

Saughall Main Report Details

Project:	Storm Christoph Section 19 Main Report		
Area:	Saughall		
Date:	10/08/2022	Project No.:	5150735

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Draft for RMA Comment	TS	SF	EJG	EJG	10/08/22
2.0	Draft for Final Approval	TS	SF	EJG	EJG	01/09/22

Client signoff

Client	Cheshire West and Chester Council
Project	Storm Christoph Section 19 Main Report
Project No.	5150735
Client signature / date	

Saughall Main Report Details

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

1. Background

Saughall is a village in Cheshire, approximately 5km north west of Chester. To the south west of the village there is a watercourse classified as a main river and there are several land drains within the agricultural land surrounding the village, most drains flow in a south westerly direction towards Sealand, Wales. Saughall is often affected by flooding to the incoming highways, restricting or cutting off access, and properties on Lodge Lane are often affected by external flooding; residents have reported garden flooding up to 27 times during high rainfall in the last two years.

Saughall is classified as Flood Zone 1 - very low risk of flooding from rivers or the sea. Some areas of Saughall are identified as being at risk of surface water flooding (Appendix I). Given that Saughall is located in a low-lying area with relatively flat profile and underlying clayey soils, the area is susceptible to localised ponding and surface run off which are not necessarily reflected on the Environment Agency (EA) Flood Zone or Surface Water maps.

2. Flood Review

2.1. Lodge Lane

During Storm Christoph one property on Lodge Lane experienced internal flooding. Flood water entered the rear gardens of other properties from the fields to the rear due to the sloping topography of the land. The flood water then flowed through the properties and onto the road.

During the Storm Christoph event, residents reported that:

- The gullies on Lodge Lane were unable to cope with the volume of flood water.
- The properties have continuous issues with mould and damp.
- One of the properties reported foul water surcharging through a drain in the kitchen floor and that this has happened three times in the last six years.
- Safe access for elderly residents and emergency services were jeopardised; there is continued concern for vulnerable residents' safety.
- Residents used sandbags to protect their properties.
- A Resident had to evacuate and stayed in a hotel for two nights after the event.
- Flooding was reported on Thomas Wedge Road, however the exact details of this flooding are not known.

Figure 1 shows details of the approximate area affected by flooding, developed in consultation with Cheshire West and Chester Council (CWaC), as Lead Local Flood Authority (LLFA), and affected property owners. Figure 2 Illustrates the flooding within the gardens of properties on Lodge Lane.

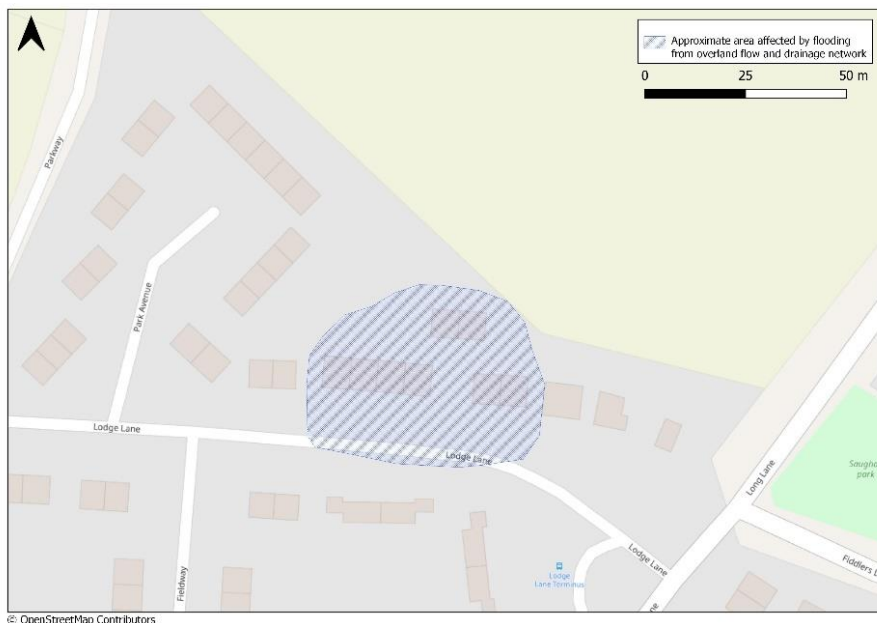


Figure 1 - Lodge Lane Flood Overview



Figure 2 - Lodge Lane Rear Garden. 20/01/21.

2.2. Hermitage Road

Owing to highway flooding, many of the access roads into Saughall became blocked off, including Parkgate Road, Hermitage Road, Lodge Lane and Seahill Road. This severely restricted access to the village and limited access for emergency services and evacuation.

Residential properties affected by external flooding were reported on Hermitage Road to the south of the village and at Willow Hey.

A series of land drains flow to a single 300mm pipe north of Hermitage Road which subsequently flows beneath the road and in a south western direction in an open ditch. This ditch re-enters a 300mm pipe beneath the private garden at the end of a private access road before discharging safely to the south west (Figure 3).

During Storm Christoph, the drain beneath Hermitage Road was surcharged, causing overland flow across the road and ponding in the driveways of residential property and the bus stop area. It is understood that surface water flooding is often experienced at this location. Water then proceeded to flow overland, ponding in the garden of the property at the end of the private access.

No incidents of flooding or issues with the sewer network were reported to Welsh Water during the event.

Residents reported that:

- Flood water was up to 1m in depth inside the walled garden at the end of the private access road.
- Residents are concerned that flooding restricts emergency vehicle access and limits opportunity for safe evacuation.
- There are safety concerns regarding passengers exiting at the bus stop when it is flooded.
- When the land drain parallel to the private access road overtops it is unclear to vehicle drivers where the road boundary is. Vehicles have accidentally driven into the ditch during high water events in the past.

Figure 3 shows details of the flooding, developed in consultation with CWaC, as LLFA, and affected property owners.

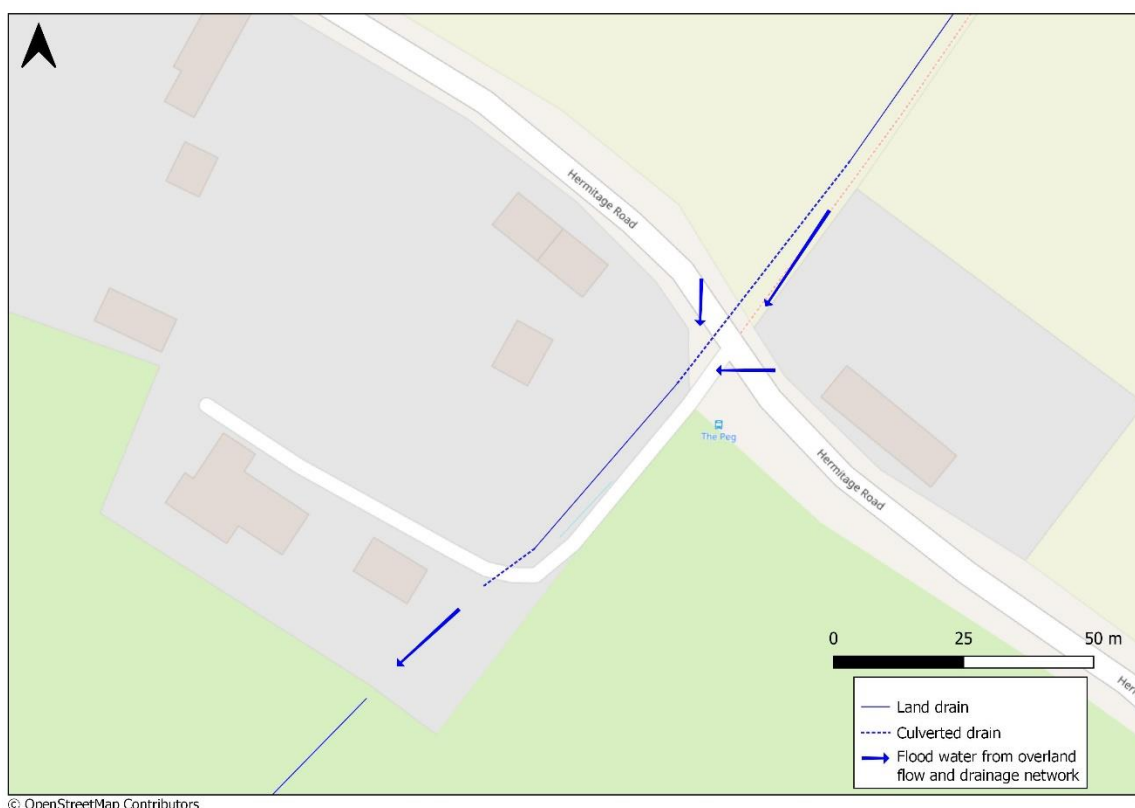


Figure 3 - Hermitage Road Flood Overview

2.3. Area Summary

Key statistics of the Storm Christoph Flooding in Saughall are summarised in Table 1. A detailed timeline of the flood event at Lodge Lane 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
8	0	1	1	1	0	As reported to CWaC prior to publishing

Figure 1 and Figure 3 show details of the flooding, developed in consultation with CWaC, as LLFA, and affected property owners. Table 2 provides a brief summary of the flood event, impact and response in Saughall.

Table 2 – Saughall

Saughall	
Date	<ul style="list-style-type: none"> 20th January 2021
Affected Roads	<ul style="list-style-type: none"> Lodge Lane, Thomas Wedge Road, Willow Hey, Hermitage Road, Seahill Road, Parkgate Road
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"> Fire Service pumped water out of property gardens Residents evacuated properties Residents used sandbags to protect properties

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

- Meeting on site with affected residents 14th October 2021 with CWaC, as LLFA.
- Work began at properties on Lodge Lane to install sump pumps in the garden of two of the affected properties .

3. RMA Response

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

- CWaC, as LLFA, is currently undertaking an investigation to establish accurate maps of land drainage in the area and identify points at which roads become blocked off during storm events.
- CWAC is moving towards a risk-based approach to gully maintenance; increasing the frequency of cleansing to those gullies identified in areas at risk of flooding.
- CWaC has commissioned a contractor to inspect and desilt the 300mm drain beneath Hermitage Road, the work has not yet been carried out but is programmed to be completed.

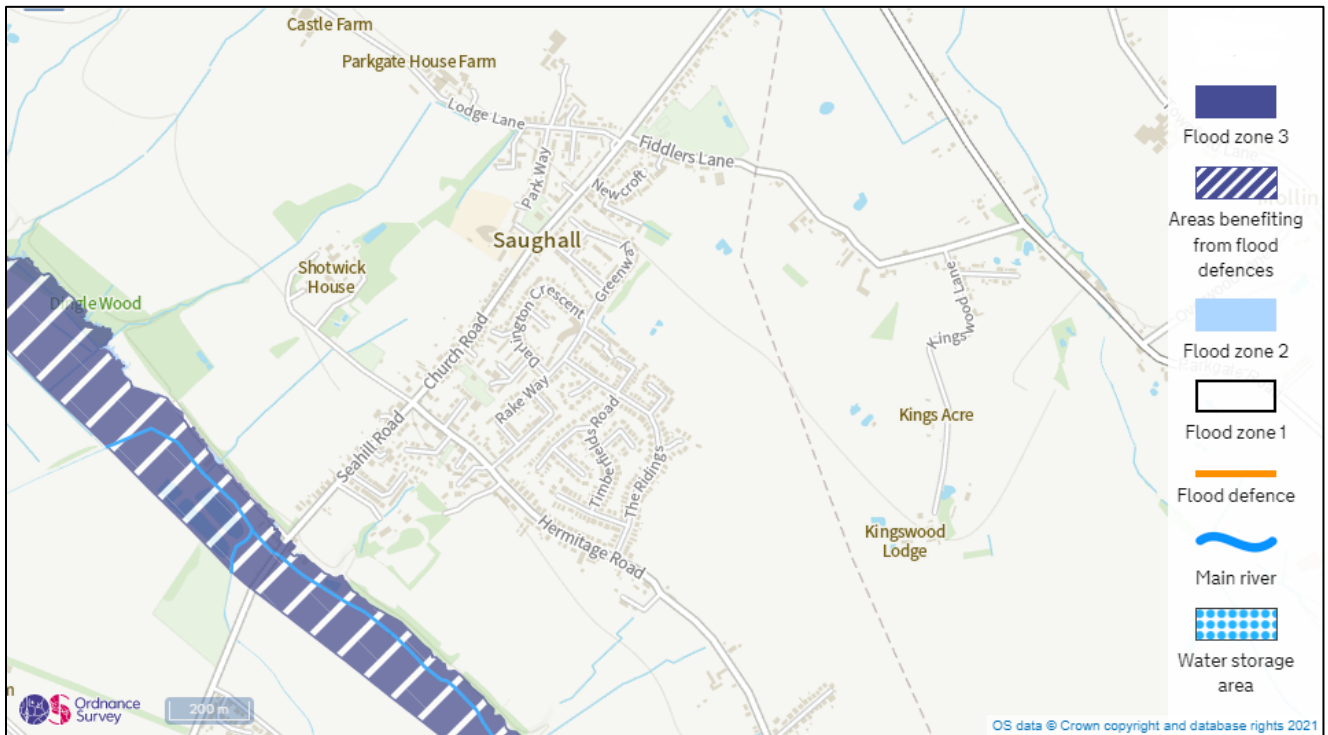
- Welsh Water will be reviewing the provision of drainage at the new Thomas Wedge Road Development as only the foul sewer should be connected to their system. Welsh Water will review the surface water drainage for the site and consider the implications on their network and the broader area.
- Welsh Water encourage residents who experience any issues with their sewage system to contact them so that they can investigate and resolve.
- The FloodHub has been promoted at several engagement events and at site visits with affected residents. A link is also included from the Flood pages of the CWaC website.

4. Recommended Actions

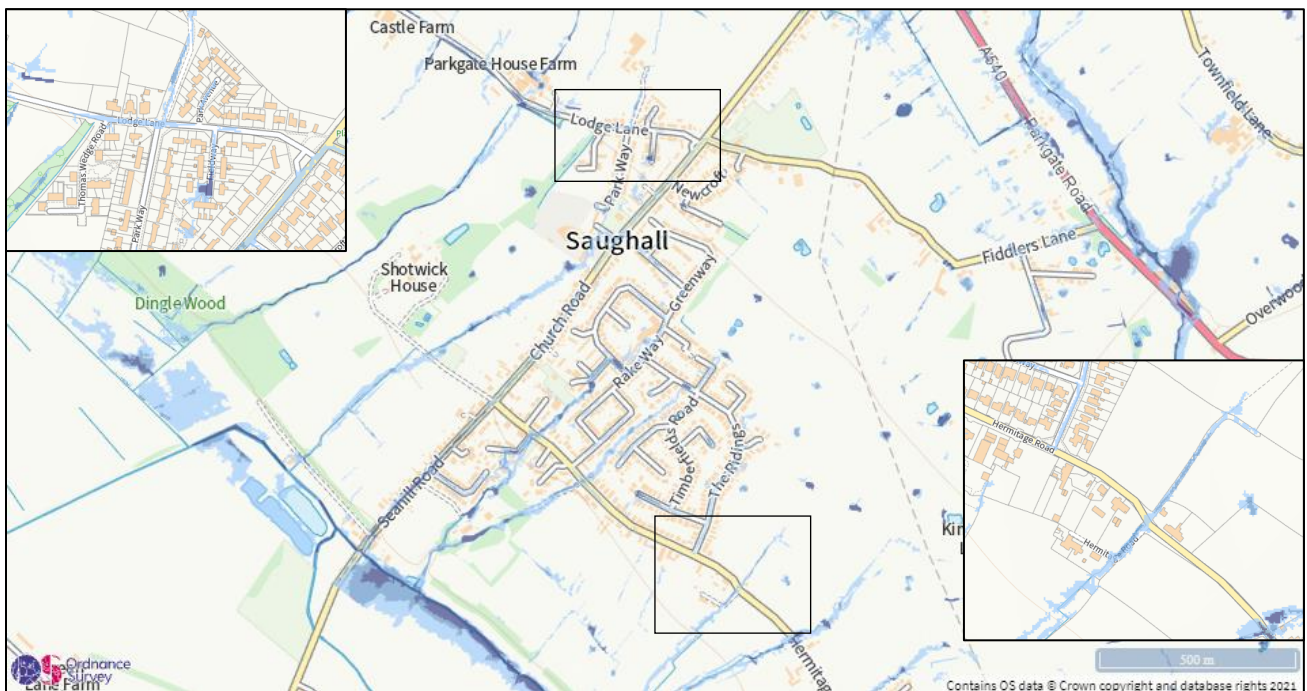
The following actions are recommended:

- LLFA to inform riparian owners of their responsibility to maintain drainage assets within their property boundary.
- Support affected residents explore property protection measures.

Appendix I - Map



Source: EA



Extent of flooding from surface water

- High
- Medium
- Low
- Very low

Source: EA

Appendix II – Timeline

Time	Lodge Lane
20 th Jan 15:00	Flood water from fields to the rear of the properties on Lodge Lane was 200mm deep gardens
20 th Jan 16:00	The Fire service pumped water out of the gardens of properties