

## Farndon Main Report Details

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

### Document history

| Revision | Purpose description      | Originated | Checked | Reviewed | Authorised | Date     |
|----------|--------------------------|------------|---------|----------|------------|----------|
| 1.0      | Draft for RMA Comment    | SF         | TS      | EJG      | EJG        | 21/06/22 |
| 2.0      | Draft for Final Approval | SF         | TS      | 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 |  |

# Farndon Main Report Details

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

## 1. Background

Farndon is a village in Cheshire on the banks of the River Dee. To the North-West of the village centre an area called Farndon Hay was also affected. Farndon Hay lies within the inside bend of a meander of the River Dee and is inclusive of Denamere Lane, also known as Townfield Lane, which is unadopted. This is the single access route to the hamlet of Farndon Hay. The River Alyn joins the Dee from the west at the northwest point of the meander.

Both the River Dee and the River Alyn are classified as main rivers. The River Alyn is in Wales and therefore is managed by Natural Resources Wales. The River Dee is in joint management with the Environment Agency (EA) and Natural Resources Wales.

Within the village, a few properties on the banks of the River Dee were affected at Farndon Bridge. In Farndon Hay, flooding occurs regularly, with all affected properties within Flood Zone 3 (Appendix I). Flood warnings for the area occur when river levels reach 8mAOD, at 8.2mAOD Townfield Lane is cut off.

## 2. Flood Review

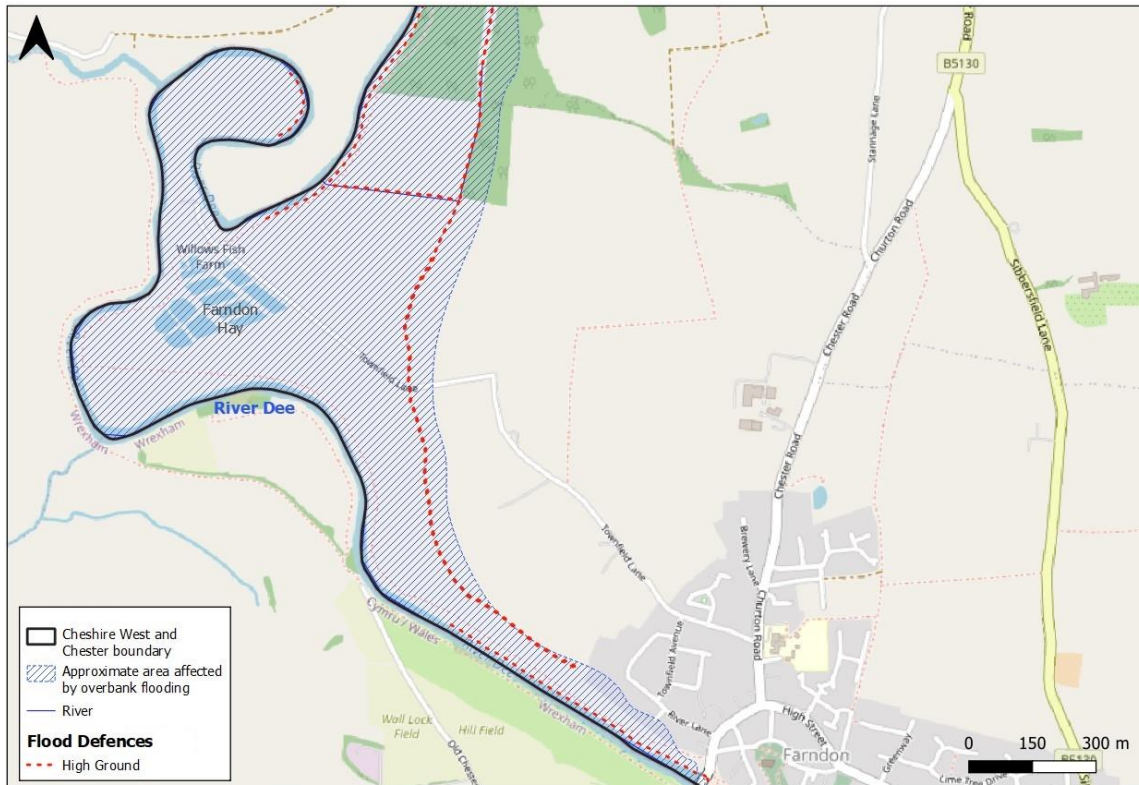
Flooding occurred at Farndon Bridge due to the River Dee overtopping. Properties on River Lane were flooded and had to be evacuated. The exact details of the flooding at Farndon Bridge are unknown.

At Farndon Hay the land inside the bend of the meander flooded, with water overtopping the banks of the River Dee. The flooding in Farndon Hay affected several properties, including a fish farm and fields containing livestock, which included horses.

No flood incidents were reported to Welsh Water during Storm Christoph.

Residents reported that:

- At the confluence of the River Dee and River Alyn water was backing up.
- The river was also affected by the tidal influence.
- The erosion of the right bank of the River Dee upstream of a property named Tipperary may contribute to out of bank flow on a more frequent basis; blocking Townfield Lane and cutting off the access route for Farndon Hay. It has been reported that during a previous flood event, an area of approximately 40m x 40m x 2m has been washed away from one of the fields along Townfield Lane (NGR SJ403552).
- Safety concerns regarding access and egress as a result of high water on Townfield Lane.
- There has been, and was, an increase in silt being flushed from surrounding agricultural fields.



**Figure 1 - Flood overview (flooding in Wales not shown)**

Figure 2 illustrates the severity of the flooding on Townfield Lane.



**Figure 2 - Townfield Lane**

Source: Resident

## 2.1. Area Summary

Key statistics of the Storm Christoph Flooding in Farndon 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                                 |
|----------------------------------|-------------------------------|---------------------------------|-------------------------------|--|--|---|
| 24                               | 0                             | 4                               | 3                             | 3                                      | 0                                      | As reported to CWaC prior to publishing |

Figure 1 shows 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 Farndon.

**Table 2 – Farndon**

| Farndon  |  |
|--|--|
| Date   | <ul style="list-style-type: none"> <li>20<sup>th</sup> January 2021</li> </ul>   |
| Affected Roads                                     | <ul style="list-style-type: none"> <li>Townfield Lane</li> </ul>   |
| Flood Alert / warning issued?                      | <ul style="list-style-type: none"> <li>English River Dee at Farndon 21/01/21 00:10 (Warning)</li> <li>English River Dee at Farndon 21/01/21 10:19 (Severe Warning)</li> </ul>  |
| Flooding Impacts and Observations                  | <ul style="list-style-type: none"> <li>Property damage</li> <li>Risk to life</li> <li>Additional stress and mental anguish on the community over such an event happening again</li> </ul>  |
| Summary of Flooding Incident Response During Event | <ul style="list-style-type: none"> <li>Property owners do what they can to shore up their properties, many having their own boats for evacuation.</li> <li>Residents decide whether to evacuate based on flood alerts, forecasts and communication with the EA via their community contact.</li> </ul> |

The following actions were undertaken prior to the interim report:

- Meeting on site with affected residents 15<sup>th</sup> July 2021 with Cheshire West and Chester Council (CWaC), as Lead Local Flood Authority (LLFA), and EA.

## 3. RMA Response

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

- Residents were evacuated from chalets during the event.
- The Environment Agency were in contact with the Farndon Community Contact throughout the event.
- The EA confirmed that the peak water level in the Dee was 9.6mAOD, this is 240mm higher than the previous record of 9.36mAOD.

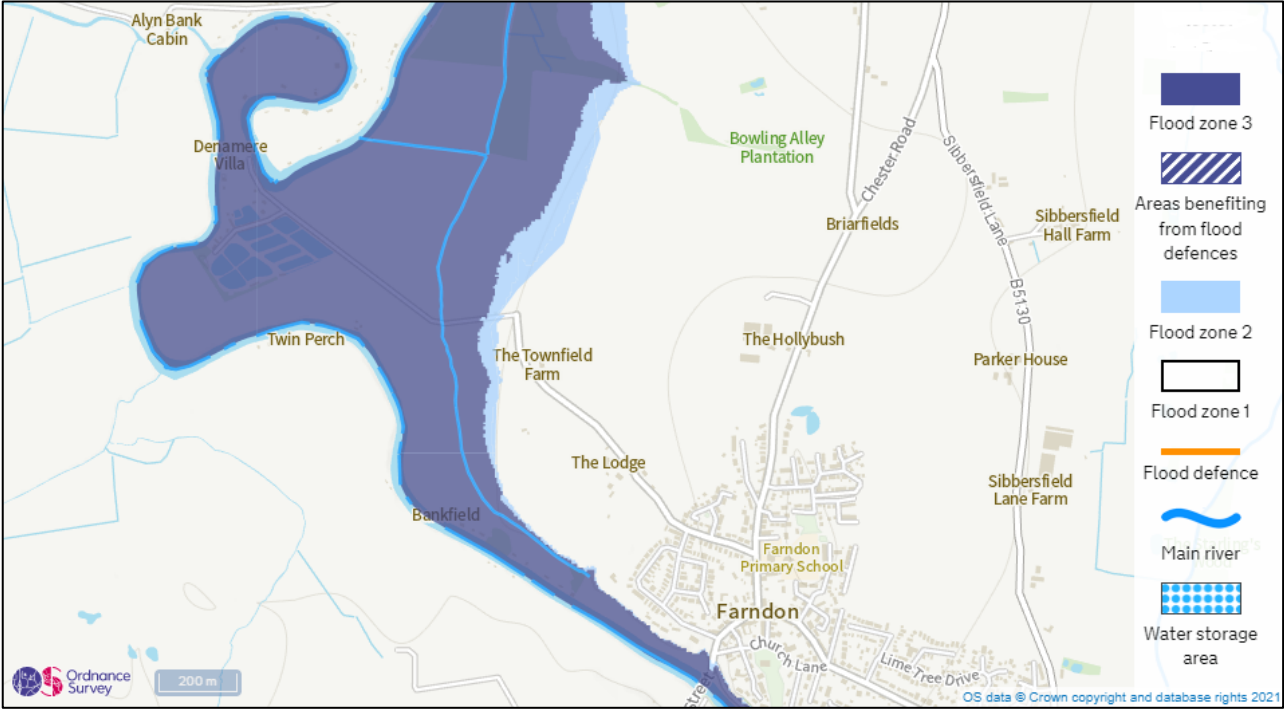
## 4. Recommendations

The following recommendations are made:

- Work with the community to (a) develop a Community Emergency Plan that considers appropriate communication channels that work for all residents, and (b) consider any potential site specific evacuation requirements.

- EA to inspect asset along the Dee (once vegetation has died back and defect can be seen) and request maintenance by landowner.
- Residents to be encouraged to sign up to the EA flood warning service.
- LLFA to promote the use of the FloodHub for information on flooding.
- 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                 | Farndon                               |
|----------------------|---------------------------------------|
| 20 <sup>th</sup> Jan | No information available at this time |