow meters were also installed at this location to provide telemetry in respect of this facility.
Further actions	
<p>Cambridgeshire County Council recommends that residents, whose properties have been flooded, contact the National Flood Forum for details on how to protect their property.</p> <p>Cambridgeshire highways issues should be reported via the County Council's website or by calling 0345 045 5212. The routine cleansing of highways gullies across Cambridgeshire is now prioritised as part of a risk based approach to highway drainage maintenance.</p>	

Please note: The actions undertaken as part of this flood investigation do not preclude the risk of the area flooding in the future. If you live in an area that is at a risk of flooding, you are encouraged to undertake the action highlighted in the 'Further Solutions' section in Table 2.

Next Steps

Cambridgeshire County Council, as LLFA, will ensure that this report is forwarded to the RMAs and the riparian owner(s) identified in the above table and that these authorities are aware of their flood risk management responsibilities. It is expected that all bodies will continue to share information and work co-operatively to manage future risk.