



Joint use of modelling and monitoring for implementing the Water Framework Directive

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The EU Water Framework Directive (WFD) imposes all European regions to deal with the water in a holistic way (in terms of water functions, disciplines, space,...) in order to reach a good status for all water bodies by 2015. Such a holistic approach creates new challenges on monitoring and modelling, but it also promotes the interaction between these two. The water bodies are highly complex systems as they hold many unknowns and uncertainties due to the incomplete understanding of the processes, to scaling aspects and to the high variability of the variables in time and space. Consequently, it is not possible to develop one perfect model or to design an optimal monitoring network with the present information and knowledge. An adaptive approach is therefore needed: An adaptive approach is therefore needed: besides from linking available data and thereby improving the conceptual understanding of the water system, models may indicate errors and inadequacies in the monitoring network. Conversely, the model is revised and updated as new data become available. As part of the activities of the EU project “Harmoni-CA” a series of workshops were organised for monitoring and/or modelling experts, water managers and scientist in the EU. In break-out groups, the need, the methodologies, technologies and the obstacles for supporting the joint use of modelling and monitoring were discussed.