

## Flood Investigation Report

### Section 19 Flood and Water Management Act 2010

#### Flooding Event 18/19 December 2014

Sustained but variable intensity of rain had been falling in the Calder Valley for several days prior to the afternoon of 18 December 2014.

Around 16:00 on 18<sup>th</sup>, as observed river levels began to show a marked upward trend, CMBC officers were in touch with the Environment Agency to gain an opinion on what to expect in order to try to make contingency arrangements as the weekend approached.

A possible Alert was predicted for 19:00 that day with medium certainty if rain did not ease.

Additional arrangements for drainage stand-by had already been made with the Council's contractor so no further action was taken.

Also at this time minor surface water issues were beginning to be reported by customers and jobs were issued to contractors accordingly until the office closed.

At 17:50 a Flood Warning (without Alert) was issued for River Calder in the section of the valley Brearley Fields to Luddendenfoot. There are no residential properties at risk in this reach.

Other alerts and warnings were issued between 18:02 and 01:16 for various reaches of the Calder between Todmorden and Castleford. By 05:03 on 19<sup>th</sup> December all alerts and warnings were withdrawn and it appears that the river did not come out of bank anywhere in the upper Calder valley.

The following day there was customer activity regarding surface water flooding and a collation of reports by field officers in the early afternoon of 19<sup>th</sup> demonstrated that 9 domestic properties had suffered internal flooding and 6 near misses had occurred. There were many cases of highway flooding with property not at immediate risk.

The internal flooding and near misses were spread around the district being in Bradshaw, Midgley, Hebden Bridge, Colden, Ripponden, Greetland and Todmorden.

Causation of flooding was overloading of non-main river Land Drainage infrastructure, blinding of highway gullies by leaves and debris and overland flow from fields.

Internally flooded properties were :-

1 Melbourne Road Walsden – already unoccupied as a result of 2013 event – failure of temporary culvert by-pass

Greenways, Scarbottom Lane Greetland – blocked/overloaded land drainage

4 & 5 Lower Smithy Colden – overloaded land drain/run-off from fields

32 Royd Lane Ripponden – run-off from fields

Staups Cottage Staups Lane Todmorden – overloaded land drainage

21 & 21A Bradshaw Lane Halifax – run-off from fields

Flat 1 Oats Royd Mill Dean House Lane Luddenden – cause not established as yet

Near misses were:-

10 Kershaw Road Walsden – failure of temporary culvert by-pass

284 Burnley Road Todmorden – undetermined source

16 & 30 Calderside Oakville Road Hebden Bridge – water off fields

25 Lane Ends Midgley – overloaded highway drainage

19 High Lees Road, Mixenden – blocked road gully

Officers have planned mitigation or investigation measures for all cases as resources permit except Kershaw Road where the cause is known to be an extant long term issue which remains unresolved.