

## Water Framework Directive Workshop

**Chair:** Dr Dave Chadwick (IGER)  
**Presenters:** Daniel Instone – Defra  
Dr Jonathan Fisher – Environment Agency  
Jacob Tompkins – Water UK

The three presenters spent 20 minutes each providing a perspective from their institutions, after which there was a general question and answer session. A brief summary of each of these presentations follows. Further detail of Daniel Instone's and Jonathan Fisher's presentations can be seen in their handouts (see below). Jacob Tompkins presented without any visual aids. After the summaries, I have outlined the discussions that followed.

Daniel Instone provided a summary of the Water Framework Directive (WFD) from a Defra perspective, covering general aspects of the WFD and its key links with agriculture. He introduced the background to the WFD, its timetabling, current activities and implications for agriculture. Stakeholder engagement is seen as key to its success and Defra are engaging with relevant parties in priority catchments. Defra see the potential use of Catchment Officers to engage with land managers and owners. Defra have consulted on approaches for the package of measures in relation to catchment sensitive farming in the summer of 2004 but will consult further. There is strong support for further actions, particularly in geographical targeting. There was mention of potential economic instruments, regulation, awareness-raising and supportive action to aid participation and meeting of WFD targets. Early action may be needed to implement measures to provide sufficient lead in time to meet WFD deadlines. River basin management plans will be cyclical, every 6 years after 2009.

Jonathan Fisher provided an overview of the economics for the WFD and supplied appropriate websites and reports for further detail (see handout). Article 4 of the WFD requires EU member states to a) assess cost effectiveness of measures and b) aid determination of whether they are disproportionately expensive. Article 9 of the WFD requires an assessment of the environment, resource and financial costs of water sources. Jonathan highlighted the economic implications of the WFD and research issues. These include: analysis of decision making, context for plans and processes; how to assess (even handedly) costs and economic impacts and effectiveness across different sectors; and how to specify fully but without double counting the environmental benefits of options and to do this clearly and fully without double counting. He outlined the collaborative research programme that various collaborators (led by Defra) are carrying out to address these research issues (see hand out). Jonathan outlined links to RELU, details of which can be seen in his handout and is keen to be approached by current and future RELU grant holders.

Jacob Tompkins gave a brief introduction to what Water UK is and how it operates. He also discussed how the Water Companies are involved with the WFD. Water Companies are both privately and public owned and are regulated by several authorities; 'Ofwat', the Environment Agency, the Drinking Water Inspectorate and English Nature. He spoke about potential concerns re: how the WFD was being introduced to the public and land users and how it will be implemented. Scaling issues were also highlighted and how one could expect to extrapolate successful measures in

one catchment directly to another catchment. He also highlighted that it is important to consider mitigation measures that operate earlier in the chain that results in delivery of diffuse pollution to watercourses as well as 'end of pipe' solutions, e.g. modification of animal diets and reducing N and P inputs in fertilisers.

The questions and answer session then developed discussions in the following areas.

Scale of implementation/assessment: The question arose about whether the current river basin districts were deemed to coarse a scale from which to implement appropriate measures for meeting the WFD targets. Although this scale appears coarse, it is based on different hydrological areas and maps conveniently onto current water company areas. Different measures / solutions may be required in different districts. It was recognised that there will be a need to operate mitigation measures at a number of scales at the same time, e.g. by sector (dairy, pigs) within a district. The Mersey Basin was cited as a good example

Economic Instruments: What economic instruments were likely to be used and how could they be implemented in a spatial context? Fertiliser taxation was discussed but it was thought that although it would be considered as a potential measure, other options should be explored first. For example, there could be quotas on production in some catchments or nutrient trading between land owners in a given catchment. The basic premise was that land use options should be matched to vulnerability. Spatial planning may be required.

Stakeholder Engagement: Catchment officers would be facilitators and advocates for river basins, aiding communication between land users and the EA.

Time scales for research: Bob Harris suggested that there were two distinct time-scales for researchers using the WFD as a reference: a) short-term (next 2 years) and nationally oriented (broad scale) – the development of generic integrated approaches for the implementation of the Directive (suggesting and providing evidence, where possible, for the package of measures but utilising existing data and knowledge), and b) longer-term (remembering that the review of meeting targets is cyclical) – developing the management of river basins in a truly integrated way (social and physical researchers) to offer innovative solutions to managing problems which will need to be implemented at the local level.