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Introduction

Dear readers,

It is already summertime, normally a calm period at work. Nevertheless, lots of efforts have been made on the river restoration front. In this third ECRR newsletter of 2013 you will find reports about lots of activities and interesting events that will take or have taken place.

Within a few weeks, from September 11-13 this year ECRR, in close cooperation with the ICPDR and the RESTORE project, will organize the 5th European River restoration Conference in Vienna. In this edition vou can find the latest information about this event. For more information I refer also to the special website of this event: www.errconference.eu

As always, the newsletter offers you interesting knowledge, information and an overview of activities and upcoming events. Anders Iversen provided us with two articles about the river restoration network and restoration of wetlands in Norway.

This edition also contains an article about the REFORM wiki-tool, as well as a short

report of the RESTORE course that was held in Utrecht in June this year. In addition you will find short articles about the European Eel Conference in Londen, the Rivers and Energy symposium in Australia as well as an article about the 2014 World Fish Migrating Day.

Last but not least, in this newsletter is a special item about the future strategy of ECRR, prepared by the secretariat and the chairman of ECRR, Bart Fokkens announced. This new strategy has recently been approved by the Board.

I wish you pleasant readings and hope to meet you in Vienna.

Hil R. Kuypers Secretary ECRR



Sessions at the RESTORE/RRC training course in Utrecht



On Tuesday 25th and Wednesday 26th June 2013 over 35 river restoration practitioners from ten European countries gathered in Utrecht, the Netherlands, for a river restoration training course run by the UK River Restoration Centre, in coordination with the RE-STORE partnership.

Martin Janes from the UK River Restoration Centre opened the training course with a brief introduction to RESTORE and the (new) Manual of River Restoration Techniques, which provided the base of the learning material for the course. The aim of the course was to teach the importance of understanding your river characteristics (sediment, hydrology and vegetation); what techniques are appropriate for your river; SMART (Specific, Measurable, Achievable, Realistic and Time-bound) objective setting and how to monitor your project and carry out adaptive management - if necessary!

Diving straight into the big issues of river restoration, Jenny Mant (RRC) continued with a session focussed on hydrology and sedimentology, which are the main components driving river processes in the catchment. Then it was back to Martin Janes and a session on restoration ecology - linking river processes to functional habitats and ecology.

The final morning session, presented by Miloslav Šindlar and Martin Krejza (Sindlar group/Czech River Restoration Centre), provided a case study example from the River Žichlínek, Czech Republic. The formerly straightened River Žichlínek flows through a low gradient, bare, agricultural landscape. Historical maps suggested that the river previously had a meandering plan form. However, due to large scale catchment change (such as land drainage and urbanization) an exact re-recreation of the old river form and proportions was not appropriate. Instead, a new shallower channel with a meandering plan form was constructed together with riparian vegetation, river-floodplain reconnection and wetlands with a retention capacity of 6,000,000 m3



In the afternoon Bart Peters (Bureau Drift) led a site visit to 'Gamerensche Waarden' near the village of Gameren on the Waal branch of the Rhine. In 1996 a restoration project aiming to create dynamic backwater areas as part of the "room for the river" programme was undertaken. Clay mining which had historically taken place created ideal areas for backwater channels. The scheme has been a success with local people who enjoy free access to the site to engage with nature. An extensive monitoring programme has taken place at the site.



At the start of the second day Martin Janes gave a short introduction on the issue of how to set project objectives. He stressed the importance of considering physical and ecological starting conditions and connecting aims, such as improving river processes, with more specific ecological targets. He also focussed on the importance of setting "SMART" objectives.

Michelle Berg (Water board De Dommel, the Netherlands) demonstrated river restoration experiences in the Netherlands. She presented the "HOW" (Handreiking ontwikkeling waterlopen) - a restoration and Water Framework implementation guide published by the Southern regional water authorities. The Beerze re-meandering case study was used to illustrate problems and opportunities of designing and implementing river restoration.



Alain de Vocht (Centre for Environmental Sciences, U-Hasselt, Belgium) showed an example of restoration on the River Witte Nete, a channelized stream with potential for creation of fish-habitats, especially for Bullhead and Spined Loach. After having remeandered the river, monitoring data showed that the dynamics of stream velocity and sedimentation was higher than expected.



Jenny Mant presented recommendations about how to "deliver project aims" illustrated by examples from Mayesbrook and the River Brent in London. She stressed the importance of strategic monitoring as an integral part of project planning, as well as the

need to make targets and monitoring "SMART". Aspects such as cost effectiveness of monitoring and the concept of estimating risks and scales were explored. She also stressed the importance of using monitoring and evaluation outcomes to guide adaptive management.



After lunch an interactive site visit was held at the "Lunterse beek", near the Village Renswoude. The restoration project finished in 2011 and covered a length of 1500m. By removing weirs and giving the river some space (20-30m width), natural erosion and sedimentation processes were encouraged. An intensive monitoring program of hydraulics, hydro morphology and ecology has been undertaken by students. The first results are promising. The variety in velocities has increased and habitat conditions are improving. However, upstream agricultural land-use is still limiting improvements of water quality. An exercise was carried out where participants explored ways of monitoring this type of project and discussed their findings enthusiastically.



Rivers and energy: new paradigms in a changing world

Rivers and river basins are important centres for a wide range of energy sources from conventional hydro-based energy to hosting important developing sources of unconventional energy. Population expansion, society expectation, changing demographics and the associated evolving economics of human development are highlighting the importance of the linkages between water and energy and in particular those of rivers and energy. Energy naturally produced by rivers and moving water has long been harnessed to deliver clean and consistent power. As our energy demands increase with increasing population and economic development, sourcing "greener" supplies of energy are expanding interest in hydropower and its potential in a range of developed and developing regions.

Biofuels, gas and other "greener" energy sources are also being developed as additional long term energy alternatives. These energy sources are dependent on a stable and clean water supply. In many cases, we are only just beginning to investigate and understand the impact of extraction and potential contamination issues around these "greener" energy sources.

Increasing development and the ever-growing impact of climate change is increasing the pressure on freshwater resources as well as the important river mouth regions.. The movement of water large distances across basins and regions is becoming increasingly necessary in times of water scarcity, but is extremely energy intensive.

These topics and more will discussed as part of the 16th International Riversymposium (23 – 26 September 2013, Brisbane, Australia) with an entire theme dedicated to exploring river – water – energy linkages. We are excited to welcome Rohan D'Souza from the Centre for Studies in Science Policy at Jawaharlal Nehru University in India as a keynote speaker on the **rivers and energy** theme. Convening partner sessions and presentations discussing alternative energy sources, energy security, hydropower and impacts will also be included in the four-day program.

The 16th International Riversymposium will provide a unique opportunity to connect the energy, food and water sectors in order to build the knowledge base and capacity to inform policy decisions regarding rivers, energy and food.



Tim McLennan CEO, International Energy Centre

www.riversymposium.com

Norway restoration network update

Annual restoration conference

The third annual, national Seminar on River and Wetland Restoration was arranged in Norway on November 21st 2012, as cooperation between the Norwegian Water Association, the Directorate for Nature Management, and the Directorate for Water Resources and Energy. The seminar brings together professionals from government, research, companies and NGOs. Participation increased from about 45 in 2011 to more than 60 attendants in 2012.

Inspiring introductory keynote speeches were made by Toni Scarr (RESTORE project manager), Jukka Jormola (RESTORE north region) and Bart Fokkens (ECRR chairman), setting the restoration efforts in a proper frame of the global World Water Forum Targets, as well as the European Water Framework Directive and Blueprint, and the benefits of developing and sharing best practices through the RESTORE and REFORMN projects. These presentations can be seen at the Norwegian Water Association website. The visitors were also taken on a field excursion covering two urban restoration sites close to the meeting venue in Trondheim.

The sessions on ongoing activities in Norway focused on the following issues:

- A new national four-year plan for the restoration of 10 selected wetland sites (see details in separate article).
- · Restoration of habitats and migration for fish.
- Restoration for improved water quality (buffer strips, sediment retention etc).

Presentation in these sessions were given in Norwegian, but can also be viewed at the Norwegian Water Association website

Preliminary planning has started for the next national seminar in late 2013.

Restoration network website

The Norwegian restoration network website was established in early 2012 and contains:

- news and information on relevant national and international conferences
- a list of national and international literature on restoration and rehabilitation issues
- links to restoration centers like the ECRR, RCC, CIREF etc. Members get automatic e-mail messages when new items are added to the website. The network website is administered by the Directorate for Nature Management, as part of the national web-site for implementation of the Water Framework Directive. The website is in Norwegian, but can be viewed at www.vannportalen.no/restaurering.

Contact for the restoration network and website in Norway: Anders Iversen at the Norwegian Directorate for Nature Management.

E-mail: anders.iversen@dirnat.no

Norway to step up wetland restoration

By: Gunn E. Frilund, senior advisor, the Norwegian Environment Agency.

The Norwegian Environment Agency has made a preliminary fouryear plan for the restoration of wetlands, which was delivered to the Ministry of Environment in October 2012.

Particularly the productive areas in the lowlands of Norway are prone to massive pressure, and the need for acreage is increasing. Major flood plains and deltas are used for buildings, infrastructure measures, primary and secondary industry. Rich mires have also become directly degraded by physical intervention, which has given them status as endangered in «the Norwegian Red List for Ecosystems and Habitats». The maps of trends in "Nature Index of Norway" also show that the condition of marshes, springs and floodplains in both lowland and upland areas are negative in most parts of the country. The situation needs to be considered as very severe for some areas, covering protected and non-protected areas. For protected areas, the influencing factors are found partly inside but especially outside the boundaries.

This plan is made on behalf of the Ministry of Environment, and in co-operation with the County governors. The County governors have been in contact with local authorities and relevant landowners. The Environment Agency has also put emphasis on co-operation with the agricultural sector and authorities for water management and water resources..

Four major criteria have been particularly emphasized when selecting areas:

- · Potential for major improvements in ecological status.
- Ramsar status.
- Known presence of several red-listed species / habitats.
- · Locations that are highly prioritized by the County authorities.

The main focus has been the restoration of protected areas, but also areas outside protected areas have been included. Based on these criterias, 15 potential restoration areas were selected in the early phase, the preliminary list of candidate areas was consulted with a number of authorities, NGOs, relevant municipalities, landowners in areas outside the protected areas as well as other affected parties.

The preliminary plan now presents ten selected areas that will have major positive effects from restoration. Implementation of the plan will improve ecosystem service production in Norway, e.g. increased flood control, protection of biodiversity, and recreational benefits for people. Eight of these sites are protected areas by law, but several of these areas also include non-protected areas. The last two projects are mainly planned in areas without such protection status. Some of the projects have also generated a lot of positive attention from media. There has not yet been revealed any significant disputes in relation to the planned restoration of these sites.

The restoration work is roughly estimated to cost approximately NOK 65 million ex. VAT (close to 9 million Euros)

The Norwegian Environment Agency has now started the detailed planning phase for three projects: Slevdalsvann nature reserve, Rinnleiret nature reserve and Gjølsjøen nature reserve, as a first step in implementation of the plan. Hopefully, actual restoration work will start in the first two of them, Slevdalsvann and Rinnleiret, in 2014 and 2015, respectively.







All the pictures show Slevdalsvann nature reserve in Vest – Agder county, has an urgent need for restoration and a restoration project are now planned.

Join the World Fish Migration Day 2014

24 May 2014

Restoration of rivers and migration highways

The World Fish Migration Day 2014 calls attention to restore the connections worldwide between rivers and the sea to create safe migration routes for fish. Free migration of fish is necessary to achieve healthy fish stocks and productive rivers. Many species, like salmon, sea trout, dorado, shad, giant catfish, sturgeon and eel, migrate between the sea and the rivers. These species are particularly threatened by barriers such as weirs, dams and sluices, built for water management, hydropower and land drainage. In many places globally, like the Mekong River, people rely on migratory fish as their primary source of protein. Water and resource managers around the world are striving to find ways to improve migration possibilities for fish in and out of rivers, and deltas and the oceans, all of which they need to survive.

The Concept

World Fish Migration Day is developed to improve the publics understanding of migratory fish and their needs. Raising awareness, sharing ideas, helping develop commitments and building communities around different basins



around the world are essential aspects of fish passage and river restoration issues. We are connected by a common purpose and are already sharing ideas and lessons across the world.

On this World Fish Migration Day 2014, we will connect with celebrations and (field) events that start in New Zealand, and follows the sun around the world and end as the sun sets on the west coast of North America. We have more than 35 locations worldwide, that will be visited and are looking for more organizations that want to join us. With these



events, we will show and educate citizens around the world about the importance of fish migration and healthy rivers. We will also highlight all projects through the website, social media and media to draw attention to our purpose. A map with all the locations can be found at: http://www.wanningenwaterconsult.nl/en/products/worldfish-migration-day-2014

How do we work?

Participating organizations will organize their own event and arrange their own outreach communication under the umbrella of the World Fish Migration Day. The organizating hub is Wanningen Water Consult partnering with WWF and TNC. This partnership will take care of the central coordination, will develop and maintain the main website where events are posted and organize the communication and publicity worldwide by collaborating with worldwide organizations like IUCN, WorldFish and other existing networks. The central website www.worldfishmigrationday.com will be online in October 2013.

Interested organizations or event planners should email:

herman@wanningenwaterconsult.nl or call 00 31 6 18 27 25 72

The World Fish Migration Day is supported by:







IMF European Eel Conference: Breaking Down Barriers!

The Institute of Fisheries Management (IFM) European Eel Conference opened on 26 June in the famous Fishmongers Hall in the London City and at the bank of the Thames with an address by Lord de Mauley, Parliamentary Under Secretary of State for Resource Management, the Local Environment and Environmental Science at DEFRA; and was closed on 27 June with a speech by Stuart Agnew MEP, one of the 25 members of the European Parliament's Fisheries Committee.

European eels only spawn in the Sargasso Sea, but their elvers reach every European country by sea and river.

David Righton and Alan Walker of the Centre for Environment, Fisheries & Aquaculture Science gave a fascinating description of their latest research into the behavior of eels during their lives in marine and freshwater environments, and their observations of the strategies used by the European Eel to survive and evolve. Using satellite tagging, this new research showed that the return migratory behavior of silver eels was not impaired by their trans-location as glass eels as part of restocking projects. They also emphasized that the eel is just one population for the whole of Europe and North Africa. Their studies of the eels' life history showed extensive evidence of significant eel coastal populations and their movement between sea and fresh water. Both these scientific approaches emphasised the importance to the recovery programme of free migration pathways.

Speaking at the conference, the Chairman of the ECRR, Bart Fokkens said that 80% of European rivers travel through two or more countries, and therefore a coordinated multinational approach is essential for eel recovery in Europe. He described the opportunities and challenges presented by the geography of the European river network and gave examples of coordinated



Photo courtesy of Paul Coulson, Institute of Fisheries Management UK

multinational initiatives that are benefiting eel recovery. The conference drew nearly 200 academics, politicians and eel specialists keen to discuss the best ways of accelerating the recovery of the European eel and migratory fish. Experts from Denmark, Sweden, Holland, Germany, UK, France, Portugal and Italy all updated the conference on how the Eel Management Plans in their countries were delivering better access to waterways for eels to migrate, grow and mature.

Summing up the conference, Andrew Kerr, Chairman of SEG said "We heard how migratory pathways are being unblocked, tens of millions of eels are being restocked in inland waterways, more successful aquaculture practices are being researched, and policy makers are engaged, listening and encouraging new initiatives".

For further information on the conference and about SEG Click here

5th European River Restoration Conference and European Riverprize Gala!

The 5th River Restoration Conference – from 11-13 September in Vienna - is coming closer and closer. Almost all keynote speakers are known already, see the conference e-newsletter: ERRC2013 Newsletter #5 July 2013. More than 50 technical presentations will be given and about 50 posters have been announced. The presenters (oral and poster) come from 25 countries and take part in an interesting program consisting of 14 sessions with 13 themes. Information about the session programs can be found on http://www.errc2013.eu/images/pdfs/DRAFT_PROGRAMME_ SESSIONS.pdf. In three side events the four European Riverprize finalists, the REFORM Project and a Community of Practice on River Restoration and Integrated River Basin Management will be presented. Three field excursions will demonstrate the practices of river restoration along the Danube and Morava river. Furthermore the European Riverprize winner will be awarded during a special Gala. In the meantime about 300 delegates are registered now. After the conference, in the autumn a special edi-

tion of the ECRR-newsletter will report the conference results, outputs and outcome. See for more information www.errc2013.eu



ECRR's Strategic Intent 2013 - 2016

Introduction

The European Centre for River Restoration (ECRR) is the network to promote and facilitate knowledge exchange on river restoration throughout greater Europe¹, a.o. by supporting the development of best practices. The ECRR defines river restoration as "...a large variety of measures aiming at restoring the natural state and functioning of the river and the riverine environment. By restoring natural conditions and processes, river restoration aims at providing the framework for the sustainable multifunctional use of rivers".

A number of developments call for a new ECRR Strategy for the period 2013 – 2016. Important elements for this revision are:

- · The developments in National and EU Water policies;
- The new to be implemented EU Water Blueprint;
- Findings and follow up activities of the WWF6 (Marseille, 2012):
- · Development of river restoration best practice examples;
- Capacity development, including institutional development in water management / river restoration and integrated river basin management;
- The anticipated hosting of the RESTORE and other wiki tools.

Values and Mission

Regarding the present situation the ECRR is a well established and well-known network, which has an increasingly active voice in river restoration across Europe, and offers more and more value to its members and the EU. The current ECRR outputs (website, newsletter and events) are considered as a bare minimum to keep the network alive. Several aspects call for improvements:

- Not all countries are represented in the network;
- The sphere and extend of influence of the ECRR can still be extended (in terms of countries and sectors reached);
- The diverse range of local situations and contexts across all the different countries is insufficiently covered in ECRR communication outputs.

The ECRR is widely considered as a key network to promote and enhance river restoration throughout Europe. The ECRR is the authority on river restoration in Europe, and is respected by the EU, national governments, and the general river restoration community in greater Europe as an influential voice.

The ECRR acquires this position, despite its modest means, by making the most out of the active involvement of its (national) partners and the members/contacts. Funding is generated by marketing ECRR products and services (charging fees for events, offering place for advertisements in the newsletter and on the website, etc.), and by donor and sponsor contributions.

The ECRR is an independent organisation, free to voice opinions, irrespective of the interests of partners and supporters. Relevant sectors for the ECRR are formed by practitioners, researchers, policymakers and private companies.

The following tagline will be used together with the ECRR logo: "The network for best practice river restoration in greater Europe."

Ambition and strategic action plan

In order to give the network a more solid base, more involvement of members, partner organisations and the National Centres is needed. ECRR defined its ambitions and strategic actions to be taken for the coming years. These are:

- Strengthening and extending the network, and striving towards better collaboration (both within the network and to the outside world);
- Start up and evaluate initiatives (pilots, communities of practice, river works);
- · Develop and initiate active relationships with governments;
- Strengthen / build up donor and sponsor relations;
- Taking an intermediate role between policy making and implementation, among others by organising events, producing guidelines, manuals, and policy reviews;
- Taking over the wiki-tool (online river restoration project databases) of RESTORE (finishes by the end of 2013).

The Board of the ECRR has set the ambitions for the coming year and first draft action plan to develop and implement the new strategy has been outlined. But input from the partners and the wider network contacts is needed to set the final tasks and goals for the ECRR for the coming years.

Provide us with your feedback!

In order to measure how well ECRR reaches its goals, to hear what can be improved, and how you feel about the general outline of the new strategy as presented here, we would like to gather your feedback.

Filling in the questionnaire will help us to learn what ECRR members value about the ECRR, what issues and activities ECRR should focus on in the future, and if members would like to become more actively involved. This will in turn be useful to you, as you can benefit from our improved outputs and activities.

We kept the questionnaire as short as we could- it should take you only about 5 minutes. Please don't hesitate and go to http://www.surveymonkey.com/s/LQSWR7C.

¹This European region comprises: the European Union, the Candidate countries to the European Union, Norway and Switzerland, the Balkans, Eastern Europe, Belarus, Moldova, Ukraine, the Russian Federation, the Caucasus, Armenia, Azerbaijan, Georgia.

Events calendar For events in other continents please consult the website

Date/periode	Titel/issue	Location	Links
18 Aug 2013	11th Intecol International Congress Of Ecology	London, UK	http://intecol2013.org/
27-08-2013	The 8th International Conference on Geomorphology of the International Association of Geomorphologics	Paris; France	http://www.geomorphology-iag-paris2013.com
11-13 Sept 2013	5th European River Restoration Conference	Vienna, Aut	www.ERRC2013.eu
15 Okt 2013	Hymo Restoration of Rivers	Namur, Belgium	http://www.colloque.walphy.be
4 - 8 Nov 2013	International Water Week (IWW)	Amsterdam, Ne	http://www.internationalwaterweek.com/
12- Nov 2013	Hydromorpholoy and hydropower challenges and practise	London UK	
8 – 9 april 2014	Water and Environment	London UK	http://www.ciwem.org/events/annual-conference
24- May 2014	World fish migration day	Many places: herman@wannin- genwaterconsult.nl	www.worldfishmigrationday.com from october 2013
3- 8 aug 2014	9th Society of Ecological Restoration Conference	Oulu Finland	http://www.ser2014.org/

REFORM wiki now online

How can river managers find knowledge and know-how for the design and implementation of river restoration projects? Useful information is scattered over specialized scientific publications, often mono-disciplinary, as well as over a myriad of project reports. REFORM's answer is to structure the access to knowledge and know-how by means of a wiki. The first version was launched at the REFORM Stakeholder Workshop (Brussels, 26-27 February 2013) and is now available online for the general public.

Read more



Call for articles

The newsletter of the ECRR should also be a way to share with one another what interesting work is being done, information about seminars or literature.

One way of doing this is by writing an article of any project, event or literature you may be acquainted with. Send this article *(maximum of 500 words)* to the secretariat of the ECRR at info@ eccr.org.

We will take a close look to the content and if it is coherent with the philosophy of ECRR (ecological river restoration and sharing knowledge) your article will be published with pleasure in the next edition (s) of the ECRR Newsletter.

The secretariat of the ECRR hopes to receive any article on ecological river restoration from any of its members.

Free Membership ECRR

All who are interested in river restoration and sustainable water management are encouraged to join.

Members receive the ECRR newsletter approximately four times per year, and are the first to be informed about activities by the ECRR, its members and partner organisations.

To register, go to www.ecrr.org, and click contact.



Secretariat: DLG Government Service for Land and Water Management, P.O.Box 20021, 3502 LA Utrecht, The Netherlands | www.ecrr.org. Executive secretary Mr. Hil R. Kuypers. If you do not wish to receive the ECRR newsletter in the future, please send an email to info@ecrr.org with the subject "unsuscribe". This will also terminate your ECRR membership.