



DLG
Service for Land and
Water Management



NEWSLETTER ECRR

INTRODUCTION

For the first time since almost a year a new newsletter has been brought out. As for all the changes that is going on for now, also the newsletter has got a new style, structure and content. We are still of course in the development phase. Neither this structure nor style will be definite for now. Hopefully, we can adjust with your input and help and can we come to one definite style at the end of this year. Also within the organisational structure there have been changes (see LATEST NEWS). We hope you enjoy reading it; we look forward to your comments and first impressions!

Secretary, Wim Zeeman & Mafasha Maharooof on behalf of the secretariat of ECRR

AGENDA

ECRR:

ECRR will have its first board meeting in Boekarest, Romania since the switch of the secretariat. The board meeting inclusive the seminar with other participants will be from the 6th of July until the 9th of July.

RRC:

Module 1- 'Understanding River restoration': Processes, ecology, planning and assessing potential. 8th & 9th June 2010, Britannia Hotel , Portland Street, Manchester UK.

CIREF:

The Second Technical Meeting in Zaragoza 1st and 2nd of June
http://cirefluvial.com/eventos_ver.php?id=35

CIRF and CIREF are organising together a visit of RR experts from Jordan to Spain. The visit will be funded by the Spanish Agency for International Cooperation and Development. Between 4th and 12th of May, visitants will learn from experiences on RR, environmental improvement of rivers and water efficient use (water treatment, saving and reuse) in Madrid, Corodoba, Doñana and Barcelona.

FORECASTER

Forecaster Project: End-user meeting Stream physical restoration; syntheses and methods for basin management. Lyon , 2010 June 2 – 4
Location : ISH Institut des sciences de l'homme, Marc Blosh room (4^e floor),
14 avenue Berthelot, 69007 Lyon.

E-COURSE

9th of April the first E-learning course on river restoration took place. INBO and ECRR joined their forces to propose to Basin Organisations management staff a course at a distance :The number of subscriptions were enormous; it had a three fold over-subscription.

This course was for an international wide audience who are River Basin Managers and Decision Makers from basin organisations, involved in the definition and implementation of measures, and from consultancies willing to expand their competencies.

People already involved in RR would not take advantage of this course – ECRR and their national components already propose in-depth courses for practitioners. The last session was held on 30th of April. In the next edition of the newsletter you will find experiences on this event.

LATEST NEWS

Bart Fokkens has retired and does not longer work at Rijkswaterstaat, he now only advisory work for Wetlands International and of course he still fulfil his role as being the chairman of ECRR.

Since January this year, the secretariat of ECRR does have a new home; Wim Zeeman had the honour to be the secretary of ECRR. Wim Zeeman works at the Government Service for Land and Water Management (Dienst Landelijk Gebied) at the central head office in Utrecht, The Netherlands.

In December last year the transfer of the secretariat from CIRF to DLG was prepared in Venice.



Also we would like to give our compliments to our colleagues of River Restoration Centre in the UK, where also our dear board member Martin Janes is active in, for the great work they done with organising the 11th annual network conference in York. We experienced this network conference as a very joyful, educative as well as a very inspiring week for us. The conference was an event where people come together to exchange experiences and to network. There was a total of 10 nationalities, of which 95% English.

Interesting to see was that every project was presented; regardless their size, from small projects to very big ones (e.g. 'the Houting Project' from Denmark). However, the main message of the conference was the period of minor problems has ended, and that it was the time to re-organise organisational and project systems. A good example for this new approach within a new system was the Houting Project. Where the initiative came to save the almost extinct fish specie 'houting' ended up in a total restoration of approx. 30 km of riversystems in only 4 years time, this included also the removal and/or the reorganisation of fish farms.

Remarkable was the fact that the English are way stronger in taking stakeholder participation into consideration in their projects than the Dutch do. This gave us a few nice examples how this could be tackled.

Furthermore there are a few fundamental researches done by the English. To name a few: the removal of weirs and taking into consideration the catchment of sediment in designing (see 'Sediment matters for successful river restoration'). These were examples where every river restorator has to deal with and benefit from.

We found out there is still a lot more to learn when it comes to ecologically restoring rivers in the Netherlands. Our English 'colleagues' had well examples of these, which we could use and bring in to practise.

ABOUT ECRR

We have a list of all the members or members in pre who we do want to invite for the meeting in July, and to do an inventory of all the people who do want to be present in Boekarest. The program will be soon distributed amongst the board, members and invitees.

This year will be a year full of developments and changes for ECRR, to start with; the new secretariat, and the new position of Bart Fokkens, our chairman, in his private life. Although Bart has retired and does not work for Rijkswaterstaat anymore, he still does work as an advisor for Wetlands International.

The website will hopefully be launched in begin of June; it will have a total new structure, style and organisation. We hope that these have improved in some ways the user-friendliness of the site. The structure of all the information has also been changed. Some new theme titles and sub-themes are made to categorise more easily the information and to find these. Hopefully the layouts will also suite everyone, for those who have seen the first draft in digital form were quite satisfied. Of course there is still a lot to be done, and we hope that the final result will be as satisfying as the first draft version. Please feel free to comment on any of the new product (s) that will be or is produced in the coming set of period and send your reaction(s) to:

W.P.C.Zeeman@minlnv.ln or M.Maharroof@minlnv.nl

Side channel near Gameren
along the river Waal in Holland



POLICY & REGULATIONS

In the UK...

The Water Framework Directive the Floods Directive and the Flood Management Plans have resulted in a host of new demands upon practitioners within both the FCRM and land drainage communities in the UK. Whilst there is a broad range of existing guidance on good engineering design and the application of mitigation measures, the array of guidance can create problems when trying to ascertain the most appropriate mitigation for new historic modification, and it is often difficult to ensure that the selected mitigation has sound scientific grounding.

The WFD Mitigations Measures Manual for Flood Risk Management and Land Drainage has been developed, jointly funded by the Environment Agency, SNIFFER and the Scottish Government, following a review of the scientific evidence base, as a single source of advice for a wide ranging of practitioners and river and coastal managers.

The First Cycle of River Basin Planning has led the Environment Agency to identify how it can achieve improved status for waterbodies through its own Flood and Coastal Risk Management activities. Around 400 measures have been identified already for delivery through flood risk capital schemes. Tools and processes are being designed to deliver mitigation measures to achieve GEP in heavily modified waterbodies, through asset management and operational activities.

Source: Conference book of: 'River Restoration Centre (RRC) 11th annual network conference'

About River Restoration

Denmark- 'The Houting Project- The largest nature restoration in Denmark'

In Denmark more than 350 species of plants and animals have been disappeared over the last 150 years. The fish called the Houting now definitely belongs amongst rare species.

To save fish species from complete extinction the Danish Forest and Nature Agency has initiated the Houting Project. Taken as a whole, the entire population of Houting in Denmark- and thereby in the world! - has been estimated to about 7000 spawners. Therefore, the Houting has been designated as a special priority species in the EU Habitat Directive. As a consequence, Denmark does have an imperative duty to protect the species and improve its survival.

Previous restocking attempts in Denmark have not been successful, as they were not followed up by a habitat restoration.

Today we know that a total restoration of the habitat is necessary for the Houting to survive and once again become common. The project amongst other measures therefore includes removal of obstacles, creating new spawning grounds and nursery areas.

The EU LIFE funding financially supports the Houting-project with €8 million of a total budget of €13.4 million. At the end of 2010 four Danish rivers will be restored in this Houting project.. The project will have:

- Removed 13 obstacles
- Given access to additional 130 km new river habitats
- Eliminated mortality of drifting fry past fish farmers
- Created new spawning grounds
- Restored approximately 30 km river
- Created 500 ha new nursery areas

For more info: www.houting.dk

Source: 'Conference book of: 'River Restoration Centre (RRC) 11th annual network conference', - Danish Forest and Nature Agency, Regional Office Wadden Sea Skovridervej 3, DK-6510 Gram, Denmark.

Europe

FORECASTER is an European project that has been selected for funding from the 1st call of the [IWRM-NET](#). It is funded by various national organisations across Europe. The project aims at linking river restoration science with practice to support the implementation of robust, cost efficient rehabilitation strategies for improving rivers and floodplains. The main objective of the project is assessing research output and case studies concerning the ecological effects of hydro-morphological degradation and positioning hydromorphology in river rehabilitation strategies. The focus is on the effectiveness to enhance hydrology, morphology and aquatic ecology (fish, aquatic

flora, benthic invertebrates). The two-year project started at the end of 2008 and will be finished this autumn.

To give end-user access to the information **FORECASTER** has developed a web-based geowiki tool (<http://forecaster.deltares.nl>). This tool is a knowledge and information system relating hydromorphology and ecology of European rivers. The system presents a compilation of case studies describing the output from river restoration projects as well as knowledge on the impact of pressures and the effectiveness of restoration and mitigation measures. It is intended to help practitioners by presenting experiences about success or failure of the application of different measures. The tool is based on a combination of Google Maps and the WIKIPEDIA approach. Thus users can consult the tool either geographically or by theme. Moreover they can become a contributor. As contributor, people can enter new case studies on river restoration or improve existing information in the webtool. To be able to contribute a simple registration is required.

Facilitating the application of Output from REsearch and CAse STudies on Ecological Responses to hydro-morphological degradation and rehabilitation (FORECASTER)

Contactpersons:

Forecaster project: Prof. dr Ian Cowx (I.G.Cowx@hull.ac.uk) or any of the participating institutes

Forecaster webtool: dr Yenory Morales Chaves or dr Tom Buijse (forecaster@deltares.nl)

Source: Tom Buijse

UK

Britain's upland rivers are characterised by moderately steep single thread wandering channels that exhibit frequent gravel transport and slowly shifting channel pattern. Efforts to engineer these channel systems has resulted in rapid and often negative channel response with erosion and deposition common in both rural and urban areas. The failure to recognise the dynamic nature of these channels and to consider the character and impact of sediment transport are the primary causes of these problems. Sediment accumulation through engineered sections is perceived to be problematic due to the loss of flow capacity and efforts have been made to control this through sediment trapping.

A protocol is presented that places sediment transport/management studies at the forefront during the design stages of river engineering and enhancement works offering a range of assessment methods often readily available to the hydraulic engineer. The potential benefits of adopting such a protocol in terms of sustained stability and economics are discussed.

Source: 'Conference book of: 'River Restoration Centre (RRC) 11th annual network conference', - JBA consulting, The Brew House, Wilderpool Park, Greenall's Avenue, Warrington, WA4 6 HL, England. University of Salford, School of Environment and Life Sciences, Peel Building, Manchester, M5 4WT, England-

: a new catchment wide strategy

Described as 'the river that changed the world'¹ the Mersey has been at the heart of the evolving cultural landscape of the northwest, from the Pennine fringes to the Irish Sea coast.

An axis of manufacturing and trade during the Industrial Revolution the River Mersey continued to be at the heart of the economic growth of the region into the 20th century. However, this came at a

¹ 'Mersey- the river that changed the world' - 2007. Published by Bleucoat Press ISBN 1 872568 55 5

great cost to the river in terms of pollution, leaving the system as the most polluted and degraded in Europe.

However, the past 25 years has seen a turn round in water quality, with the river now supporting salmon in some limited reaches. Despite the success of dealing with the water quality the river and its corridor still have a legacy of poor and fragmented habitats, extensive flood defences and an adjacent population of 5 million who largely turn their backs on the river.

To address this, 'The Mersey Life Project' was developed. This project is seeking to realise the socio-economic and ecological potential of the river and its main tributaries by making it a great place for people and wildlife.

The Portfolio of projects for Mersey Life contains over 160 schemes, which, for example, involve the restoration of 400 hectares of flood plain, 35 km of river channel and 870 hectares of riverine woodland management. Integrated with this are 100 schemes to enhance access and recreation including improved fishing access to 60km of river and schemes to introduce art and address safety issues along urban reaches of the river. The Portfolio approach also insists in developing collaborative processes and partnerships between key agencies and interest groups.

Source: 'Conference book of: 'River Restoration Centre (RRC) 11th annual network conference', - Katherine Causer, Environment Agency, North West Region, South East Area Office, Appleton House, 430 Birchwood Boulevard, Warrington, WA3 7WD, England. Peter Worrall and Gene Hammond, Penny Anderson Associates Ltd, Park Lea, 60 Park Road, Buxton, Derbyshire, SK17 6SN, England. Martin Janes, Environment Agency, North West Region, Central Area Office, Lutra House, Dodd Way, Walton Summit, Bamber Bridge, Preston, Lancashire, PR5 8BX, England. Steve Maslen, Maslen Environmental, Salts Mill, Victoria Road, Saltaire, Shipley, BD18 3LF, England.

LITERATURE



Sediment matters for successful river restoration

Sediment is an important part of a healthy river system and is an essential component of many aquatic ecosystems. Impacts can relate to a wide variety of concerns that include habitats, flood risk,

water quality and amenity. Our changing climate also means that these impacts could increase in the future importantly.

The EU Water Framework Directive requires sediment pressures to be identified and any risks managed in order for watercourses to meet good ecological status. Given the range of potential impacts there is a need for a tool that can be used by a wide range of non-specialist users to help understand catchment sediment issues.

In view of this, Atkins Ltd is currently developing the 'Sediment Matters Handbook' for the Environment Agency. A draft of the handbook has been produced and it is currently being piloted across 10 UK catchments, its due for publication in 2010. The approach that has been developed to enable users to:

- Understand catchment sediment dynamics
- Identify sediment- related problems
- Devise sediment monitoring programmes and collect evidence of sediment related problems
- Focus management and restoration for multiple benefits

Source: 'Conference book of: 'River Restoration Centre (RRC) 11th annual network conference', - 'Sediment matters for successful river restoration'. Jo Shanahan, Atkins Ltd, the Octagon, Pynes Hill Court, Rydon Lane, Exeter, EX2 5AZ, England. Natalie Philips, Environment Agency, Olton Court, 10 Warwick Road, Olton, Solihull, B92 7HX, England.

Publication magazine H2O

In the Netherlands more and more streams are being 'restored'. The Dutch regional water authorities are currently busy removing the weirs in the Dutch river areas to give the streams the opportunity to restore themselves into their natural morphological structure.

About these morphological effects after natural restoration of streams is currently not much known in the scientific world.

Therefore the Dutch Service for Land and Water Management (DLG, Dienst Landelijk Gebied) has given Royal Haskoning and the University of Twente the assignment to do in-depth research about the morphological effects of some of these straightened streams in the land division- project of Saasveld-Gammelke in the area of Oldenzaal.

In this publication of DLG, you can find the outcomes of the research done by Royal Haskoning in coöperation with the University of Twente. Also you can find calculations made with a one-dimensional hydraulic and morphological model and the outcomes of this.

This publication is in Dutch.

Source: Dutch Title: 'Morfologische effecten van ontstuwing en hermeandering beken.' English Title: 'Morphological effects of the removal of weirs and re-meandering of streams.' Translator: F.M. Maharroof