

Upton Main Report Details

Project:	Storm Christoph Section 19 Main Report		
Area:	Upton		
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Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Draft for RMA Comment	SF	TS	EJG	EJG	10/08/22
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Client signoff

Client	Cheshire West and Chester Council
Project	Storm Christoph Section 19 Main Report
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Upton Main Report Details

This Upton specific Main Report should be read in conjunction with the Section 19 Flood Investigation – Main Report (January 2021 Storm Christoph Flooding Event).

1. Background

Upton Park is a residential estate located two miles north of Chester city centre surrounded by suburban modern housing developments. It was reported that internal flooding occurred to a single property on Upton Park Road, although it is alleged that other properties were affected to some degree. Flooding also occurred within Queen Elizabeth II Park.

There are no main rivers close to the estate. It is thought a number of historic drains run north south through the Queen Elizabeth II Park and along its southern boundary. Depressions in the land indicate there may be a culverted watercourse which drains the parkland, and it is thought this historically tied into the ditches around the perimeter of the park. Previous investigations have found a concrete headwall in the corner of Mill View Primary School's playing field, suggesting the existence of a drainage ditch system and historic inlet structure. On Upton Park, opposite the hedge line behind this headwall, there are two gullies identified in the road either side indicating a possible historical connection point. It is assumed that these connect to the Welsh Water combined sewer in Upton Park.

There is a raised area in the school grounds near the location of the historical headwall where historical drawings indicate there is a 225mm pipe that receives field drainage from the school into a chamber, this chamber has not been located or identified on site. There is a pumping station in the southeast corner of Queen Elizabeth II Park, near Wealstone Lane, which stores foul water during storm events and pumps it away once pressure on the system has dissipated. An access chamber exists in the grounds of what was a youth centre.

In 2012 flood water entered residential property gardens, on this occasion one of the residents used a submersible pump to remove water.

Parts of Upton Park are in the 1 in 30-year surface water flood risk zone (Appendix I).

2. Flood Review

Water entered property gardens from Queen Elizabeth II Park, to the rear of the properties. Observations during the flood event indicate that water came into the affected properties from Queen Elizabeth II Park rather than from the adjacent school grounds. Cellars of properties on the estate were flooded during the event.

Figure 1 shows the flood flow routes, this was developed in consultation with Cheshire West and Chester Council (CWaC), as Lead Local Flood Authority (LLFA), and affected property owners.

No flood incidents reported to Welsh Water during Storm Christoph.

Residents reported that:

- The flow route of the water may be indicative of the route of an old watercourse
- There are concerns that the drainage in Queen Elizabeth II Park is inadequate
- There are historical concerns from the community with regards the presence of heavy metals in standing water.

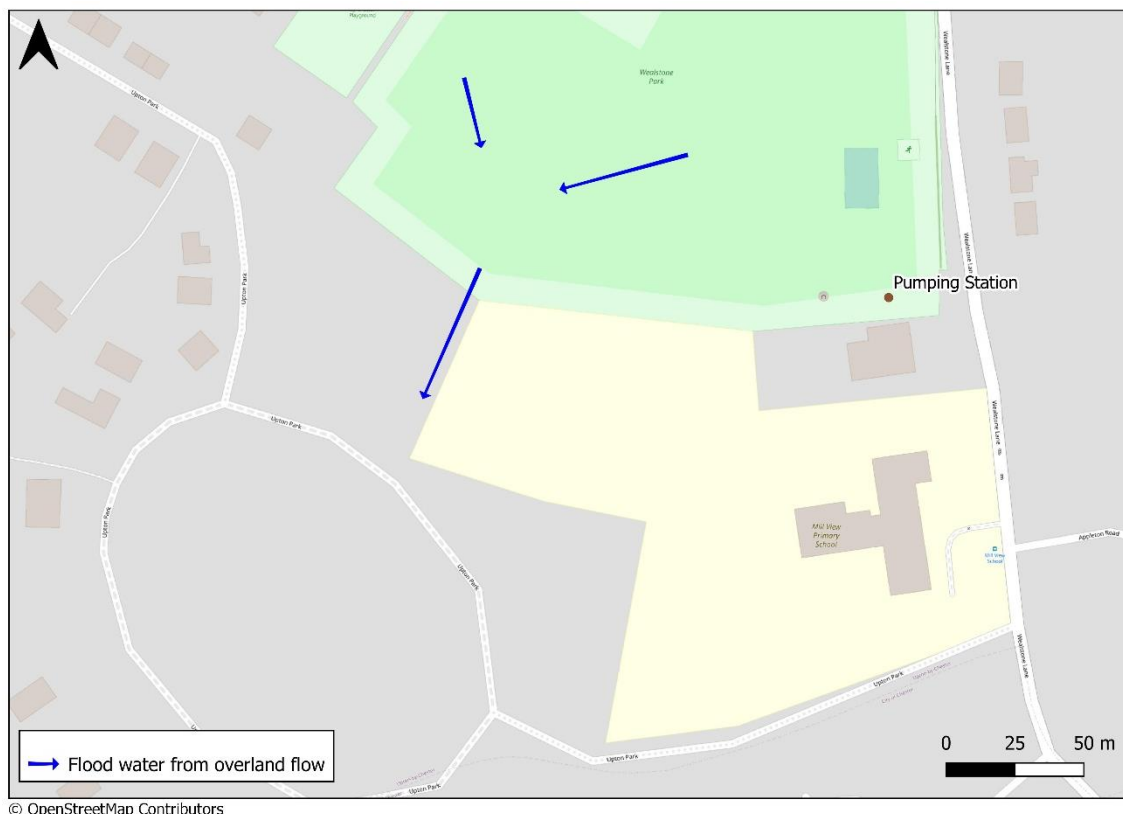


Figure 1 - Flood Overview

Key statistics of the Storm Christoph Flooding in Upton are summarised in Table 1. A detailed timeline of the flood event can be found in Appendix II.

Table 1 - Flood Impact Summary

Residential properties affected:	Commercial premises affected:	Number of properties evacuated:	Number of properties flooded:	Number of domestic properties flooded:	Number of commercial premises flooded:	Comment
2	0	0	1	1	0	As reported to CWaC prior to publishing

Table 2 provides a brief summary of the flood event, impact and response in Upton.

Table 2 – Upton Flooding

Upton Park	
Date	<ul style="list-style-type: none"> 20th January 2021
Affected Roads	<ul style="list-style-type: none"> None in the area of affected property
Flood Alert / warning issued?	<ul style="list-style-type: none"> The area is not covered by a Flood Warning or Flood Alert
Flooding Impacts and Observations	<ul style="list-style-type: none"> Property damage Additional stress and mental anguish on the community over such an event happening again
Summary of Flooding Incident Response During Event	<ul style="list-style-type: none"> Personal pump was used to pump water away from affected property in the afternoon

The following actions were undertaken prior to completion of the interim report:

- Upton-by-Chester and District Parish Council met 3rd March 2021 to discuss the flooding.
- Discussions undertaken with regards drainage improvements of the parkland to accompany regeneration plans of the fields.
- Meeting on site with affected residents 1st July 2021 with CWaC, as LLFA.
- CWaC to assist the Parish Council in producing a Community Resilience plan if not already done so.

3. RMA Response

This section outlines the RMA response to the flood event at Upton Park and identifies area for improvement of flood risk. Consultations have been undertaken with the participating RMAs and local residents to inform this assessment.

- The LLFA, alongside the Parish Council is currently undertaking an investigation of the drainage system; to locate, inspect and, where required, inform Welsh Water should cleansing, repairs or exposing buried chambers in Upton Park be required. This investigation is aimed at developing a strategy to reduce field run off and potentially wider drainage issues in the area.
- The FloodHub has been promoted at several engagement events and during site visits with affected residents. A link is also included from the Flood pages of the CWaC website.

4. Recommended Actions

The following actions are recommended:

- CWaC, as LLFA, to complete their investigation into the drainage system and make good identified buried chambers on the system. If considered appropriate to do so, progress a proportionate Outline Business Case or proceed directly to undertake works to improve drainage.
- Parish Council to release findings of heavy metal contamination investigation in standing water within Queen Elizabeth II Park.

Appendix I – Map



Extent of flooding from surface water

- High
- Medium
- Low
- Very low

Source: EA

Appendix II – Timeline

Time	Upton Park
20 th Jan pm	Overland flow from the Queen Elizabeth II Park flowed into gardens of Upton Park Road. Water was pumped out of private property.