

Preliminary flood risk assessment: Reading Borough Council

This addendum by Reading 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 Reading Borough Council were reviewed during 2017, using all relevant current flood risk data and information.

Following this review, there is no change to the assessment of local flood risk for the Reading Borough Council area.

Past flood risk

The risk to Reading Borough therefore remains consistent with that reported in 2011.

Future flood risk

Additional surface water modelling has been completed by the Environment Agency, in the form of their 'updated Flood Map for Surface Water' (uFMfSW), released in 2013. This was their third iteration of a national scale surface water modelling exercise, following the 'Areas Susceptible to Surface Water Flooding Maps' released in 2008, and the 'Flood Map for Surface Water' (FMfSW) released in 2010.

The 2013 uFMfSW mapping provides an indication of areas potentially at risk of surface water flooding during the 1 in 30 year, 1 in 100 year, and 1 in 1000 year surface water flood events. This differs to the FMfSW, which provided an indication of areas at risk during 1 in 30 year and 1 in 200 year surface water flood events.

The uFMfSW mapping indicates larger areas are impacted by the 1 in 30 year surface water flood event than in FMfSW mapping. The updated approach therefore indicates a greater proportion of Reading Borough is at risk of surface water flooding for this lower order event.

The uFMfSW included modelling for the 1 in 1000 year surface water flood event. This was not modelled within the original FMfSW, and therefore extents are not available for comparison. The uFMfSW provides additional information with regards to the areas potentially at risk due to surface water flooding in extreme rainfall events.

Fluvial modelling remains consistent with that provided in 2011, and therefore the risk to the Borough due to fluvial sources remains consistent with that reported in 2011.

The latest Environment Agency climate change guidance was released February 2016. The guidance requires consideration of a range of climate change allowances to be completed, dependent on location. Reading Borough lies within the Thames River Basin District, and therefore the 25%, 35% and 70% climate change allowances should be considered for a development with a 100 year lifetime.

The fluvial models have been updated to provide flood levels and extents for these climate change flood events, updating the information available with regards to future risk flood from fluvial sources. The larger allowances used provide larger modelled flood extents than previously modelled for climate change flood events, therefore indicating that a larger area is at risk from this source of flooding in the future.

Flood risk areas (FRAs)

The following FRAs have been identified for the purposes of the Flood Risk Regulations (2009) 2nd planning cycle:

- Reading Borough

Background to identification of the FRA:

The two methods used to determine indicative Flood Risk Areas (FRAs), cluster method and communities at risk method, have identified different areas of Reading Borough as FRAs. Where this is the case, Environment Agency guidance advises that the indicative FRA should be taken to be the total extent of the two areas combined. The majority of the Borough is therefore identified as an indicative FRA, with the exception of the area surrounding M4 Junction 11, and land north of the Madejski Stadium.

To provide a conservative approach to assessment of the FRA, it is considered appropriate to include the entire Borough within the boundary of the FRA. The extent of the indicative FRA is therefore proposed to be marginally amended.

Other changes

N/A

**Reading Borough Council
December 2017**