



Winter 2015-16 floods among worst in 100 years

A new scientific review of the winter floods of 2015-16 confirms that the event was one of the most extreme and severe hydrological events in a century.

The study, carried out by scientists from NERC's Centre for Ecology & Hydrology (CEH) in collaboration with the British Hydrological Society recognises that the winter 2015/2016 episode ranks alongside the floods of 1947 as one of the two largest flood events of the last 100 years at least.

The appraisal brings together both river flow and meteorological data in an analysis of the events that led to extensive river flooding in northern England, Scotland, Northern Ireland and parts of Wales over a three-month period.

Storm Desmond alone caused an estimated insurance bill of more than £1.3b when it struck on the 5th and 6th December last year and 16,000 properties in England were flooded in three months.

Cumbrian resident Dr Ed Henderson, a co-author of the review from the British Hydrological Society,

The review highlights:

- December 2015 was the wettest and, on average, the warmest on record in the UK, in records going back to 1910.
- The highest ever recorded rainfall in the UK was measured when 341.4 mm of rain fell at Honister Pass in the Lake District in the 24 hours leading up to 6pm on 5 December 2015.
- Record peak flows occurred at the rivers Eden, Tyne and Lune in England of around 1,700 cubic metres per second.

said: "The effects of the floods are personal. Thousands of Cumbrians, like people in other flood-affected parts of the country, have seen their lives upturned. Many have experienced life-changing financial losses and incredible stress. Speaking with flood victims, the words that come out are despair, fear and anxiety – fear of flooding again and the anxiety of an approaching winter. Floods don't just take your home, the place where you should feel safe, they often take your future as well."

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Lead author Terry Marsh, from CEH, said: "At a national scale the winter floods of 2015/16 were the most extreme on record. The November to January period was the wettest three-month sequence in the UK rainfall series – which begins in 1910. The associated flooding was both extensive and repetitive, and total river outflows from Great Britain following the passage of Storm Desmond in December exceeded the previous maximum by a substantial margin."

Dr Nick Reynard, the CEH lead for natural hazards research, said: "Our new review clearly outlines the events of the last winter as one of the most severe episodes of flooding to hit the UK in the last 100 years. Communities across the country were devastated. In response we are working hard with central government to improve flood estimation, and examine how potential mitigation measures, such as natural flood management, can help us reduce the impact of flooding in future."

Download the full report *The Winter Floods of 2015-16 in the UK* at www.ceh.ac.uk

Read Economic and Social Research Council funded research on flood recovery bit.ly/ESRCpreparingforfloods