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Building Networks: Exploiting Options for the Eastern US and Nearby European Continent

The objectives of the project were to build capacity for evaluation and importation to the UK of transferable water management measures as deployed in the eastern seaboard of the USA and the nearby European continent. These include catchment or watershed agricultural programmes for water quality protection and sustainable abstraction. The work completed has:

- developed a sustainable 'network' of appropriate water professionals and stakeholders;
- promoted international and intra-national communication and events between catchment interest groups and management agencies;
- achieved integrated and interdisciplinary assessment of the natural environmental and socio-economic aspects of catchment management for water quality protection;
- identified candidate approaches and measures, setting an agenda for further evaluation.

Farming is the main source of diffuse water pollution but also produces goods, livelihoods and landscape attributes that sustain rural communities. These are generally desired by society, raising the question of how the costs of water resource protection should be distributed. Diffuse pollution of water cannot easily be controlled as the sources are numerous and dispersed, and pathways into the environment are diverse and difficult to trace. Thus the monitoring and enforcement costs of regulation are potentially high. The knowledge base from a natural science perspective is strong, particularly in the USA, but gaps remain and micro-level investigation can be needed to account for local conditions. The central challenge is how to determine and implement the best combination of measures for a specific catchment, given local conditions and wider policy constraints.

This capacity building project identified lessons from surface and ground water protection initiatives in the USA and nearby European continent. Common features of success are land management changes achieved through voluntary agreements supported by appropriate regulation, financial incentives and public awareness creation. A range of technologies exist in the form of 'whole farm planning', farm best management practices and stream corridor barriers. Partnerships between all agencies and stakeholder groups and an adaptive approach to problem diagnosis and implementation are important. Land management and diffuse sources of pollution have a local basis and it is important to foster local instruments and participation of stakeholders supported by sound scientific understanding and an enabling policy and regulatory environment. A catchment management template is needed that compiles and integrates scientific understanding and governance procedures that have been tested in leading improved catchments.

The project's activities have contributed a genuinely holistic and interdisciplinary perspective on land and water management. It has also effectively drawn on international expertise and experience in catchment management, and has usefully highlighted legislation and governance as key areas. An international network has been created which will continue to operate productively in the future.