

# Newsletter on the Human Dimension in Water Management



April 2007

Supported by the European Commission & Harmoni-CA ([www.harmoni-ca.info](http://www.harmoni-ca.info))

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## **1** Running waters brought to daylight and awareness - The establishment of a network of „Running waters in the urban area“ started by the U.A.N.

More and more cities, municipalities and citizens rediscover their waters – as natural area in an urban environment, as a place of recreation, as a formative element in urban construction, as a meeting place for cultural activities and last but not least as

an opportunity for environmental education for young people and children.

The objectives, people have when they turn back to their waters on a wider scale are manifold. The questions to be dealt with, recur.

Therefore a network “Running Waters in the Urban Area” will be established by the Kommunale Umwelt-Aktion U.A.N. supported by the Federal Foundation for Environment (DBU). The establishment of the network is conducted by a group of volunteering experts with practical local experiences.

The city of Osnabrück, who gave the first impulses for this project with their first network conference in October 2006, is the co-operation partner in this project.

The network will support practitioners in implementing revitalisation projects at

running waters in urban areas. It wants to highlight ways of implementation, make existing experiences usable for anyone interested and create a network with close links to various associations and other cooperational partners. All in all the network shall help to improve knowledge on and activities at running waters in urban regions.

Contact persons at the U.A.N. are Katrin Flasche (phone +49 (0)511/30285-58, [flasche@nsgb.de](mailto:flasche@nsgb.de)) and Britta Apelt ([apelt@nsgb.de](mailto:apelt@nsgb.de)).

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## 2 Cost-Benefit Analysis of the Mandatory Flood Insurance System in Poland

The research on the subject of *Cost-Benefit Analysis of the Mandatory Flood Insurance System in Poland* was conducted as a PhD research by Anna Lasut at the AGH University of Science and Technology in Krakow, Poland. It allowed to analyse the flood risk and to formulate conclusions about the current state of the flood insurance in Poland. The comparative analysis of insurance against flood existing in chosen counties all over the world led to the conclusions about the possibilities of implementation in Poland some desired features from existing flood insurance systems. Based on the defined for the assessment purpose mandatory flood insurance system the Cost-Benefit Analysis (CBA) was conducted for the *Wisłoka* river basin. The simulation of

CBA for such system in that region was performed from the point of view of various stakeholders, such as insurance companies, the government, exposed to risk and not exposed to risk inhabitants. The CBA study showed significant benefits for inhabitants exposed to risk and for the government from the implementation of the mandatory insurance in comparison to the current state. The other stakeholders were subjected to several benefits, but the costs for them were higher. For more information on the subject please contact Ms Anna Lasut at:

[alasut@zarz.agh.edu.pl](mailto:alasut@zarz.agh.edu.pl)

University of Science and Technology;  
Faculty of Management, Krakow, Poland

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## 3 Advances and Visions in Large-Scale Hydrological Modelling

*11th Workshop on Large-Scale Hydrological Modelling, 31 Oct - 2 Nov 2007 in Frankfurt/Main*

In 2007, the 11th Workshop on Large-Scale Hydrological Modelling will take place in Frankfurt/Main. With reference to the 2nd Workshop on Large-Scale Hydrological Modelling held in 1998, the following topics will be addressed:

- Sensitivity of model results against uncertain input data
- Influence of spatial resolution and information availability
- Integrated modelling approaches including natural sciences and socio-economic models
- Coupling of processes in hydrosphere, atmosphere and biosphere

Based on keynote talks on each topic, the

state of the art of Large-Scale Hydrological Modelling as well as future challenges will be discussed in four workgroups of approx. 15 participants. Within the workgroups, posters on innovative research in the fields of the workshop will be presented. For that reason, we invite the submission of poster abstracts in the above mentioned topic areas until July 1st, 2007.

The workshop language is German. For further information, visit

<http://www.geo.uni-frankfurt.de/ipg/ag/dl/aktuelles/index.html>

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## 4 Registration is open for the Workshop: Global Assessments: Bridging Scales and Linking to Policy, Washington DC, May 9-11, 2007

The workshop is hosted by The Integrated Assessment Society (TIAS) and the Global Water System Project (GWSP).

The workshop brings together scientists and practitioners in order to share and consolidate new research ideas and fostering future co-operations in the area of global assessments. The event will be held back-to-back with the International Water Association's *WATERMATEX 2007: the 7th International Symposium on Systems Analysis and Integrated Assessment in Water Management* 7-9 May 2007 ([www.WATERMATEX2007.org](http://www.WATERMATEX2007.org))

The programme will include

- A joint session of the International Water

Association (IWA), TIAS and GWSP on **“Uncertainty and Models in Policy Processes for Water Management”**

- Scenarios of the 4th Global Environmental Outlook,
- The Role of Land Use in Integrated Water Management,
- Impacts of Policy Decisions on Land Use Change
- Linking Impacts and Adaptation Modeling of Climate Change to the Policy Process
- Global Change Impacts on Water and Food Security – Economic Analyses
- Representation of the Human Dimension in Global Water Assessments - Current

state and major challenges for methodological innovations

A detailed programme including presenters is available from

<http://www.tias.uos.de/wash2007/>

Registration can take place via the TIAS-GWSP workshop webpage:

<http://www.tias.uos.de/wash2007/>

You may also register at the same site for the WATERMATEX Symposium.

**For more information** visit the workshop home page or contact Caroline van Bers [cvbers@usf.uos.de](mailto:cvbers@usf.uos.de)

Phone 1: + 31 (0)53 489 4135

## 5 4th & Final Harmoni-CA Forum & Conference - (25-27 September 2007)

From 25 till 27 September 2007 the 4th and final Harmoni-CA Forum and Conference will be organised in Brussels, Belgium. This event consists of:

### **Day 1, September 25<sup>th</sup>, 2007:**

The focus will be on what Harmoni-CA has accomplished with regard to its major aim: **bridging the gap between research and WFD implementation**, such as the lessons learned and the recommendations towards DG-RTD and DG Environment. With respect to the aim of harmonizing research activities, the synthesis of research (CatchMod) projects and the WISE-RTD web-portal will be presented as essential activities in support of implementation.

### **Day 2, September 26<sup>th</sup>, 2007:**

The focus will be on how far the Harmoni-CA/CatchMod results have been finalized and which activities urgently need to be initiated.

### **Day 3, September 27<sup>th</sup>, 2007:**

This day ongoing and foreseen activities in the near future will be presented, such as activities of the Pilot River Basins and the SPI-Water project supporting the WISE-RTD web-portal after Harmoni-CA's end. Merging the needed activities from the finalized (CatchMod) projects in those of the new, ongoing projects will be Harmoni-CA's final "stone for the bridge".

Contact: Harmoni-CA Work Package 1: [harmonica.wp1@riza.rws.minvenw.nl](mailto:harmonica.wp1@riza.rws.minvenw.nl)

## **6<sup>th</sup> Harmoni-CA/WP5 Policy Workshop:** **“Using Economic Methods and Models for the Implementation of the Water Framework Directive: Status, Options and Challenges for a better integration of water economic research into policy implementation”**

*on 14th & 15th June, 2007 in Berlin, Germany*

The Water Framework Directive (WFD) requires Member States to integrate economic considerations in various stages of the implementation process. While a number of economic methods and models exist in academia and research that can support this work, the practical use of such approaches in WFD implementation has been limited so far. In the contrary, the economic issues at hand for WFD implementation are often dealt with by non-economists, using much more limited, but implementable approaches like expert judgements etc.

Some main reasons for this so far limited use of economic methods and models are:

- the novelty of the WFD requirements (many water administrations are not used in applying economic methods and do not have many water economists in their staff);
- the complexity of issues at stake in the context of an integrated, river-basin approach;
- the need to apply economic methods and models at a very broad scale (entire river basins), while most available models have been developed and tested at a limited scale (sub-basin at the most);
- the difficulties of estimating the impact of measures on the ecological status at the water body scale that also needs to be correctly presented in the models/methods used;
- financial restrictions, hindering an in-depth investigation in all cases where such work would be needed.

### **Aims of the workshop**

Based both on background information provided (on existing economic methods and tools as well the current situation regarding their utilisation and additional research projects conducted for WFD-policy support in a number of selected EU-Member States) and mainly on the practical experiences of the participants, the workshop more specifically aims at:

- identifying the main obstacles for a more wide-spread use of economics research in WFD implementation based on practical experiences that capture the variety of problems at stake;
- fostering the exchange between policy-oriented researchers and research-interested policy makers;
- inducing positive exchange of experience between different Member States/River Basins in order to enable wider application of integrated economic models and research results from one country to an other;
- setting the ground for a better use of economic research supporting the next round of WFD implementation (2009-2015) and the updated River Management Plans due 2015;

You can find more details at [www.harmoni-ca.info](http://www.harmoni-ca.info). **In case you have any questions** on the content of the workshop, please contact Edi Interwies at: [Interwies@intersus.eu](mailto:Interwies@intersus.eu). For questions concerning logistics or registration, please contact [workshop@usf.uni-osnabrueck.de](mailto:workshop@usf.uni-osnabrueck.de).

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## 7 WASAMED- Water Saving in the Mediterranean Agriculture

*Final conference took place in Bari*

The EU-funded Thematic Network (FP5) „Water Saving in the MEDiterranean agriculture (WASAMED)“ had organised an International Conference on „Water Saving in Mediterranean Agriculture & Future Research Needs“ from 14th to 17th February 2007 at the CIHEAM Mediterranean Agronomic Institute of Bari, Italy ([wasamed.iamb.it/conference](http://wasamed.iamb.it/conference)). WASAMED had the objective to establish a platform for effective Mediterranean dialogue on water saving in agriculture, contributing to improved management of limited water resources and sustainable development in the Mediterranean Region. It included 42 partners from Universities, research centres decision and policy-making institutions and end-users associations from 16 countries. The

conference in Bari brought together relevant local and regional key-actors, scientists from all over Europe and EU officials in order to discuss and identify the priorities in research to support national and regional strategies on water saving in the Mediterranean region.

In 6 thematic sessions topics from regional initiative in irrigation system performance and water use efficiency to innovative approaches and tools in water saving and integrated strategies in the Mediterranean region were discussed. The conferences paper contributions are published in proceedings with three volumes. Presentation and further information are available at

<http://wasamed.iamb.it/programmi/workshop.php>.

## 8 Water Governance and Adaptive Capacity – The Need for Multi-Level Approaches

*Seminar at the Stockholm International Water Week organized by the International Human Dimensions Programme on Global Environmental Change (IHDP), the Global Water System Project (GWSP) and the EU project NeWater, Stockholm 16<sup>th</sup> of August*

The global water crisis is more and more perceived as a governance crisis. Yet we are still missing sufficient understanding of water governance systems. Hence, this seminar aims to close a gap that so far has hindered better governance for the sustainable use of our global water

resources. To understand what determines the adaptive capacity of water governance, vis-à-vis threats and challenges deriving from global change, requires a multi-level perspective, i.e. linking local and regional initiatives to global ones effectively. Whereas the basin has been advocated as

the preferred scale for IWRM it becomes increasingly clear that challenges such as water allocation between water scarce and water rich regions or adaptation to climate change can only be addressed by governance at a global scale.

Therefore, key issues of the seminar are:

- Adaptive & Integrated Water Governance – introduction of a new scientific paradigm
- Multi-level Water Governance – getting the scales right
- Local Implications of Global Environmental Change

- European Lessons of Adaptive & Integrated Water Management – the Water Framework Directive
- The Water Scarcity Initiative of UN-Water – a Global Response to a Global Crisis

The seminar will highlight research conducted under the auspices of IHDP, GWSP and the NeWater project as well as a model for policy implementation from a multi-level perspective.

More detailed information on the Stockholm Water Week: [www.siwi.org](http://www.siwi.org). For information on the seminar contact Falk Schmidt, [schmidt.ihdp@uni-bonn.de](mailto:schmidt.ihdp@uni-bonn.de).

# 9 List of Projects in the HDWM Cluster

## HarmoniCA – Harmonizing Modelling Tools at Catchment Scale

<http://www.harmoni-CA.info>

The concerted action HarmoniCA will provide guidance on management concepts and ICT tools for river basin management and the implementation of the WFD. Of specific interest for the HDWM cluster is the work package on “Integrated Assessment and the Science Policy Interface” that deals specifically with the involvement of stakeholders in the development of river basin management plans and the representation of socio-economic aspects in river basin management models.



## HarmoniCOP – Harmonizing Collaborative Planning

<http://www.harmoniCOP.info>

The project HarmoniCOP explores stakeholder and public participation and the role of ICT tools in river basin management planning using a social learning perspective. HarmoniCOP aims at improving the conceptual base for stakeholder and public participation and provide practical guidance for the implementation of the European Water Framework Directive.

## **GOUVERNe**

### GOUVERNe

<http://www.c3ed.uvsq.fr/c3ed/Gouverne/PresGOa.html>

The project responded to the requirement for integrated systems of information permitting coherent policy and resource management decisions covering water uses in Europe. The project developed and implemented in pilot studies a user-based and scientifically validated Decision Support System (DSS) for the improved management of underground water resources at the catchment and sub-catchment levels.



## SLIM - Social Learning for the Integrated Management and Sustainable Use of Water at Catchment Scale

<http://slim.open.ac.uk>

This project develops strategic planning methodologies and social tools for the integrated management of water at catchment or river-basin scale and other "bundles" of natural resources. It emphasizes the importance of processes of social learning for integrated resource management.

## AQUALIBRIUM

[www.aqualibrium.de](http://www.aqualibrium.de)

This project investigates the implications of the increasing deregulation of national water markets, and the fact that more and more private companies are involved in the water market. It aims at giving an overview on the current debates and analyses the various models of involvement and co-operation between the public and the private sector in the EU member states.



## FIRMA

<http://firma.cfpm.org/>

This project explored new approaches to improve water resource planning by developing and applying agent-based modelling to integrate physical, hydrological, social and economic aspects of water resource management. Specific emphasis was given to stakeholder participation and participatory model building and scenario development.



## INTERMEDIARIES - New intermediary services and the transformation of urban water supply and wastewater disposal systems in Europe

<http://www.irs-net.de/intermediaries>

This project maps the development of intermediary services and organisations in the water and wastewater sectors, examines how they facilitate the **EUROMARKET**

<http://www.epfl.ch/mir/euromarket>

The EUROMARKET project studies the likelihood, nature, and forms water liberalisation may take in Europe in the foreseeable future. This is done by analysing different liberalisation scenarios, depending upon the evolving water markets, the different enterprises' strategies, and the existing legislation/regulation both at the national and at the European levels.



#### MULINO

<http://www.feem.it/web/loc/mulino/index.html>

The MULINO project is developing a Decision Support System for the integrated management of water resources. The system includes a decision software based on multi criteria analysis procedures. This software is being developed in collaboration with representatives from water authorities in Italy, Romania, the UK, Belgium and Portugal, and through these relationships is exploring ways to include stakeholders' preferences in the assessment of a decision problem.



#### EUWARENESS - European Water Regimes and the Notion of a Sustainable Status

<http://www.euwareness.nl/>

focuses on the dynamic relationships between conflicting uses of water resources, the regimes under which these uses are managed, and conditions generating regime transitions towards sustainability. Water basin regimes have been studied in six European countries (Netherlands, Belgium, France, Spain, Italy, Switzerland).

More information:  
Project coordinator: Stefan Kuks  
Address: University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands  
Email: [s.m.m.kuks@cstm.utwente.nl](mailto:s.m.m.kuks@cstm.utwente.nl)  
Internet: [www.euwareness.nl](http://www.euwareness.nl)

#### ADVISOR

<http://ecomana.dcea.fct.unl.pt/projects/advisor>

ADVISOR aims at the delivery of a set of guidelines to river basin authorities and related EU agencies for the execution of integrated evaluation of projects.

application of new resource-saving technologies and social practices and assesses their impact on the environment, economic efficiency and network management.

The theoretical platform thereby established will support the development of new integrated evaluation methodologies and tools, which will incorporate the state of the art of the latest scientific thinking and assessment tools together with modern participatory, multi-stakeholder decision making processes.



#### PRINWASS - Barriers and Conditions for the Involvement of Private Capital and Enterprise in Water Supply and Sanitation in Latin America and Africa: Seeking Economic, Social, and Environmental Sustainability

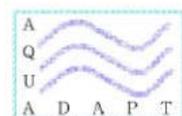
<http://www.geog.ox.ac.uk/~prinwass/>

The project develops an indicative framework of strategy and processes, expressed by relevant guidelines, for sustainable water supply and sanitation services in developing countries, taking into account the roles of the state (national, regional, and local government levels), civil society (users associations, citizen movements, etc.), market forces (privatized water utilities), and their interrelations (e.g. public-private partnerships, other forms of private sector involvement in WSS, etc.)

#### MERIT - Management of the Environment and Resources using Integrated Techniques

<http://merit-eu.net/>

The aim of MERIT is to develop a water resource management methodology to help engage the stakeholder in the decision making process. Bayesian networks are being used as tool to help the decision maker by using input from stakeholders to design and construct the networks. A range of participatory techniques are being developed to facilitate the engagement process.



#### AQUADAPT - Strategic Tools to Support Adaptive, Integrated Water Resource Management under Changing Utilisation Conditions at Catchment Level: A Coevolutionary Approach

<http://www.aquadapt.net/>

The overall aim of the Aquadapt project is to

generate knowledge which supports the strategic planning and management of water resources in semi-arid environments at catchment level under changing supply/demand patterns.

#### **TiGrESS - Time-Geographical Approaches to Emergence and Sustainable Societies**

<http://www.riks.nl/projects/TiGrESS>

The aim of the TiGrESS project is to improve the methodology for understanding human-environmental interactions on the basis of three regional case studies.



#### **MANTRA East - The Integrated Strategies for the Management of Transboundary Waters on the Eastern European Fringe - the pilot study of Lake Peipsi and its drainage basin**

<http://www.mantraeast.org>

The aim of the MANTRA East Project is to analyze and develop strategic planning methodologies and scientific tools for integrated water management in transboundary water basins following the requirements of the EU Water Framework Directive. The project's special geographical focus is on transboundary water basins located on the existing and future borders of the European Union.



#### **NeWater - New Approaches to Adaptive Water Management under Uncertainty**

[www.newater.info](http://www.newater.info)

NeWater identifies key elements of current water management regimes and investigates their interdependence. Research is focused on transformation processes of these elements in the transition to adaptive integrated water resources management.



#### **River Dialogue - Empowerment and Awareness Building in River Basin Management Through Focus Groups and Citizens Juries**

<http://www.riverdialogue.org>

River Dialogue is aimed at identifying the best approaches to increase public participation in implementation of the EU Water Framework Directive, including preparation and implementation of river basin management plans. The project will practically test two specific participatory methods of citizens' involvement – focus groups and citizens' juries.

#### **WASAMED – Water Saving in Mediterranean Agriculture**

<http://wasamed.iamb.it/>

WASAMED is to establish a platform for effective Mediterranean communication and debate on water saving in agriculture, contributing to improved management of limited water resources and sustainable development in the Mediterranean Region.



[www.aquastress.net](http://www.aquastress.net)

AquaStress is delivering interdisciplinary methodologies enabling actors at different levels of involvement and at different stages of the planning process to mitigate water stress problems. AquaStress adopts a Case Study - stakeholder driven approach and is organised in three phases; (i) characterisation of selected reference sites and relative water stress problems, (ii) collaborative identification of preferred solution options, (iii) testing of solutions according to stakeholder interests and expectations.

**Editors**

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University of Osnabrueck  
Institute of Environmental Systems Research -  
Resource Flow Management  
Barbarastr. 12  
49076 Osnabrueck  
Germany

borowski@usf.uni-osnabrueck.de

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