

Local Flood Studies

Hydro-GIS undertake a range of hydrological work on the local scale. These include:

- Flood risk assessment for developments deemed to be at risk of flooding;
- Flood risk assessments for developments which could pose an increased risk of flooding for neighbouring properties;
- Hydrological aspects of SuDS design;
- Hydrological reports for the design of Sustainable Homes
- Flood risk reports to assist with buying, selling, or insuring of property
- Local flooding problems



Hydro-GIS staff are highly experienced in the standard methodology often required for these projects such as the Flood Estimation Handbook, and also have experience in the application of other methods and models for predicting surface runoff, percolation to ground water, evaporation, soil erosion, leaching of fertilisers and pesticides, and sediment delivery. The application of GIS provides further valuable input for these studies such as the generation of digital terrain models to accurately define ground levels and flood storage compensation volumes, the calculation slope angles, river channel cross sections and areas of particular land use.

In addition to the hydrological and GIS expertise used for these studies we have a detailed understanding of the Environment Agency flood risk maps, having previously generated a number of such maps on behalf of the Environment Agency in Southern and Thames Regions. It is often the case that the Environment Agency maps as shown on the internet do not provide an entirely accurate indication of flood risk because they were generated using a very general approach. More detailed studies undertaken for a specific site can give a much better assessment of the risk and show for example that a site deemed to be at high risk of flooding by the Environment Agency maps in reality has a much lower risk.

