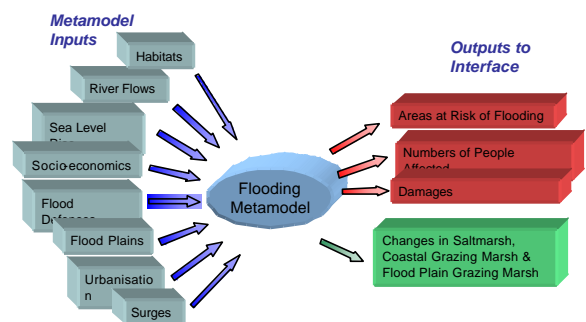
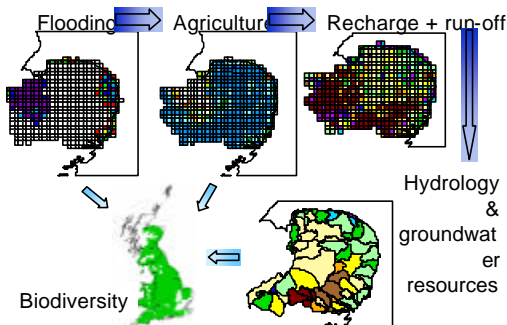


# School of Civil Engineering and the Environment

## RegIS2: Integrated Metamodel Tool for Regional Climate Change Assessment

RegIS2 enables stakeholders to assess the impacts of future climate change on fluvial and coastal flooding, hydrology, biodiversity and agriculture in East Anglia and the North West. Metamodels, accessed via a GIS interface, produce coupled simulations of possible impacts under different climate scenarios for the 2020s and 2050s. The interface also allows users to analyse a range of possible adaptive responses and the influence of future policy and socio-economic scenarios upon this response.

Although climate change is a global issue, there is an appreciation of the sensitivity of the coastal zone, biodiversity, agriculture and hydrology at the local to regional scale. As well as impacts on individual sectors, there is a need to consider interactions between sectors. Within the interface, interactions between systems are explored by linking the metamodels to one another, using the data from one model to drive the others.



One of the main components of the integrated tool is the flooding metamodel. Specific outputs of this metamodel include the changes in areas of saltmarsh and both coastal and fluvial floodplain grazing marsh, as well as areas at risk of flooding, numbers of people affected by flooding and damages caused by flooding. All results can be viewed and explored within the RegIS2 interface.

