



Exchanging environmental information and decision making: developing the local Pilot Environmental Virtual Observatory with stakeholder communities

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Public participation in the development of flood risk management and river basin management plans are explicit components of both the Water Framework and Floods Directives. At the local level, involving communities in land and water management has been found to (i) aid better environmental decision making, (ii) enhance social, economic and environmental benefits, and (iii) increase a sense of ownership. Facilitating the access and exchange of information on the local environment is an important part of this new approach to the land and water management process, which also includes local community stakeholders in decisions about the design and content of the information provided. As part of the Natural Environment Research Council's pilot Environment Virtual Observatory (EVO), the Local Level group are engaging with local community stakeholders in three different catchments in the UK (the rivers Eden, Tarland and Dyfi) to start the process of developing prototype visualisation tools to address the specific land and water management issues identified in each area. Through this local collaboration, we will provide novel visualisation tools through which to communicate complex catchment science outcomes and bring together different sources of environmental data in ways that better meet end-user needs as well as facilitate a far broader participatory approach in environmental decision making. The Local Landscape Visualisation Tools are being evolved iteratively during the project to reflect the needs, interests and capabilities of a wide range of stakeholders. The tools will use the latest concepts and technologies to communicate with and provide opportunities for the provision and exchange of information between the public, government agencies and scientists. This local toolkit will reside within a wider EVO platform that will include national datasets, models and state of the art cloud computer systems. As such, local stakeholder groups are assisting the EVO's development and participating in local decision making alongside policy makers, government agencies and scientists.