

European Centre for River Restoration NEWSLETTER – March 2009

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ECRR PARTICIPATION IN THE

5th WORLD WATER FORUM – Istanbul, 16-22 March 2009

Topic 3.1 – Basin management and transboundary cooperation



On Friday 20 March 2009 the ECRR will participate in the 5th World Water Forum, within the Topic 3.1 – Basin management and transboundary cooperation (session 3.1.3), coordinated by the International Network of Basin Organizations (INBO) and UNESCO.

This is an outcome of a long journey started some months ago with the establishment of the partnership between the ECRR and INBO: the [4th ECRR International Conference on River Restoration](#) was in fact included in the preparatory meetings for the Forum.

Bart Fokkens, ECRR President, will participate as a reacting speaker in the session 3.1.3 (How can cooperation over transboundary surface and groundwater resources be achieved in a sustainable manner?).

The session will evaluate the tools and mechanisms that are available for the development of cooperation and the prevention of conflicts over water resources. The session will

make an assessment of these tools and mechanisms, and will look gaps in order to improve the track forward by suggesting how to fill the record of cooperation. The session will also offer an opportunity to explore the grounds for the transfer of knowledge and practices. It will look into the political and institutional mechanisms and tools that are crucial for the reinforcement of trans-boundary cooperation as well as for the improvement of water management (surface and groundwater) at basin level (i.e. international organizations, arbitration commissions, basin organisations, legal and financial mechanisms).

The programme of all the sessions of the topic 3.1, as well as the working documents and the list of conveners and stakeholders is available in the [INBO website](#).

To find all the information about the 5th World Water Forum in Istanbul, check the [official website](#).

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ECRR SEMINAR

**“Synergies between River Restoration and River Management
focussing on Natura2000 and Ramsar sites”**

28-29 May 2009 – Lelystad, The Netherlands



The ECRR was officially established in a constitutional meeting in April 1999, in Silkeborg in Denmark and the start was supported by a LIFE project. A special seminar will be organised to celebrate the 10th anniversary of the ECRR. This seminar will be hosted by Rijkswaterstaat – Centre for Water Management, in The Netherlands.



Therefore, it gives great pleasure to cordially invite you to the seminar “Synergies between River Restoration and River Management, focussing on Natura2000 and Ramsar sites”. This is a very actual topic, especially in relation to the implementation of the relevant European Directives. The aim of the seminar is to discuss the constraints, possibilities and opportunities of implementing the EU Directives e.g. the Water Framework Directive and Bird and Habitat Directive, by river restoration.

Conclusions and recommendations will be formulated.

Participants can apply to give an oral presentation by sending in an abstract of about 500 words before 1st of April. Four participants will be selected to give their presentation.

For the program of the seminar and the registration to the seminar, see the next pages. Participation in the seminar is free of costs, including consumptions, lunches, celebration dinner and excursion. Only hotel costs and travel costs to and from the seminar need to be paid by participants themselves.

Registration should be done before 15th of April, through downloading [the registration form from the website of the ECRR](#). Participants can also participate in only the first seminar day. The Seminar will be held in the Agora theatre in Lelystad The Netherlands. Lelystad is located on about 60 km from Amsterdam and has a direct connection by train with Schiphol/Amsterdam airport. There are trains every 15 minutes from the airport and the duration is about one hour.



For more information about the seminar please check the [ECRR webpage](#).

TOP NEWS

[Catchment plans will be 'vital' to tackle pollution](#)

Catchment management plans will be vital if the UK is to improve water quality and reduce its greenhouse gas emissions, according to environmental scientists.

[Ciwem's Living Wetlands Award For STREAM](#)

River restoration project STREAM, STRategic REstoration and Management of the River Avon, has won CIWEM's Living Wetlands Award. The River Avon has long been valued by anglers and nature conservationists and is the largest unimproved floodplain grazing land in Britain. However, extensive land drainage had changed the local habitat and broken the links between the river and floodplains. STREAM is restoring the river through a catchment approach and link management of the river and floodplain.

[WFD opportunity 'must not be missed'](#)

Drawing up plans to meet EU water regulations offers the best opportunity to reform water and wetland management for decades, according to the head of one of the UK's biggest wildlife charities.

News from the newsletter "Science for Environment Policy", a service from the European Commission

THE STATE OF OUR RIVERS: EU-WIDE SURVEY RESULTS (Issue 139)

A Europe-wide survey of rivers and streams has tested water samples for a range of polar organic pollutants. The study highlights the problems associated with the persistence of industrial pollutants and monitoring emerging pollutants.

The continual entry of organic pollutants derived from personal care products, pharmaceuticals and industrial chemicals via wastewaters into rivers and streams is a cause for concern. Little is known about the long-term, potentially toxic effects of these increasingly complex mixtures of pollutants. Water-soluble compounds can also contaminate ground and drinking waters.

The survey was conducted by collecting water from 122 sampling points from over 100 bodies of water throughout Europe in autumn 2007, representing a range of sizes, from small streams to large rivers. They were in varying states of cleanliness, from unspoilt to contaminated. 27 European Countries, most of which were EU Member States, were covered.

The research team, led by the European Commission's independent Joint Research Centre (JRC), identified the concentrations of the target pollutants and the number of times they were detected in rivers. Relatively speaking, the most frequently detected compounds at noteworthy concentrations were benzotriazole, tolytriazole (which are anti-rust substances), caffeine, carbamazepine (a drug used for the treatment of epilepsy) and nonylphenoxy-acetic acid, a degradation product of industrial surfactants used in cleaning products. These agents are suspected to disrupt the reproductive functions of humans and wildlife - known as so-called 'endocrine disrupting compounds'. The study detected only low concentrations of pesticides. However, the sampling was conducted in the autumn when few pesticides are used.

Rivers with the relatively highest amounts of perfluorinated acids (PFOS and PFOA), were identified. These chemicals are major industrial pollutants and can persist in the environment. They have been detected in human blood worldwide. The study suggests that the Rivers Po in Italy, Danube, Scheldt in Belgium and the Netherlands, Rhone in France and the Wyre in the UK contained significant amounts of PFOA, although not all major European rivers were tested. PFOS was found in similar amounts, but its emissions were more widely distributed throughout Europe.

Overall, the cleanest water was sampled from areas with a low population density. Only 10 per cent (11 of the 122 samples) of the samples contained virtually no chemicals.

The study also highlights the need to anticipate environmental problems stemming from the use of chemicals in Europe. In this context the new European legislation REACH1 (Registration, Evaluation, Authorisation and Restriction of Chemical substances), which requires companies to provide data on the amounts of chemicals used and to perform environmental risk assessments, will contribute also to the quantitative and qualitative understanding of water pollution.

To know more click [here](#).

Source: Loos, R., Gawlik, B.M., Locoro, G., et al. (2009). EU-wide survey of polar organic persistent pollutants in European river waters. *Environmental Pollution*. 157: 561-568.

Contact: giovanni.bidoglio@jrc.it

[Council planners 'still approving flood risk developments'](#)

Town halls gave the green light to 16 major developments in flood risk areas against Environment Agency advice in the past year, according to a new report from the agency.

[Public asked for help to tackle water quality](#)

More than half of North East Scotland's waters have failed to reach 'good' status, according to figures from the Scottish Environment Protection Agency.

[EA seeks views on water quality](#)

The Environment Agency is asking business and the public for their views on plans to improve water quality across England and Wales.

[Vulnerability of Delta Regions and Estuaries](#)

The three-day Aquaterra 2009 in Amsterdam attracted over 600 experts from around the world. They discussed in depth how best to ensure a sustainable future for the world's largest deltas, many of which are the economic powerhouses and food baskets of nations. The Aquaterra conference delegates issued a joint closing statement that will be a key topic of discussion at the fifth World Water Forum in March.

*News from the newsletter "Science for Environment Policy",
a service from the European Commission*

PAST ECONOMIC LOSSES FROM FLOODING NOT DUE TO CLIMATE CHANGE (Issue 142)

Economic losses from flooding disasters can be the result of both social and climate factors. A recent investigation into floods in Europe from 1970 to 2006 revealed that an observed trend in economic losses was mostly driven by societal factors, such as increases in population and wealth, rather than climate factors.

Flooding and the accompanying economic losses are a major concern. However, it is important to know exactly how much of this is related to climate change and how much is caused by other factors, particularly societal influences. Adapting to climate change is a major European policy concern and forms part of the Second European Climate Change programme (ECCP II)¹. In 2008, a green paper was adopted that outlined options for adaptation². In order to develop effective adaptation policy, it is necessary to understand the impacts of climate change as far as possible.

Economic losses from floods have shown a positive upward trend over the years, which may suggest that climate change has an influence. However, studies do not tend to take into account socio-economic factors, such as changes in population or the wealth of a country. This study, led by the European Commission's Joint Research Centre (JRC), assessed flood damage in 31 European countries taking these factors into account.

The study adjusted the data on economic flood losses over the years according to inflation, population and GDP per capita for that year and for the country in which the flood occurred. The 'Purchasing Power Parity' factor was used to account for differences in price levels between countries. The 27 largest floods in Europe were considered.

When the influence of socio-economic factors on floods was filtered out, the data suggest there is no significant increase in economic losses between 1970 and 2006. This indicates that socio-economic factors were in fact the main contributors to the original upward trend. During this time, Europeans have experienced increases in the standard of living and wealth, and the population has grown. As a consequence, there may be greater exposure of people and assets in flood-prone areas.

The study appears to show no link to climate change but does point out that there is no simple link between flood-disaster losses and anthropogenic climate change. Furthermore, it stresses that the monitoring of losses from floods and other weather-driven disasters should become a priority over the coming years.

To know more click [here](#).
Or download [this document](#)

Source: Barredo, J.I. (2009) Normalised flood losses in Europe: 1970-2006. Natural Hazards and Earth System Sciences. 9: 97-104.

Contact: jose.barredo@jrc.it



[River "blue belt" to protect Derby residents from floods](#)

Experts have put forward radical plans for a "blue belt" to protect Derby residents from future floods.

[Developing Flood Alleviation Plans](#)

The Penketh project identifies the drainage network needs for the Penketh catchment in the North West of England. By using InfoWorks CS 2D, innovative modelling techniques and working with the various stakeholders in the area, United Utilities (UU) has proposed integrated and sustainable solutions to property flooding.

More news are available in the [news section](#) of the ECRR website.

RIVER RESTORATION COURSES

2009 STREAM RESTORATION SHORT COURSES

University of Maryland/Johns Hopkins University/Utah State University/University of California, Berkeley.

Introductory courses in stream restoration taught by a consortium of UMD/JHU/USU/UCB faculty are now available for registration.

Introductory courses offered in 2009:

Duke Farms in Hillsborough, New Jersey, April 27 - May 1

<http://streamrestorationnj.com>

Cromwell Valley Park near Baltimore, June 1-5

<http://www.palmerlab.umd.edu>

Logan, Utah, July 13-17

<http://www.cnr.usu.edu/streamrestoration>

Sagehen Creek Field Station, Truckee, California, August 16-21

<http://sagehen.ucnr.org/courses/geomorph.htm>

An advanced design course will be offered in Logan, Utah, August 10-14

<http://www.cnr.usu.edu/streamrestoration>

The introductory courses emphasize understanding geomorphic and ecological process as a sound basis for planning and designing river restoration. The courses emphasize the inter-relatedness of hydrology, hydraulics, sediment transport, geomorphology, aquatic ecology, fisheries, and riparian ecology. The courses include daily field activities in degraded, unimpacted, and reconstructed channels. The courses strive to integrate the practice of stream management and restoration with modern riverine science and focus on providing students an overview of recent trends and findings in the scientific literature.

The advanced course focuses explicitly on geomorphic, sediment transport, and riparian vegetation principles applied to channel design.

The instructional team is led by Peter Wilcock (Johns Hopkins), Margaret Palmer (Univ. Maryland), Matt Kondolf and Mary Power (UC- Berkeley), and Jack Schmidt and Phaedra Budy (Utah State). Other members of the instructional teams of each course vary.

EVENTS

[Final Conference on River Basin Management: Processes, data, future scenarios](#)
25/27 March – Tübingen,
GERMANY

[Law of Water Management in the Mediterranean – Past, Present, Future](#)
25/29 March – Florence and
Montecatini Terme, ITALY

[Improving the ecological status of fish communities in inland waters - International Symposium and EFI+ Workshop](#)
30 March/ 3 April – Hull,
UK

[10th River Restoration Conference 2009: 'River restoration benefits: past, present and future'](#)
1/2 April 2009 –
Nottingham, UK

[2nd European Water Conference 2009](#)
2 April 2009 – Brussels,
BELGIUM

[Introduction to River Restoration, Part I: Physical Processes](#)
14 /16 April 2009 –
Portland, Oregon, USA

RIVER RESTORATION COURSES

PORTLAND STATE UNIVERSITY -- 2009 RIVER RESTORATION CLASSES

[Introduction to River Restoration, Part I: Physical Processes – April 14th through 16th](#)

Facilitator: Janine Castro, Ph.D.
Location: Leach Botanical Garden, Portland, Oregon

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[Introduction to River Restoration, Part II: Ecological Processes – May 19th through 21st](#)

Facilitator: Willis (Chip) McConaha, Ph.D
Location: Leach Botanical Garden, Portland, Oregon

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[Stream Reconnaissance and Assessment Tools -- September 22nd through 25th](#)

Facilitator: Mitch Swanson and John Dvorsky
Location: Leach Botanical Garden, Portland, Oregon

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[Restoration Design -- November 2nd through 6th](#)

Facilitator: Rob Sampson, P.E.
Location: Leach Botanical Garden, Portland, Oregon
Prerequisite: Introduction to River Restoration, Part I: Physical Processes

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[Restoration Project Management -- December 8th through 10th](#)

Facilitator: Bruce Henderson and Dan Warren
Location: Leach Botanical Garden, Portland, Oregon

These five core courses comprise the foundation of the River Restoration Professional Certificate Program at Portland State University in Oregon. Courses are offered each year at approximately the same time to allow for completion of the certificate over several years if necessary. Please note that Intro I: Physical Processes is a prerequisite for Restoration Design. To register or for more information, visit the [website](#).

[TWO DAY INTRODUCTION TO MESOHABSIM INSTREAM DATA COLLECTION AND MODELLING](#)

Spring Course - April 20-21, 2009
Location: Technical University of Madrid, Spain

This introductory course is intended for decision makers and conservationists who want to have good understanding of the method but do not plan to hands-on use in the near future. We will teach the basics of data collection techniques within the MesoHABSIM framework, analysis and interpretation. Course participants will have any opportunity to conduct stream habitat mapping with a Pocket PC, use the grid electrofishing technique, learn about multivariable habitat suitability criteria for native fish species, habitat suitability maps, habitat-flow rating curves and habitat time series analysis (UCUT Curves). We will teach interpretation of flow augmentation scenarios and simulation for determination of habitat improvement measures.

[Two Day Introduction To Mesobasim Instream Data Collection And Modelling](#)

20 / 21 April 2009 – Madrid, SPAIN

[8th UN Forum on Forests](#)

20 April / 1 May 2009 – New York, USA

[Flood Protection Brno 2009](#)

21/25 April 2009 – Brno, CZECH REPUBLIC

[CIWEM Annual Conference 2009: Water & The Global Environment](#)

24 April 2009 – United Kingdom Olympia Conference Centre, London, UK

[Stream restoration short course](#)

27 April / 1 May 2009 – Duke Farms in Hillsborough, New Jersey, USA

[33rd International Symposium on Remote Sensing of Environment](#)

4/8 May 2009 – Stresa, ITALY

[Water Footprint Reporting](#)

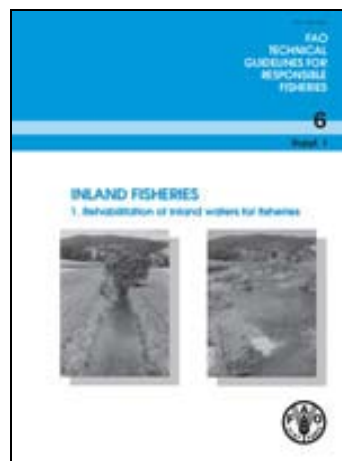
5 / 7 May 2009 – Brussels, BELGIUM

[World Environmental and Water Resources Congress](#)

17/21 May 2009 – Kansas City, USA

PUBLICATIONS

Rehabilitation of Inland Waters for Fisheries



FAO Technical Guidelines for Responsible Fisheries
FAO Fisheries Department
Rehabilitation of Inland Waters for Fisheries.
No. 6 Suppl. 1, Rome, FAO. 2008. 122p.
ISBN 978-92-5-106002-5
ISSN 1020-5292

Many rivers, lakes and other inland waters have been modified and degraded by human activities. Rehabilitation of degraded systems and mitigation of impacts of ongoing stresses are needed to preserve ecosystem services and fisheries, and are of a high priority if the aquatic biodiversity of inland waters is to be conserved.

A number of technical solutions for rehabilitation and mitigation are available to restore habitat diversity, provide for environmental flows and ensure longitudinal and lateral connectivity within such systems. It is recommended that such methods are applied on a basin-wide scale but it is recognized that more restricted sections of waterbodies may have to be targeted.

Groundwater Management in Large River Basins



by Milan Dimkic, Heinz-Jurgen Brauch and Michael Kavanaugh,

Publisher : Intl Water Assn ISBN: 1843391902

This book reviews the state-of-the-art of groundwater management in large river providing an innovative, informative and consistent approach with technical tools for planners, decision makers and engineers. Groundwater Management in Large River Basins provides comprehensive coverage of the basic elements of groundwater management in large river basins, including: (i) Social, economic and legislative framework, goals, practices and possible tools; (ii) Review of EU groundwater legislation and its implementation; (iii) Natural groundwater occurrence and natural circumstances and processes; (iv) Groundwater management and maintenance issues, including role of natural factors in groundwater management; different methods of groundwater abstraction and protection; groundwater treatment technologies; well ageing and maintenance; nitrate problems, etc.;

[NovCare -Novel methods for subsurface characterization and monitoring: From theory to practice](#)

13/16 May 2009 –
Helmholtz Center for Environmental Research -
UFZ, Leipzig,
GERMANY

[Introduction to River Restoration, Part II: Ecological Processes](#)

19 / 21 May 2009 –
Portland, Oregon, USA

[Groundwater Recharge Assessment: are we any Closer to an Answer?](#)

20 / 21 May 2009 –
Norwich, UK

[International Day for Biological Diversity](#)

22 May 2009

[Sustainable development - A challenge for European Research](#)

26/28 May 2009 -
Charlemagne building,
Brussels, BELGIUM

[STRIVER conference – Integrated Water Resource Management In Theory And Practice](#)

26/28 May 2009 -
Brussels, BELGIUM

Planning for rehabilitation projects needs to be carefully conceived with a clear statement of the objectives of the rehabilitation and selection of the methods to be used. The selection of appropriate methods for any particular waterbody depends on local social and economic conditions and priorities. Land tenure, local laws and the interests of other local stakeholders in the resource also need to be incorporated into rehabilitation plans. In international rivers and lakes rehabilitation plans may need negotiation and cooperation by all riparian states. After execution, rehabilitation projects should be carefully monitored as to their success in meeting the objectives and modified should they fail to achieve the expected results.

(v) Groundwater modelling as a tool for groundwater assessment; (vi) Aquifer restoration; (vii) A spectrum of technical appendices for engineers, which address groundwater issues. Also included will be appendices intended to support the work of groundwater engineers. This book will be of interest to groundwater engineers and planners, as well as lecturers and postgraduate and postdoctoral students.

THE RIVERPRIZE 2009

2009 Riverprize nomination open now!

Community groups, catchment authorities and individuals working on restoration of rivers, lakes and wetlands across Australia and the world can now apply for the prestigious [Riverprize 2009](#).

Submission deadline: 30 April 2009

Download entry guidelines and nomination forms [here](#).

Riverprize is open to individuals, organisations or agencies who can demonstrate outstanding achievements in river management and restoration. The international award is open to Australian and international applicants. The national award is exclusively for Australian entrants.

Last year, the prize pool was valued at A\$500,000. In 2008, the Australian Government provided A\$1 million to fund the National Riverprize over a five-year period under the Water for the Future plan.

The main criteria for both Prizes are to demonstrate outstanding results in river or catchment/watershed management and substantial progress towards sustainability. Submissions also need to show evidence of high levels of program delivery, inclusiveness, public accountability and innovation.

Nominations in each category are judged by two separate panels comprising natural resource managers, representatives from water industry, government agencies, environmental organisations and eminent scientists from Australia and overseas.

Good luck with your application!



[EC Presidency Conference on
Wilderness and Large
Natural Habitat Areas](#)
26 / 29 May 2009 –
Prague, CZECH
REPUBLIC

[ECRR SEMINAR:
“Synergies between River
Restoration and River
Management focussing on
Natura2000 and Ramsar
sites”](#)

28 / 29 May 2009 –
Lehystad, THE
NETHERLANDS

BECOME A MEMBER!

Joining the ECRR is FREE!

Acting as an international network the ECRR is pleased to get contributions from its members: they are all very welcomed to provide us information on projects, events, news, training courses, etc.

The ECRR newsletter, for example, is thought as a tool (available to all members) for advertising to an international platform the outcomes of the project, important events worldwide, new publications, etc.

As a member of the ECRR, you will:

- keep on receiving a monthly newsletter with the most recent international information related to river restoration (conferences, projects, policy document, funding opportunities...);
- have the opportunity to share your experiences and spread the results of your projects;
- become a part of a network of people and institutions involved in river restoration and sustainable river management at European level, find partners for your project proposals and develop joint activities;

To Become a member of the ECRR fill in the [application form](#) in our website.

For request of information please contact

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