

25 August 2010

Location: Bleadon

Watercourse(s): River Axe and Lox Yeo

District: North Somerset Council

Flood Zones Changed: 1 in 100 year Fluvial floodplain (Flood Zone 3)

North Somerset Council SFRA (Level1) current fluvial outlines on the River Axe and Lox Yeo.

What has changed: The EA's Flood Map in Bleadon is based upon the National Generalised Modelling method, which is commonly referred as JFLOW. The EA flood map in this area was updated in January 2009 but it would appear this change has not morphed over to the Councils Level1 SFRA yet.

Currently NSC Level1 SFRA flood maps show the old EA's fluvial 1in100 year flood outline as PPS25's 3b (Figure 1). As a result of our 2009 update our fluvial outline has been reduced significantly on the River Axe on Bleadon Levels and along the Lox Yeo at Loxton. The new flood extent is now a thin strip along the River Axe to Bleadon village then a slightly narrower floodplain along the Lox Yeo leading to Loxton. Please see Figures 2 and 3 showing the new fluvial outlines.

Please be aware that the tidal floodplain remains the same through this area and now becomes the dominant risk on Bleadon level.

Reason for change:

The previous Flood Map was considered to be overestimating flood risk quite significantly and not thought to be realistic. This update has effected the entire Brue and Axe catchment but this is the only area within North Somerset Council boundary.

The new outlines are based on JFLOW, as were the old ones, however the main changes were to use new roughness values to characterise the floodplain and the channel in the hydraulic model. The flow nodes in the model were also modified so that the model was more stable.

Planning Issues:

It is important that North Somerset Council and the EA are using the same flood plains when validating/reviewing planning applications in this area.

We would advise that North Somerset Council incorporate the EA's new outlines within their SFRA and continue to categorise the fluvial 1in 100 year extent as a 3b area in accordance with PPS25.

North Somerset Council should already have this information in a GIS format as it was provided as part of the annual flood map update.

Contact for further information:

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SFRA/Flood Map Update

Current NSC Level1 SFRA fluvial flood map at Bleadon and Loxton.

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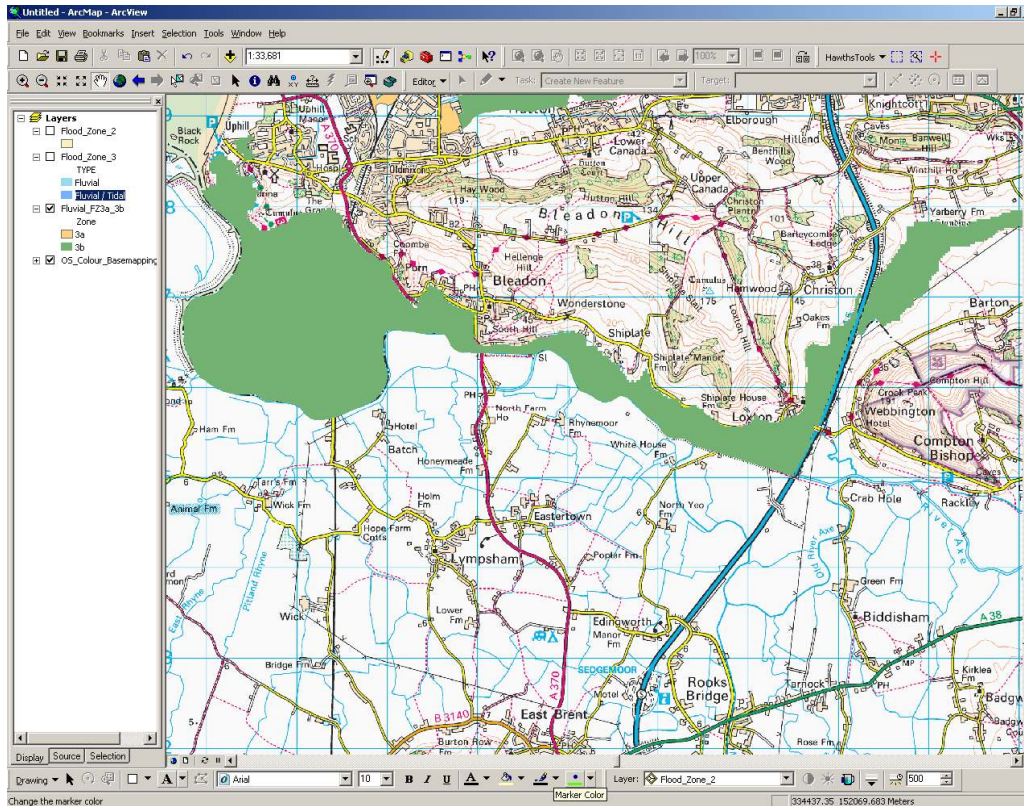


Figure 1

SFRA/Flood Map Update

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New EA fluvial flood map at Bleadon and Loxton.

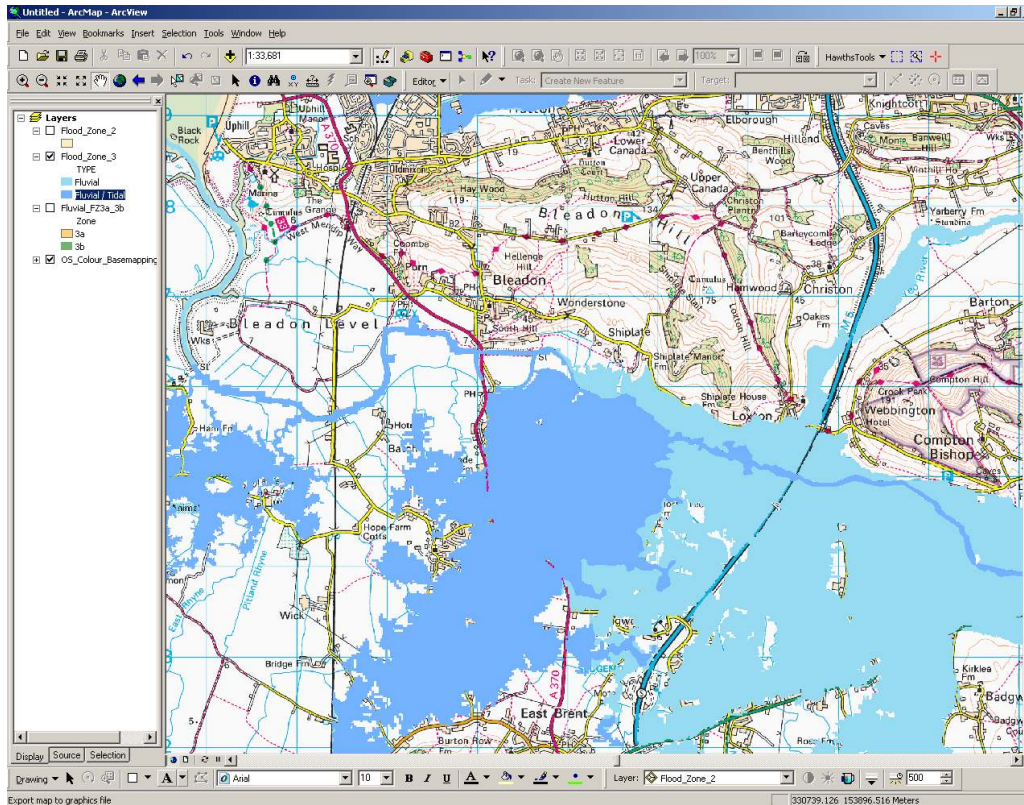


Figure 2

SFRA/Flood Map Update

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Old and new floodplains overlaid together.

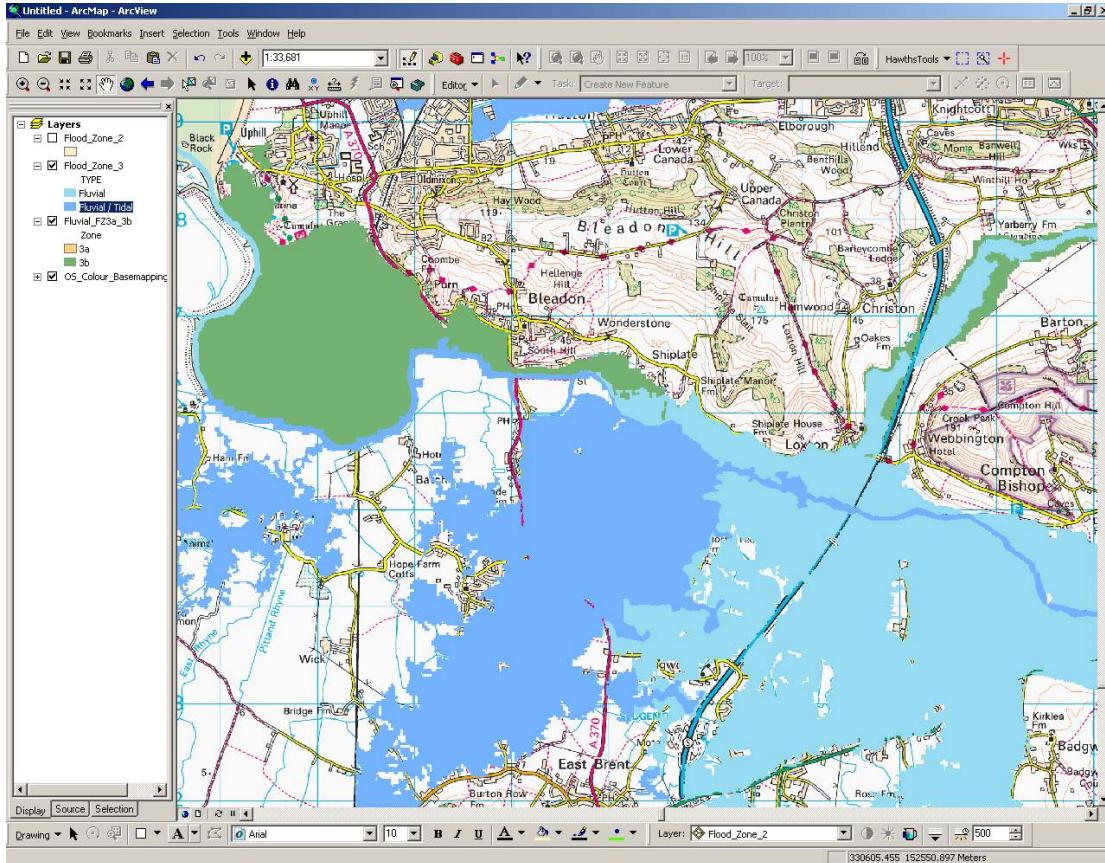


Figure 3