

Preliminary flood risk assessment: Calderdale Metropolitan Borough Council

This addendum by Calderdale Metropolitan Borough Council (2017) updates the council's preliminary flood risk assessment report published in 2011. Read the addendum in conjunction with the [preliminary assessment report](#).

Addendum

The preliminary flood risk assessment (PFRA) and flood risk areas (FRAs) for Calderdale Metropolitan Borough Council were reviewed during 2017, using all relevant current flood risk data and information,

Past flood risk

As a consequence of flooding experienced and subsequent S19¹ investigations carried out, current understanding of significant flood risk has improved with increased understanding of mechanisms and interaction of the different sources. Significant incidences are detailed below;

21 November 2016

On 21st November 2016 overland flow surface water flooding in several locations across the Valley, in particular Mytholmroyd and Hebden Bridge.

During November and December 2015, severe flooding was experienced at several locations throughout Calderdale.

Flooding Locations Summary:

Boxing Day 2015

Over Christmas and Boxing Day, Pennine areas had over 60mm of rain fall in 24 hours and some locations had over 100mm. Many of these locations had already seen over twice their usual amount of rainfall in December and this followed an extremely wet November. Most locations along the River Calder saw the highest ever recorded river levels.

The flooding on 26 December 2015 occurred when rivers rose rapidly because the ground was already saturated from previous heavy rain. Approximately 3,550 homes and 1,165 businesses were impacted with a building washed away in Mytholmroyd. Confirmed numbers of properties flooded are 2,135 flooded homes and 1,108 flooded businesses. In addition to this a number of substations, schools, roads and bridges were also damaged notably Elland Bridge. Unlike previous significant flood events, communities further down the valley including Sowerby Bridge, Elland and Brighouse experienced a greater degree of flooding.

12 December 2015

Surface water flooding was experienced throughout Calderdale including at Walsden, Cornholme, Todmorden, Callis, Hebden Bridge, Mytholmroyd, Sowerby Bridge, and Brighouse. In these locations, roads suffered from standing surface water and drainage systems were unable to cope. River levels on the River Calder were high but only breached the banks in Sowerby Bridge. At Hebden Bridge, Hebden Water, overtopped its banks flooding Oldgate and contributing to flooding in Market Street.

¹ An investigation into a flooding event that a lead local flood authority (LLFA) is required to carry out under Section 19 of the [Flood and Water Management Act 2010](#), and according to the LLFA's local flood risk management strategy

15 November 2015

Extensive rainfall caused road closures across Calderdale. Flooding to property was mainly confined to incidents along Hebble Brook and Ovenden Brook though some flooding was also experienced in Todmorden.

9th July 2012

On 9th July 2012 flash floods occurred in Hebden Bridge, Eastwood & Mytholmroyd. Three weather systems hit the area on the 9th July, causing torrential rain to fall on already heavily saturated ground, and resulting in major flooding incidents across the Upper Valley, with over 43mm of rainfall. This caused surface water flooding but did not result in high river levels. Again, saturated ground caused water to run off the hillsides. Nutclough dam overtopped and there was extensive flooding in Keighley Road. Rubble and silt from the hillsides blocked drains and culverts. Around 100 homes and businesses suffered, some for a second time.

22nd June 2012

On 22nd June 2012, Major flooding across the Upper Valley down to Brighouse. River Calder and River Hebble overflowed causing major damage. This flood event was the largest fluvial event on record across the Upper Calder Valley, and the third largest across the lower reaches of the River Calder. Rainfall raised river levels all along the River Calder and filled all available storage. From midday onwards, steady rainfall continued to fall. More than a month's rainfall fell in the 24 hours of the 22nd of June. The rivers rose to unprecedented levels causing the worst flooding since 2000. Over 900 properties and businesses were affected by the resulting flooding when Walsden Water, the River Calder, various tributary rivers and the Rochdale Canal burst their banks. Hebden Bridge recorded its highest ever river level (3.311 metres) and Mytholmroyd saw levels over 4.9 metres. Some properties flooded to a depth of over a metre.

As well as the flooded premises, there was structural damage to road surfaces, culverts and bridges, plus major disruption to traffic and local people, including the railway line, stranding many people in transit.

The towns and villages most affected were Walsden, Todmorden, Eastwood, Hebden Bridge (including major flooding at Callis, Woodland Villas and Charlestown), Mytholmroyd and Brearley/Luddendenfoot.

There was also flooding in other parts of the Borough, such as in Sowerby Bridge, Elland and Brighouse.

Future flood risk

No new information on potential future floods has been added to or changed current understanding of significant flood risk in the borough since publication of the original PFRA report in 2011.

Flood risk areas (FRAs)

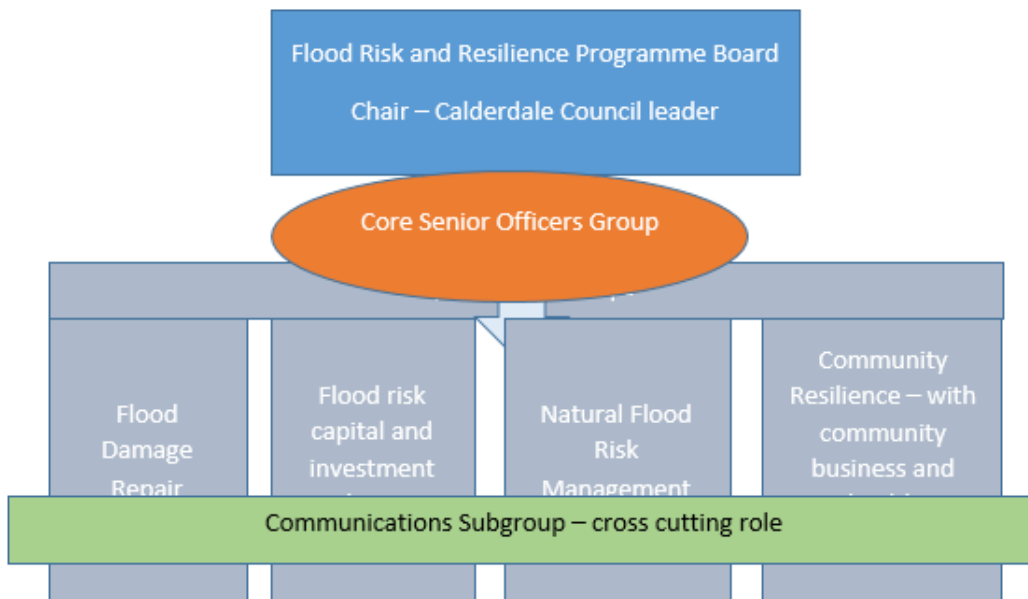
No FRAs have been identified in the Calderdale lead local flood authority (LLFA) area for the purposes of the Flood Risk Regulations (2009) second planning cycle.

Other changes

Following on from the events of Boxing Day 2015, the governance for flood risk management has altered to ensure a more partnership approach. Flood recovery and resilience is delivered in Calderdale by the Calderdale Flood Recovery and Resilience Programme, which is a programme based on working in partnership with a range of

stakeholders. The programme brings together a number of partners including the Council, the Environment Agency, Canal and River Trust, local flood groups, Yorkshire Water, Network Rail, and the voluntary sector. The aim of the partnership is to work together to substantially reduce the impact of flooding in Calderdale as well as supporting the local community to build its resilience against future flood events.

The delivery of the Programme is ensured by a Programme Board, Core Senior Officer's Group, four Operational Groups and a crosscutting Communications sub group, as shown below;



**Calderdale Metropolitan Borough Council
December 2017**