

TECHNICAL NOTE

2018s0290 - Bath and
North East Somerset
Strategic Flood Risk
Assessment

29th May 2018

Bath and North East
Somerset Climate
Change Sensitivity
Buffering

Appendix A shows the topographic sensitivity of Flood Zone 2 as a result of climate change. Where no flood zones exist 25m has been buffered either side of the watercourse centreline.

To define the topographic climate sensitivity, Flood Zone 2 was buffered by 10m. Where Flood Zone 2 and 3 are identifiably different, the height difference between Flood Zone 2 and 3 has been calculated and added to Flood Zone 2.

The map shows the merged output.

This map provides indicative information on areas which may be sensitive to increases in fluvial flood risk as a result of climate change, based on their location in the vicinity of watercourses and floodplains and on local topography. This map is for planning only and should not be used for other purposes. It is important to note that the mapping process for these areas is based on spatial buffers only and the maps therefore do not reflect areas which will definitely be at increased risk in future. Instead, this mapping should be used to identify areas where evidence will need to be provided in a planning application showing the anticipated effect of climate change on fluvial flood risk to the site. In some cases, it is anticipated that the evidence will show no significant increase in risk to a site. The type of evidence required is detailed in Section 4 of the Level 1 SFRA report. Information on how the “climate change sensitivity buffer” was derived is also included in Section 4.

The “climate change sensitivity buffer” shown has been derived based on the existing flood zones and on watercourse centrelines. Where no flood zones exist, the buffer has been defined as the furthest upstream Flood Zone 2 width. Where this was not possible (no local flood zones) a horizontal buffer of 25m has been added to either side of the watercourse centreline.

In areas where existing flood zone mapping is available, the buffer is based on “topographic sensitivity” and derived by comparing the existing flood zone extents and LIDAR. Where Flood Zone 2 and 3 are identifiably different in extent, the height difference between Flood Zone 2 and 3 has been estimated from LIDAR. This difference has then been added on to the existing estimated Flood Zone 2 level for each area and the buffer delineated to include areas below the estimated level. 10m has been added horizontally to Flood Zone 2, so that the buffer extent is a minimum of 10m from the existing Flood Zone 2.