

Beales Corner / Wribbenhall, Bewdley, Worcs

Temporary flood barriers trial

In spring 2003, the Environment Agency were allocated funding from the Department for Environment, Food and Rural Affairs (Defra) to purchase plant and equipment that would facilitate the trials of temporary flood defences. Several types of temporary flood defence barriers were purchased and joint action plans were established with local authorities and other professional partners such as Severn Trent Water.

Three locations along the River Severn were initially identified as suitable for the trials including Beales corner in Bewdley.

However, following the floods of 2007, Sir Michael Pitt carried out a review and recommended that there should be a national policy on the use of temporary flood defences. This policy states that we will consider providing temporary flood defences as a short-term measure against flooding from main rivers where:

- the location for their use and the time available to deploy them in normal conditions are suitable;
- there is support from the local authority, partner organisations and the community;
- they are economically viable;
- they are not used as a long term alternative to permanent schemes.



To comply with the new national policy, all the temporary flood defence trial sites along the River Severn are being reviewed.

In September 2014 we completed our review of the use of temporary flood defence barriers for Beales Corner/Wribbenhall. It focused on a technical assessment, economic viability, effectiveness and risks associated with the temporary barriers over a 100 year period. Our findings show the preferred long term solution to flood risk management for the community in this location, giving consideration to the best use of public money.

Flooding in Bewdley

Bewdley is frequently impacted by fluvial flooding with major events occurring in 1947, 1965, 1998, 2000, 2002, 2004, 2008 and most recently this year. The highest flood level was recorded in 1947 as 5.82m at the Bewdley gauge which can be seen in the [rivers and sea level section of our website here](#). Flooding to property can occur directly and indirectly from the River Severn. Indirect flooding can occur due to rising groundwater with cellars filling with water, and from surface water and sewers when the rise in river level means the sewers cannot discharge to the River Severn.

High river levels also lead to the flooding of Kidderminster Road, being the main through road, and Stourport Road at Beales Corner. These roads become impassable and cut off one side of the river from the other.

In the seven year trial period since 2007, the barriers have been deployed ten times due to potential flooding. The barriers protected property on three of those occasions.

The water levels witnessed during February 2014 were the highest levels seen in Bewdley since the start of the temporary barriers trial. In light of this and to ensure all the latest information was considered as part of the review a thorough examination of the recent performance of the temporary barriers was undertaken.

Future flood risk management

We would like to acknowledge our thanks to the local people who have been involved in the trial, and for those who have provided feedback into the technical review through the community survey.

The review has assessed the performance and costs of the temporary barriers. Future flood risk management options have been considered on technical, environmental and economic grounds. As we invest taxpayers' money on flood risk management we are required to ensure that the economic benefits of any option outweighs the costs.

The temporary flood defence barriers provide low level and limited flood protection to 19 properties. In a larger flood event, water will exceed barriers and flood properties at this location. Additional risks identified with the use of temporary barriers in this location are failure to deploy the barriers in time, operational failure, barrier sliding and seepage.

The assessment has shown that providing property level protection (PLP) is the only technical, environmental and publicly-funded viable option.

Following the review, evidence and assessment of the risks and options, we are minded to take PLP forward as the long term solution for flood risk management in this location. PLP is able to provide a higher standard of protection to a greater number of properties, approximately 30.

What happens next?

Sept 2014 - March 2015	Obtain details of local interest in PLP and complete applications.
March 2015 - Sept 2015	Professional surveys to assess individual property requirements for those applicants.
Sept 2015 to Sept 2016	PLP measures undertaken in accordance with surveys.
31 March 2017	Professional surveyor's sign off for PLP and provisional date for the end of the Environment Agency temporary barriers trial.

Community engagement in 2014

- In April 2014 we wrote to local residents, councillors and the local MP advising of the revised timescales to take into consideration the flooding in February 2014.
- In September 2014 we will meet with the local MP, councillors and council officers on site to discuss the review and preferred option.
- In September 2014 we will meet with the National Flood Forum, the local flood group and Town Council representatives to discuss the review and preferred option.
- In September 2014 we will write to residents, councillors and the local MP advising them that the review is completed and will be available on our website. We will also provide details of our public drop in sessions.
- On 1 and 14 October we will hold public drop in sessions in Bewdley town centre and Wribbenhall. These sessions will provide the opportunity for face to face contact with local residents to discuss PLP and any queries they may have, including future timescales.

Contact details

If you have any questions with regard these details please come along to one of our drop in sessions or contact Dan Wilkinson, Flood Risk Management Officer on 01562 534177 or via dan.wilkinson@environment-agency.gov.uk