

3. How does the Q100 plus 95% blockage scenario used in the SFCA compare with the recommended Q100+CC plus 50% blockage scenario at the development site? Currently the Q100 plus 95% blockage event shows the development site to experience significant flooding. Whilst this high blockage scenario is precautionary, is this a reasonable estimate considering that there is a bridge structure immediately upstream that potentially would filter the majority of flood debris? The SFCA will need to substantiate which scenario will ultimately be used for this development site.
4. The URS model is based on the EA's Abertillery to Six Bells model developed by Halcrow in 2006 and the Tredegar to Aberbeeg developed by JBA in 2009. Changes have been made to some of the survey, where URS have undertaken a survey of the wall on the right bank of the Ebbw. Does this mean the JBA survey is incorrect in this area? Has a different control point been used compared with the JBA survey, therefore all the differences between the two surveys are relative?
5. Any changes between the EA model and URS model should be recorded and justified. E.g at culvert inlet AB28IN, why has the inlet control data been changed compared with the JBA model?
6. A minimum flow of 10m³/s has been used in the ISIS model, to help stabilise the model. How does this flow affect the flood risk at the site, is there over estimation of risk? Has there been any other features in the model added to help stabilise it?
7. At section AB27U, the building on the left bank has been included in the model in the URS model. Also a building has been included in the 2D domain on the left bank next to the six bells culvert. If these buildings are offering a significant protection to the proposed development, is there going to be a management plan put in place to make sure they are not removed in the future or, if they are, will there be a replacement wall or similar structure? If you are looking to submit a Flood Map challenge as part of the FCA, a simulation run excluding the building will need to be undertaken, i.e. undefended scenario.
8. Section 3.2.3 (topography) states that LiDAR that was captured in 2000 was used in the model. Geomatics Group has LiDAR data available from 2005. Are there any differences between the datasets and if so, why hasn't this been used?
9. Global roughness set to 0.055 in 2D domain. Why haven't improvements been undertaken to improve roughness on a local scale in the model?
10. The HX Additional FLC command has been used and set to a value of 0.3 in the .tcf and noted in Table 4. Why has this command and value been used?

11. We require confirmation that URS have a valid licence from us to use this model data? If the license has expired, please contact external relations for a new one.

Conclusion

URS need to undertake further work before this model can be accepted by the Environment Agency. Each of the comments above will need to be addressed in turn.

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