



M³ Partners

CRP Henri Tudor (Luxembourg)

The Resource Centre for Environmental Technologies (CRTE) is an applied research institute that assists public administrations and private companies in applying best available environmental techniques and implementing environmental policies. CRTE is currently running projects in waste water sanitation, groundwater protection, surface water monitoring concepts and risk analysis at the catchment scale. Furthermore CRTE is the REACH/CLP helpdesk for Luxembourg.

The catchments in Luxembourg are characterized by strong urban pressures in the southern part of the country as well as widespread excess nutrient inputs due to agriculture. Luxembourg as a small country faces a major conceptual and logistical challenge with the WFD implementation.

Erftverband (Germany)

The Erftverband is a regional water association which deals with all matters concerning water. The association was founded in 1959 by legislation of North Rhine-Westphalia. It is financed through fees paid by its approximately 260 members, which are local authorities, trade and industry which use ground or surface water or discharge wastewater within this region.

The core operation region of the Erftverband is the 1.918 km² catchment area of the river Erft. The entire operation area extends over an area of 4.216 km² covering the region affected by the brown coal mines of the Rhineland. The association plans, builds and operates groundwater measurement facilities, sewage treatment plants, storm water basins, flood water retention reservoirs and surface water monitoring stations.

M³ Contacts

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Erftverband

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Modelling Monitoring Management



Application of integrative modelling and monitoring approaches for river basin management evaluation

Workshop

Modelling pressures and impacts for WFD river basin management: Lessons learned and future prospects

June 14-15, 2012
Cologne, Germany

www.life-m3.eu

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M³ Workshop 2012 structure

Session 1: Pressure analysis revisited: Getting on target

A first pressure analysis had to be performed in 2004 for the WFD implementation and will soon have to be repeated for the second cycle. How useful were the approaches used in this early stage of the WFD implementation for the monitoring schemes and River basin management plans? The management of priority substances and other catchment specific pollutants was only marginally addressed in the first pressure analysis: how can stakeholders assess these pressures efficiently?

- **Bob Harris**, Catchment science, University of Sheffield: *'Understand your problems before you try to fix them' - are we trying to fix the right things through River Basin Plans?*
- **Hanna Andersson**, Swedish Environmental Research Institute: *Substance flow analysis for assessment of sources and pathways of priority substances.*

Session 2: Dynamic emission models: do they provide added value for WFD implementation?

Process-based, dynamic and spatially distributed emission models have a long history in academia but have only scarcely been adopted for WFD implementation by stakeholders. What is the added value of more differentiated models for management? Do the results outweigh the important calibration effort?

- **Martin Volk**, Department of Computational Landscape Ecology, Helmholtz Centre for Environmental Research – UFZ Leipzig: *Towards the implementation of the European Water Framework Directive? Lessons learned from nutrient simulations in watersheds with different conditions.*
- **Manfred Kleidorfer**, University of Innsbruck, Unit of Environmental Engineering: *Modelling emissions from urban areas: random numbers or useful information?*

Session 3: Water Quality models & ecotoxicological effects: how to address all pressures

Eutrophication and oxygen depletion are standard features of water quality models. Can these simulations be linked to ecological status? Can the effects of micropollutants on biological river communities be integrated in Water Quality models?

- **Michael Rode**, Aquatic Ecosystem Analysis Dept., UFZ Magdeburg: *Modelling river water quality - do we integrate sufficient biological processes?*
- **Roman Ashauer**, Environmental Toxicology, EAWAG; Dübendorf, Switzerland: *Ecotoxicological effects beyond EQS: Effect models for dynamic exposure situations*

Session 4: Round table 'Improving River basin management with modelling tools: prospects'

Round table with experts and stakeholders

Call for abstracts (oral and poster presentation)

The workshop lives from contributions of stakeholders and involved academia. **Participate actively to the workshop by submitting an abstract!**

Deadlines:

Abstract submission: April 15, 2012

Final programme: May 15, 2012

Registration: May 31, 2012

Workshop venue

The workshop takes place at the "Residence am Dom" right in the heart of Cologne next to the famous Cologne Cathedral. With the Cologne main station next door the conference location is well connected to the German railway system and the Cologne-Bonn Airport. Many museums and sights as well as many theaters and shopping streets are within walking distance from here.



M³ Scope

The Water Framework Directive (WFD) schedule has set the definition of the programmes of measures (POM) in 2009 as a milestone in the endeavour of achieving good ecological status of waters by 2015. The definition of the POM for achieving good ecological status in water bodies should ideally be the optimized combination of measure implementation costs and ecological effects. In practice, the POM will be influenced by political decisions and the level of detail in the planning as well as the arguments or the data that support the choice of a specific measure will be highly variable. Hence, there is a need for accompanying scientific actions that will guide and benchmark the intended measures in the course of their realization. This is especially true for the less obvious environmental pressures on water bodies. However, so far there are only very few tools for evaluating measures with respect to their effect on the ecological status of surface water bodies.

M³ will apply latest developments in monitoring and modelling concepts to specific river basin management measures in the two partner regions. The case studies will be extensively documented and made available to the public over the project's website. Furthermore, M³ will create a space for reflection on the challenges and conceptional shortcomings in the implementation of the WFD. This will be achieved by publications, four workshops on the project's main actions and a summarizing book. Further information on content and activities are available under >> www.life-m3.eu

