

The Challenge

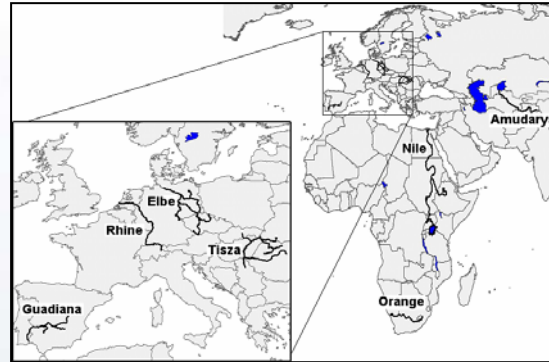
The central issue of the NeWater project was the requirement for a transition from currently prevailing regimes of river basin water management to more adaptive regimes in the future. This transition calls for a highly integrated water resources management concept. NeWater identified the following key elements of the water management system: governance, sectoral integration, scales of analysis, information management, infrastructure, finance, and risk mitigation. Research focused on processes of transition of these elements to more adaptive processes of Integrated Water Resources Management (IWRM). The development of concepts and tools that guide an integrated analysis and support a stepwise process of change in water management was the cornerstone of research activities in the NeWater project.

The Project Objectives

The core aim of NeWater was to understand and facilitate change to adaptive strategies for integrated water resources management. These strategies were tailored to the institutional, cultural, environmental, and technological settings of river basins. They took into account the socio-ecological vulnerability and the adaptive capacity of the individual basins. One objective of NeWater was thus the development of the integrated Management and Transition Frame-

work (MTF) in order to support analysis of the role of key elements in the transition process. A guiding principle was the co-development and co-application of knowledge and tools supporting adaptive water management in seven case study basins.

NeWater Case Study Basins:



NeWater also shared experience and innovations through dialogues and publications to advance European research in water management and to support the implementation of the Water Framework Directive and EU Water Initiative.

The Methodology

Seven river basins (Amudarya, Elbe, Guadiana, Nile, Orange, Rhine and Tisza) were selected as case study areas to establish the link between practical activities and advances in thematic research and tool development. The goals and needs of stakeholders were carefully considered in collaboration with scientific partners and other experts.

The Results

NeWater has produced more than 200 deliverables. All public results are available on the website. A synthesis of the deliverables guided to the following 12 products:

1. The prototype of the Management and Transition Framework including databases on management processes, learning processes and a general system description for several basins.
2. The Uncertainty Guidance providing insights on how different types of uncertainty can be approached in adaptive management processes.
3. A synthesis of those NeWater results addressing the "burning policy issues" related to uncertainty, stakeholder participation and global (climate) change.
4. A climate and water adaptation book providing insights into various adaptation strategies for climate change.
5. An evaluation of water resources scenarios for the case study regions taking up the most recent results of climate development simulations.
6. A comparison of adaptation strategies across regions addressing the differences in awareness of and strategies for climate change.
7. The description of a process for analysing dynamic vulnerability and adaptive capacity.
8. A special issue on participation presenting the diversity of participatory approaches for research and management. For more details see Ecology and Society Online Journal (<http://www.ecologyandsociety.org/>).

(Continued next page)

The Results (continued)

9. The NeWater Guidebook on Adaptive Water Management explaining benefits and outcomes of, as well as lessons learned from making the transition to adaptive water management.

10. A special section on Adaptive Water Management was integrated into the WISE-RTD portal (<http://wise-rtd.info/>) providing additional access to all the main NeWater outcomes.

11. A CD with training material to build capacity among those who "train" the water managers.

12. The Online teaching curriculum providing academic instructors with teaching materials on the theme of adaptive river basin management (<http://www.newwatereducation.nl/>).

NeWater – New Approaches to Adaptive Water Management under Uncertainty

Consortium:

39 partners from 15 countries

Project Coordinator:

Prof. Dr. Pahl-Wostl, Institute of Environmental Systems Research; University of Osnabrueck, Germany

Project Management:

Dr. Britta Kastens & Dr. Ilke Borowski
contact@newwater.info

Project Web Site: www.newwater.info

Project Consortium

- Institute of Environmental Systems Research, University of Osnabrück 
- Alterra, Wageningen University and Research Centre 
- Centre for Ecology and Hydrology Wallingford 
- Cemagref 
- Geological Survey of Denmark and Greenland 
- HR Wallingford Ltd. 
- International Institute for Applied Systems Analysis 
- Stockholm Environment Institute, Oxford Centre 
- Tashkent Institute of Irrigation and Melioration 
- Center for Environmental Systems Research, University of Kassel 
- Research Group Work, Organizational and Personnel Psychology, Catholic University Leuven 
- Cranfield University 
- Ecologic Institute 
- Fondazione Eni Enrico Mattei 
- Helmholtz Centre for Environmental Research - UFZ 
- International Centre for Integrated Assessment and Sustainable Development, Maastricht University 
- Institute of Hydrodynamics, Academy of Sciences of the Czech Republic 
- Institute of Natural Resources 
- Water Research Institute, National Research Council 
- Instituto de Soldadura e Qualidade 
- International Union for Conservation of Nature (Int. NGO)
- Manchester Metropolitan University 
- Max Planck Institute for Meteorology 
- National Scientific Centre for Medical and Biotechnical Research 
- Potsdam Institute for Climate Impact Research 
- RBA, Delft University of Technology 
- Rijkswaterstaat, Centre for Water Management 
- Seecon Deutschland GmbH 
- T. G. Masaryk Water Research Institute 
- Complutense University of Madrid 
- Umeå University 
- University of Exeter 
- Technical University of Madrid 
- University of Twente 
- Faculty of Earth and Life Sciences, VU Univ. Amsterdam 
- Wageningen University 
- Center for Development Research, University of Bonn 
- University of Oxford 
- Geological Survey of Spain (Partner without EU-Funding) 

NeWater

New Approaches to Adaptive Water Management under Uncertainty



An Integrated Project in the 6th EU framework programme



2005 – 2009

www.newwater.info

Supported by the EC under contract No. 511179 (GOCE)