



European Centre for River Restoration

NEWSLETTER - April 2009

n. 4/2009 - Editor: Francesco Pra Levis

IN THIS ISSUE:

ECRR SEMINAR

"Synergies between River Restoration and River Management focussing on Natura2000 and Ramsar sites" (28-29 May 2009 -Lelystad, The Netherlands)

Top News

Spreading the word on environmental models

A new tool to assess nitrogen and phosphorus flow in agriculture

Events

p.5

The conservation and management of rivers: 20 years on (6-9 September 2010 University of York, UK)

ECRR SEMINAR

"Synergies between River Restoration and River Management focussing on Natura 2000 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. 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 River between 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 possibilities constraints, 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.

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 11th of May 2009, through downloading the registration form from the website of the ECRR. Participants can also participate in only the first seminar day. For the programme of the seminar, see

the next pages.

More info at the ECRR website.





Teaching Adaptive Water Management A Training Course for Instructors (12-14 May 2009 – Bonn, Germany)

p. 7

Managing Natura 2000 rivers: restoration, monitoring and linking with the floodplain (24-25 June 2009 – Salisbury, England)

p. 8

Publication
A Handbook for Integrated
Water Resources
Management in Basins

p. 9

Become a member

p. 10

PROGRAMME OF THE ECRR SEMINAR

Thursday 28 May: Seminar day

08.45 Registration and Coffee

09.15 Opening addresses on behalf of:

- Rijkswaterstaat Centre for Water Management
- Municipality of Lelystad
- International Network of Basin Organisations; INBO
- European Centre for River Restoration; ECRR

Keynote Speeches

09.30 - Ecological rehabilitation in the River Rhine catchment, with special regard to the re-introduction of salmon in North-Rhine-Westphalia, Germany.

Detlev Ingendahl, Fishery ecology, State Authority for Nature, Environment and Customers Protection of Nort-Rhine-Westfalia, Germany.

With contributions from André Beukelaar, Rijkswaterstaat Centre for Water Management, The Netherlands.

 River Restoration and nature conservation along the Lower Danube River; Delta and Green Corridor.

Mircea Staras, Scientific Director Danube Delta National Institute; DDNI, Romania

With contributions from Jenica Hanganu and Ion Grigoras, DDNI

Upstream – downstream, wetlands connect us all;
 Tobias Salathé, Regional Unit Europe, Ramsar Convention on wetlands, Switzerland.

Facilitated discussion about the keynote speeches

Coffee break

11.15 Presentation of selected subjects

- Strategic River Restoration Activities to link management of the river Avon and the Valley Natura2000Sites. (STREAM Project):

Frank Allan, Natural England, United Kingdom (reservation).

- Film: Development of an ecosystem based management plan for the Tuzlov River in Russia;

Kosolapov, North Caucasus Research Institute for Integrated Water Management, N. Prokhorova, Russian Research Institute for Integrated Water Management and Protection and G. Radko, Kuban River Basin Administration, Russian Federation.

Climate adaptation by River Restoration in the IJssel Delta;
Arjan Otten, IJsseldelta project, Province of Overijssel, The Netherlands.





TOP NEWS

Water declaration vague on main issues

The world will not lessen its mounting worries over water until it is clearly on track to dealing with the twin threats of water mismanagement and climate change, WWF International Director General James Leape said on World Water Day today.

Water: the essence of life

European citizens rank water quality as one of their main environmental priorities and a number of LIFE projects are helping to guide the implementation of EU water policy.

Restoring river basin habitats in Lapland

A Finnish LIFE Nature project has successfully implemented river basin restoration actions to boost biodiversity and enhance water quality in the River Simojoki catchment.

Glimpse into future of flooding

Ofwat has demanded flood risk assessment be included in April's five-year exercise. Justin Butler, managing director of Ambiental Technical Solutions, explains the assessment and protection measures utilities need to take

 Methodology for analysing the problems of the Órbigo river in Spain, in the framework of the Spanish National River Restoration Strategy:

Felipe Gutiérrez, Infraestructura y Ecologíca, S.L.

Facilitated discussion about the presentations Formulation of the "Lelystad Declaration on River Restoration"

13.15 <u>Lunch</u>

14.30 <u>Celebrative Programme</u>

River Restoration and the role of EU Water Framework Directive in the Danube Basin;

Philip Weller, Executive Secretary of the International Commission for the Protection of the Danube River; ICPDR, Austria

Intermezzo:

The Flora of the Lower Volga and Volga Delta; Russian Federation.

Invisible Connections for rivers and wetlands in Europe and beyond

Jane Madgwick, CEO, Wetlands International; WI, The Netherlands. Developments in River Restoration and the European Centre for River Restoration; ECRR, Italy

Bart Fokkens, President of the ECRR, The Netherlands.

16.00 Closing Ceremony

16.30 Reception at Seminar Venue

18.30 Surprise and end of reception

19.30 Sailors buffet at the Batavia Yard

Friday 29 May: Excursion day

09.00 Departure by bus from Apollo Hotel

- Bus trip through the IJsselmeerpolders

10.00 Boarding on the Veerman van Kampen for a trip along the River IJssel, the northern branch of the River Rhine.

- River restoration projects in the IJssel Delta, a Natura 2000 site Lunch on board of the Veerman van Kampen
- River restoration plans with combined urban and wetland development partly by bus
- Floodplain river restoration project, with a short walk

Embarking and bus trip back to Lelystad

16.00 Back at Lelystad train station

17.00





Flood Control Principles in the World 2009

Czech Flood Protection
Association organises a big
international conference Flood
Control Principles in the
World. It will be the largest
meeting of flood control
managers of the year, focused
on the practical experience and
concrete flood control measures.
That was the reason, why we
choose several cities from all
around the world, typical for
their flood risk management.

More news are available in the <u>news section</u> of the ECRR website.

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

SPREADING THE WORD ON ENVIRONMENTAL MODELS (issue 144)

Good environmental information is essential for good environmental policy and modelling tools are one of the major providers of this type of data. A new technical report from the European Environment Agency provides an overview of the modelling tools currently available and outlines the possible features of an online inventory.

The European Union has highlighted the need for environmental information to be available and accessible to both policy makers and citizens. In its communication 'Towards a Shared Environmental Information System (SEIS)', the EU laid out the principles of an SEIS and the benefits it would bring to Europe1.

Models that describe, simulate and project environmental changes have advanced greatly over the past few decades. In order to describe the different models, the report places them into three categorises. The first is their thematic focus, for example, whether they are investigating air quality, climate, transport or water. The second is their geographical scale and the third is their method of analysis.

The report lists the available modelling tools under their different thematic focuses. This classification demonstrates the extensive resources that are available for modelling the environment. However, it also shows gaps in the resources. For example, there is a lack of models on key issues such as waste and material flows, biodiversity and water quality. There was also a lack of information on the requirements and the capacities of the modelling tools which makes them difficult to compare. This may lead to a lack of transparency and non-experts may find them hard to understand.

To overcome these shortcomings the report suggests that an online inventory should be set up. This could provide information on modelling tools for potential users and it could also establish a forum for communication between those who provide the modelling tools.

The report suggests that the inventory should be a type of 'web-based encyclopaedia', following a 'wiki'-inspired approach, with the option for users to exchange comments or join discussion blogs. As such, the inventory would need to be monitored and quality-controlled, preferably by an independent body that is at the interface between science and policy. Lastly, the inventory should be transparent and contain descriptions of the models with enough detail so that audiences with only basic knowledge can understand.

To give an idea of the structure of this inventory, the report sets out a template that could be used to describe the models and then uses this format to describe 14 example models. It also provides a comprehensive list of participative models. These are models that rely on user interaction, for example educational games and tools that allow users to calculate their personal impact on the environment.

Contact: Annekathrin.Jaeger@eea.europa.eu





EVENTS

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 Hillshorough, New Jersey, USA

<u>Biodiversity Protection</u> — <u>Beyond 2010</u> 27-28 April 2009 - Athens, GREECE

Land and water ecological networks, continuities for life 28-29 April 2009 – Paris, FRANCE

33rd International
Symposium on Remote
Sensing of Environment
4/8 May 2009 – Stresa,
ITALY

Teaching Adaptive Water Management — A Training Course for Instructors 12-14 May 2009 — Bonn, GERMANY

NovCare -Novel methods

for subsurface
characterization and
monitoring: From theory to
practice
13/16 May 2009 —
Helmholtz Center for
Environmental Research UFZ, Leipzig,
GERMANY

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

A NEW TOOL TO ASSESS NITROGEN AND PHOSPHORUS FLOW IN AGRICULTURE (ISSUE 145)

MITERRA-EUROPE is a new tool that models the amount of nitrogen and phosphorus, among other key pollutants, used in agriculture across all 27 Member States at regional, country and EU-27 levels. It can be used to calculate the effects of different strategies to minimise excess pollution.

Many regions in the EU-27 use more nitrogen and phosphorus in agriculture than is required. The main sources of nitrogen and phosphorus come from fertilisers and manure. They are typically removed from the ground by crops and animals which eat crops. However, any surplus can enter the environment, affecting both air quality and water systems.

Air pollutants from agriculture include ammonia, nitrous oxide and methane emissions, which arise from livestock, including non-grazing livestock such as pigs and poultry. They also come from the housing, storage and application of manure as fertiliser and from excess artificial fertilisers in soil. Water pollutants include nitrates, phosphates and organic bound nitrogen and phosphorus. They can leach from stored manure and from runoff from agricultural soils into groundwater and surface waters.

Funded by the EU, researchers developed MITERRA-EUROPE1 using information from existing models (GAINS and CAPRI) and a new nitrogen-leaching model. MITERRA-EUROPE applies a uniform approach, allowing comparisons to be made between different EU countries, such as the effects of different policies to reduce nitrogen pollution.

From their findings, the researchers concluded that a combination of measures to abate ammonia and nitrous oxide emissions and nitrogen leaching was the most effective way to reduce both nitrogen and phosphorus pollution.

Using the model, the researchers estimated for the EU-27 that:

- there are large differences within the EU-27 in nitrogen surpluses, ammonia and nitrous oxide emissions and nitrogen leaching from agricultural land
- the distribution of ammonia and nitrous oxide emissions and nitrogen leaching approximately matches the distribution of livestock across the EU-27
- intensive agricultural systems in northwest Europe have the highest emissions compared with lower emissions from non-intensive agricultural systems in South and Central Europe
- major sources of ammonia came from dairy cattle (27 percent), other cattle (26 percent) and pigs (25 percent)
- the largest sources of nitrous oxides are, in order, fertiliser application, grazing, manure housing, storage and application

The researchers used the model to assess the efficiency of various policy measures, such as from the Nitrates Directive2, to reduce pollution from emissions of ammonia and leaching of nitrates. The study estimated the effects of measures to decrease single pollutants or a package of measures to reduce more than one pollutant. The results suggest that single measures to reduce ammonia emissions also increase nitrous oxide emissions and nitrogen leaching. But methods to decrease nitrogen leaching also decreases the emissions of ammonia and nitrous oxides.

Contact: gerard.velthof@wur.nl





World Environmental and Water Resources Congress 17/21 May 2009 – Kansas City, USA

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

EC Presidency Conference on Wilderness and Large Natural Habitat Areas 26/29 May 2009 - Prague, CZECH REPUBLIC

THE CONSERVATION AND MANAGEMENT OF RIVERS: 20 YEARS ON

6-9 September 2010 University of York, UK

In September 1990 the Nature Conservancy Council organised an international conference on 'The Conservation and Management of Rivers'. The conference was truly international, attracting 337 delegates from 29 countries.

By September 2010 twenty years will have elapsed since the York conference. A huge amount has changed in the world since then – economically, politically, culturally, scientifically. This conference will look back over this period and assess the changes in river conservation – how the environment has changed, how the legislation and policies that drive conservation have changed, how organisations have changed, how techniques for practising river conservation have changed, and how public attitudes g , p have changed. What predictions did we make in 1990? Which have been proved accurate and which have not? Where have we succeeded and where have we failed?

The 2010 conference provides an opportunity both to share experience as we look back over the last 20 years, and to use the lessons of the past to look 20 years into the future.

The conference, sponsored by the Joint Nature Conservation Committee, Environment Agency, Scottish Environment Protection Agency, Northern Ireland Environment Agency and Scottish Natural Heritage, will bring together all those with an interest in achieving greater integration of conservation within the management of river systems. It will provide a forum for scientists, policy makers, water resource managers, engineers and nature conservationists to:

- discuss the theory and practice of river conservation
- describe progress in different parts of the world
- define appropriate strategies for the future

The emphasis of the conference will be on habitat and wildlife conservation but will be set within the wider context of water management. The meeting will have a broad, international perspective, and will reflect the range of priorities within and between countries in the developed and developing world.

Programme Papers on the following topics will be included in the programme:

- Philosophy of conservation historical and global perspectives
- Catchment characteristics and river ecosystems
- The case for conservation threats to river systems, the value of protection
- The integration of habitat and wildlife conservation with wider management objectives
- River classification/assessment of conservation potential
- Ecosystem integrity biological, chemical, hydromorphological
- River management overall objectives, channel engineering, riparian zones, catchment control, fluvial changes
- The relevance of climate change to river conservation
- The recovery and rehabilitation of rivers and streams

How to register your interest

To receive the second circular (which will be issued in July or August), please contact: RiversConference2010@jncc.gov.uk





ECRR SEMINAR:
"Synergies between River
Restoration and River
Management focussing on
Natura2000 and Ramsar
sites"

26/29 May 2009 - Lelystad, THE NETHERLANDS

Forum on Integrated Water Resource Management 1/3 June 2009 - Université de Sherbrooke, CANADA

Stream restoration short course

1/5 June 2009 - Cromwell Valley Park near Baltimore, USA

8th World Wide Workshop for Young Environmental Scientists -- WWW-YES 2009

2/5 June 2009 - Paris-Créteil, FRANCE

World Environment Day
5 June 2009

Final conference of the Life
Nature project "Head water
streams" from
experimentation to
management of the Head water
streams
9/11 June – Dijon,
FRANCE

Our Living Rivers: the 6th
Canadian River Heritage
Conference
14/17 June — OttawaGatineau, Ontario and
Quebec, CANADA

Teaching Adaptive Water Management A Training Course for Instructors

12-14 May 2009 – Bonn, GERMANY Hosted by the UNU Institute for Environment and Human Security

The two-day training course is intended to familiarize university instructors with the teaching material provided in the Online Curriculum - Adaptive River Basin Management (http://www.newatereducation.nl).

The course will focus on both content of the modules, as well as the use of the materials in designing new programmes or incorporating these into the teaching curricula of the instructors who participate in the course. In addition, participants will learn about approaches to and methods for teaching Adaptive Water Management.

WHAT IS ADAPTIVE WATER MANAGEMENT?

The complexity of current water resource management poses many challenges. Water managers need to solve a range of interrelated water dilemmas, such as balancing water quantity and quality, flooding, drought, maintaining biodiversity and ecological functions and services, in a context where human beliefs, actions and values play a central role. Furthermore, the growing uncertainties of global climate change and the long term implications of management actions make water management problems even more difficult to address.

Adaptive Management involves learning from management actions and using that learning to improve the next stage of management (Holling, 1978). As defined by the NeWater Project, adaptive water management (AWM) involves increasing the adaptive capacity of the water system by putting in place both learning processes and the conditions needed for learning processes to take place. (C. Pahl-Wostl et al. 2005). Extensive information on AWM is available from the NeWater Project (New Approaches to Water Management under Uncertainty) see: http://www.newater.uos.de.

WHO THIS COURSE IS DESIGNED FOR

The course is aimed at current and future (i.e. PhD candidates) instructors of water management, primarily those teaching in centres of higher education, who are interested in including Adaptive Water Management concepts and methods in their teaching curricula. It is intended to increase their capacity to train the next generation of water managers.

APPROACH

The training course begins with an introduction to the theoretical foundations of adaptive water management. Participants will then work directly with the online curriculum using the available material in their own course design. A range of approaches to teaching adaptation will be demonstrated.

PROGRAMME

May 12 – course begins at 13.30

- Introduction to Adaptive Water Management: Concepts and Methods

Mav 13

- Orientation of the online curriculum - Design a Course

May 14 - course ends at 12.30

- Final Presentations of participants
- Next steps





<u>STREAM - Project</u> <u>seminar and site visits</u> 23/25 June – Salisbury, UK

<u>Green Week 2009</u> 23/26 June – Brussels, BELGIUM

European Water Resources
Association (EWRA) 7th
International Conference:
Water Resources
Conservancy and Risk
Reduction Under Climatic
Uncertainty
25/27 June – Limassol,
CYPRUS

SER Summer School -Restoration Ecology 2009 29 June/ 3 July 2009 – University of Münster, GERMANY

International forum on integrated water management - tools for ACTION:
1-3 June 2009 – Quebec, CANADA

International conference about water footprint 4 June 2009 – Madrid, SPAIN



Managing Natura 2000 rivers: restoration, monitoring and linking with the floodplain

24-25 June 2009 – Salisbury, England



STREAM (Demonstrating STrategic REstoration And Management) is a £1 million conservation project centred on the River Avon and Avon Valley Natura 2000 designated sites in southern England. It is one of the largest river restoration projects undertaken in the UK, and has developed a range of innovative techniques to restore, monitor and manage lowland rivers and floodplains. The project has take action on

- 1. River restoration
- 2. Linking river and valley
- 3. Monitoring
- 4. Raising awareness of the river system

Under the Water Framework and Habitats Directive, an increasing amount of river restoration work being planned across Europe. STREAM demonstrates practical aspects of how to plan, manage and implement a large programme of river restoration, develop detailed whole - river restoration plans, and integrate management of river and floodplain Natura 200 designated sites.

Conference aims

To demonstrate innovative techniques for restoring, monitoring and managing lowland rivers and floodplains.

Who should attend?

Anyone involve in river restoration, including river and fishery managers, specialists, academics and competent authorities from the UK and around Europe.

Costs

There is a small fee for attending the conference and dinner, and delegates are responsible for their own travel and accommodation costs. Discretionary discounts are available for students, participants from EC ascendancy states, Trusts and small NGOs.

Booking

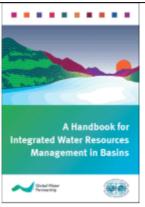
Places will be allocated on a "first come first served" basis. Please send and expression of interest to: elaine.swiffen@naturalengland.org.uk by 22 May 2009





PUBLICATIONS

A Handbook for Integrated Water Resources Management in Basins



Climate change, floods, drought, pollution, wastage, destruction of biotopes: in many countries, the seriousness of the situation requires a quick implementation of comprehensive. integrated and consistent management of water resources, aquatic ecosystems and lands. The experience gained in many countries in the world allow saying that this Integrated Water Resources Management (IWRM) should implemented on the relevant scale of the basins of rivers, lakes and aquifers, national whether local. transboundary.

The ministerial declaration of the World Water Forum, which has just taken place in Istanbul, goes in that direction and supports this approach. But significant progress should still be made everywhere in the world: Then how to pass from theory to practice? How to implement that on the field?

To facilitate this process, the Global Water Partnership (GWP) and the International Network of Basin Organizations (INBO) combined their efforts to write a Handbook on Integrated Water Resources Management in Basins, which was presented at the World Water Forum of Istanbul.

The purpose of this book, which required nearly one year of work and involved more than a hundred of professionals, members of the two

GWP and INBO networks, is to provide useful advice to improve governance of fresh water resources in the basins, using practical examples of projects already undertaken in various countries.

Its drafting was supervised by a Working Group, jointly chaired by Jean-François Donzier (INBO) and Martin Walshe (GWP) and made up of (ĠWP Technical Hartmut Brühl Committee). Moraes Oscar de Cordeiro Netto (Latin-American of Basin Organizations), Network (Mediterranean Teodoro Estrela Network of Basin Organizations), Alan Hall (Special Adviser to GWP), Vadim Sokolov (regional Water Partnership for Central Asia and Caucasus) and Reginald Tekateka (African Network of Basin Organizations and Southern Africa). It was coordinated by Aurélie Vitry for GWP and Daniel INBO. Valensuela for Close coordination was made with the work started by UNESCO on the same issue.

The handbook is addressing basin managers, water professionals and representatives of public authorities who have to make decisions related to water management and who must protect aquatic ecosystems, while trying to limit conflicts between the various users. The handbook also concerns non-governmental (NGOs. stakeholders professional users' organisations, associations. etc.) concerned by water uses or environmental protection and which are involved in activities in basins.

The Handbook is published in French and English. It benefited from a financial support of the French Ministry of Foreign and European Affairs. The English and French electronic versions of the Handbook can be downloaded free of charge.





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 <u>application form</u> in our website.

For request of information please contact

European Centre for River Restoration C/o Centro Italiano per la Riqualificazione Fluviale Viale Garibaldi 44/A 30173 Mestre – Venezia, ITALY

> Tel/fax: +39 041615410 e-mail: info@ecrr.org