## Editorial

The ECRR’s mission includes ‘Connecting people and organisations working on river restoration and management’ as an important mean to support the development of best practices of river restoration and management and to exchanging information about river restoration. And the ECRR aims to be an authoritative voice on river restoration in Europe, and is respected by the EU, governments and the wider restoration community in greater Europe, backed by its formal network of members. Many of the ECRR’s audience will share our main objectives and can be equally committed for furthering river restoration across Europe. Others will need convincing of its merits and application, depending on the audience type. These are differentiated as river restoration practitioners, policy makers, researchers, NGO’s and the private sector.

This newsletter testifies how this part of the mission is brought in practice in different manners, like by the questionnaire about ECRR communications, the ECRR general members meeting, participating in conferences and seminars, stimulating national river restoration centres, supporting of the WFD Review campaign and the call for collaboration on river barrier location, removal and mitigation in Europe. By this way, already only in a couple of months hundreds to thousands of people are directly and/or indirectly contacted and connected. The proof for us that this is much appreciated, is the willingness amongst the audience to write articles for our newsletter. From the questionnaire we learned that ECRR has a strong and positive reputation. But also, that we can strengthen our communications and network, by making sure that our mission, brand vision and values are used in all our communications. For example that our members and 2500 followers in greater Europe actively share knowledge. Learning about practices in other regions and countries broadens perspectives and generates new ideas!

You can convince yourself about this by reading the articles on the different subjects. The summary report of the ECRR’s General Members Meeting 2018 as well as the results of the communications survey, give a good insight in ECRR performance and developments. The article on the continued success of the Norwegian Restoration Seminar proofs the importance of and wide interest in international river restoration knowledge sharing. The Water Campaign calls specifically the public to join the WFD Review (Fitness check) process, while the EUROPE – INBO 2018 report calls the river managers to do so. The Dam Removal Europe Seminar report and the AMBER project article create awareness and provide guidance on the river continuity barriers locations, removal and mitigation specifically with respect to fish migration.

And this is not all, because the event calendar shows you many other opportunities to meet, speak and connect with other people in 2019. We are looking forward to meeting and supporting you soon again.

Bart Fokkens, ECRR and Wetlands International  
Francisco Martinez Capel, CIREF  
Timur Pavlyuk, RosNIIVH

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ECRR General Members Meeting 2018 dinner hosted by Wetlands International European Association © Francisco Martinez Capel
A stimulating General Members Meeting European Centre for River Restoration 2018

ECRR’s General Members Meeting 2018 was held on 13 and 14 November and hosted by Wetlands International – European Association in Ede, the Netherlands. The formal Members Meeting was on day one. First of all, a new member was welcomed, the Swedish Agency for Marine and Water Management. Besides a mini-symposium and field trip were held on the second day. Moreover, participants exchanged practices of Water Framework Directive implementation in different European countries.

The ECRR has 16 member organisations across greater Europe including government agencies, topic centers and NGOs working in the field of river restoration. At the Members Meeting, the ECRR members discussed the past year’s activities, the network’s strategy and the workplan for the upcoming year.

In 2018, Wetlands International and the ECRR joined forces in a collaborative workplan to enhance the RESTORE RiverWiki (a case studies platform for promotion of best practices of river restoration), to evaluate the ECRR’s communication channels and define ways to further develop its brand identity and lastly, to support an ECRR submission to the European Commission’s Fitness Check of the Water Framework Directive. The symposium and field trip on day two were organised by ECRR’s member, the Dutch Foundation for Applied Water Research, (STOWA). It was joined by members of the Dutch Community of Practice for Rivers and Streams. In the morning, after introductions of Ernest de Groot, chairman of the Dutch Community of stream and river restoration and ECRR’s chairman, Martin Janes from the RRC in UK, participants from Finland and Norway presented practices of river connectivity restoration and examples of how river restoration supports the objectives of the EU Water Framework Directive. STOWA presented its publication on (eco)system analysis for river restoration, specifically for implementing cost-effective measures for the improvement of ecological water quality, based on Ecological Key Factors (EKFs);

http://watermozaiek.stowa.nl/upload/Publicaties%202017/digitaal.pdf

The Swedish Agency for Marine and Water Management to develop a national ecological river restoration manual and policy. Mr. Erik Årnfelt is the leading person for this work. He has experienced the extensive information and documentation, accessible through the ECRR website, as very useful in the process. The Agency anticipates a great need for information exchange in the upcoming work and for this reason the Agency applied for a full membership of the ECRR, already fully meeting the conditions, amongst others:

– The Agency is at the ministerial level recognized as the national Centre for River Restoration.
– It has an active national network, primarily governmental, but through the implementation of the restoration policy gradually extending to other parties.
– The Agency will organize regular national thematic river restoration meetings, workshops, seminars etc. to promote river restoration and exchange river restoration best practices.

Moreover, the Agency is enthusiastic to participate in the ECRR Pan-European river restoration community and contribute jointly to the improvement of the state of the Pan-European rivers and other water bodies according to the requirements of the European Water Directives and the UNECE Convention.
The explanation of our colleagues from STOWA demonstrated that having a better and practical understanding of the factors influencing aquatic ecosystem functioning can help define specific measures as well as policy goals.

During the field trip, the group visited a project on small river restoration at the Renkums Beekdal. The water authority explained how it had integrated ecological and heritage values during the restoration of the brook valley. The next stop along the Waal river showed a more technical solution for reconciling inland navigation and ecology in a large lowland river by the construction of a longitudinal training dam. An explanation was given by Tom Buijse of Deltares Institute, that the dam was constructed as an experiment under the Room for the River Programme and currently its sound effects on biodiversity and morphology are being monitored.

The meeting was a great success, showing the present improving status of the ECRR and demonstrating the synergy of the cooperation between ECRR and Wetlands International European Association. Moreover, the active participation by the members created high expectations for promising future developments of the ECRR, being reported in the course of the year 2019 by a series of articles in the ECRR newsletters.

Evaluation of communication channels and identity of ECRR – October 2018

In the summer, during a period of a couple of months, as part of the workplan an questionnaire was send out on behalf of the ECRR to ECRR’s two main target groups, Member Organisations and ECRR’s Newsletter Subscribers, by Communication Agency ‘De Lynx’. The inventory had a good response from almost all Member Organisations and about 100 newsletter subscribers, what is enough for reliable conclusions.

The questionnaire taught us first of all that the ECRR has a very strong and positive reputation. But also, that ECRR’s branding should be strengthened by making better and more use in all communications of ECRR’s mission, brand vision and values. These can mainly be derived from ECRR’s Strategic Intent that was drafted this year and soon will be published at ECRR’s website. And based on ECRR’s limited resources clear choices are needed on which messages, target groups and communications communication channels should be focused.

Then the main conclusions are the following.

Newsletter; The newsletter is read very well and the survey respondents clearly show their appreciation for the reliable, scientific information that is shared through the newsletter and also the other communication channels. However, a shift from the pdf format to professional newsletter software can help to: 1. Generate traffic from the newsletter to the website, 2. Keeping the newsletter us such short, because the newsletter will only contain the first paragraph(s) and readers will link to the website for the full text, 3. Analyse more precisely what content is most appreciated.

Website; The website is not very frequently visited by members and newsletter subscribers, but more by a large group of outsiders very often downloading publications and the newsletters. Members are more interested in news and agenda items, while newsletter subscribers are more interested in information, like best practices, resources and technical/scientific information. The advice therefore is to make the website more ‘minimalistic’ and user friendly.

Twitter; The twitter stream is not so popular among both groups, because of mainly retweeting and hardly sending own tweets. By this way, ECRR does not profile itself enough as a
knowledge-based organisation. It is recommended to use also or only LinkedIn, because its environment is well equipped to share articles as currently published in the newsletter and to receive reactions and a LinkedIn group unites members and/or followers and helps to build up the network.

**Capacities and resources:** To guarantee continuity and improvement of ECRR’s (communication) activities the organisation needs money and practical assistance, first of all to be provided by its members, partners and donors and secondly by the users of the services provided. Explicit calls for help should be clearly visible done on the website, in the newsletter and via the social media.

**Non-Europeans:** The newsletter has many readers and the website has many visitors from other continents, what is considered as a nice side effect and has led to a ‘loose’ global network of River Restoration organisations, networks and centres, meeting each other at regional and world river (restoration) forums and conferences.

**Branding:** In addition to the Strategic Intent a Brand Document is needed to support the achievement of the strategic targets. It is important to people not only to know what the ECRR does, but mainly why ECRR does it. Describing ECRR’s role to be played in relation to defining river restoration needs and benefits as well as progress, outputs and outcomes achieved clarifies the reason for existence and should be part of ECRR core message.

At the General Members Meeting (November 2018) the conclusions and recommendations were fully endorsed and the Board was asked to fulfill under the workplan 2019 the next steps to be undertaken. The basis for this is firstly to complete the Strategic Intent, what will be the case in January 2019. Then to make clear choices such as: 1. Which target groups do you want to reach, 2. What communication channels do you want to use, 3. What messages do you want to convey and 4. In which order do you want to do the activities. The ECRR Board is convinced that with the results of the questionnaires, the conclusions and recommendations of ‘De Lynx’, the completed Strategic Intent and additional documents under development as a Position Paper and a Policy Brief concerning the WFD Fitness Check, it will be possible to make and realize the wanted plan for the improvement of ECRR communications channels and performance. Moreover, the Board likes to thank very much ‘De Lynx’ and WI staff, the respondents to the questionnaires and all others who contributed to and supported the information, new insights and proposals. Without them it would be hardly possible to make a sound plan for communications improvement.

Moreover, the Board likes to present in this article the first outlines of an ECRR Brand document as proposed by ‘De Lynx’ as follows.

**Brand Vision:** Our ideal world: River restoration experts in Europe use the knowledge and contacts in the ECRR network to achieve maximum success. River restoration brings future-proof river ecosystem that serve all who are dependent on them as for clean and safe water.

**Brand Mission:** How to get to the ideal world: ECRR is the authoritative voice on river restoration in Greater Europe. Our insights, case studies, and technical information broaden perspectives of researchers, NGO’s, field workers, river managers and policy makers. Through activities we transfer knowledge from one to another country, establish contacts that cross borders, professions and sectors and influence decision making.

**Brand values:** Seen and felt in every activity ECRR carries out:
– **State of the art.** All content we share is reliable. Our members and partners are credible organisations. Their efforts guarantee our readers state of the art information and the qualitative insights on river restoration.
– **Broadening perspectives.** Our member organisations and over 2500 followers in Greater Europe actively share their knowledge. Learning about practices in other regions and countries broadens perspectives and generates new ideas.
– **Together.** ECRR members are helpful and caring. Not only amongst themselves, but also towards ECRR’s followers, who approach ECRR for knowledge, contacts and assistance. By sharing and helping, we motivate each other to find the way forward.

Please let us know your reactions on these brand document outlines.
Continued success for the annual Norwegian Restoration Seminar

Introduction
The Norwegian River Restoration Seminar was arranged for the first time in 2010, as a collaboration between the agencies for nature management and water resources; then it attracted close to 40 participants. The annual seminars have now become an annual institution, with around 100 participants every year since 2015. At the same time the perspective has broadened, covering not only urban and rural rivers, but also wetland restoration. The seminars aim to provide updates on restoration research and experiences, and functions as the annual networking event for persons with interest in river and wetland restoration across water managers at all levels, agencies, municipalities, researchers and consultants. One successful feature of the seminars has been to invite keynote speakers from other countries, to inspire and motivate the Norwegian audience. The 9th National Seminar took place in Oslo on November 20th, 2018, and for the first time it also covered restoration of coastal habitats.

International key-note speakers
The seminar was opened by the key-note speaker Cor Beekmans from the Room for the River programme in the Netherlands, presenting integration of national and regional requirements in the design of nature development projects. The second key-note speaker during the day was Per Moksnes from Gothenburg University, presenting interdisciplinary research on the management and restoration of coastal eelgrass habitats from the Zorro research programme. At the end of the seminar, a Norwegian participant shared take-home-messages from the UK River restoration Conference in Nottingham in April.

Sharing Norwegian experiences
The sharing of Norwegian experiences included a presentation for a County Governors Environmental Office on the continued loss of eel habitats and possible restoration measures to counteract this trend, and presentation from a municipality of ongoing work to reopen a creek as part of a road reconstruction project, presentation of experiences with wetland (peatland) restoration. In addition a stakeholder group presented the comprehensive work on improving trout habitats in 28 rivers draining to the same fjord in western Norway.

Update from research
The update on research covered a presentation by the Norwegian Institute for Water Research on the European MERCES project on marine restoration with examples from a Norwegian fjord, a presentation by the Norwegian Institute For Nature Research on different assessment approaches for defining good ecological status, and a presentation by the Norwegian Research Centre on how river morphology and sediment transport limits frames our possible actions in river basins.

All presentations from the 2018 seminar will be available at the Norwegian Water Association webpage: https://vannforeningen.no/foredrag/20-11-2018-det-9-nasjonale-seminaret-om-restaurerings-av-vassdrag-og-vatmarker/

All presentations from the previous seminars (2010-2017) are available at this Norwegian Environment Agency archive page: http://www.vannportalen.no/kalender/gjennomforte-arrangementer/nasjonale-restaureringsseminarer/
The Norwegian National Project Group on River Restoration

In 2015 the Norwegian Ministry of Climate and Environment decided to formalize a National Project Group on restoration, organized under the National Committee of Agencies for implementation of the Water Framework Directive. Participants in the group include four national Agencies, as well as selected representatives from local Municipalities, and regional Authorities. The tasks of the project group are to:

- Promote increased restoration activity in Norway.
- Secure sufficient coordination of planning, financing and execution of restoration.
- Facilitate exchange of knowledge, experiences and good examples on restoration.

Organizing and implementing the annual Restoration Seminar has so far been the most important task of the National Project Group, in collaboration with the Norwegian Water Association.

The increased attention to restoration will help Norway fulfill several obligations:

- The Water Framework Directive (WFD) objective to protect, enhance and restore the ecological status of water bodies.
- The UN Sustainable Development Goal (SDG) number 6 on sustainable management of water, especially target 6.6 to protect and restore water-related ecosystems, including wetlands, rivers and lakes.
- The Convention on Biological Diversity (CBD), Aichi-target number 15 on conservation and restoration of degraded ecosystems, contributing to climate change mitigation.

Contacts at Norwegian Environment Agency:
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- Vibeke Husby (vibeke.husby@miljodir.no), Wetland Restoration Initiative.
- Anders Iversen (anders.iversen@miljodir.no), International restoration contact.

#ProtectWater campaign heading to 200,000 signatures

Eef Silver, Policy Officer at Wetlands International – European Association.

Wetlands International is one of the five NGOs that initiated the campaign. Eef.silver@wetlands.org / +31 318 660 952.

Have you signed already? So far, over 173,021 citizens took part in the EU wide campaign #ProtectWater as a response to the EU Fitness Check of the Water Framework Directive (WFD). They told the EU to keep the WFD strong and to improve its implementation by Member States and stakeholders.

Over 100 European NGOs are actively reaching out to raise awareness on the poor status of rivers, lakes and wetlands in Europe. They call citizens and stakeholders to action with striking visuals and messages informing them on the dependence of people and wildlife on rivers and lakes and the need to stop their destruction.

Fit for purpose?
The NGO campaign is an answer to the review of the Water Framework Directive carried out by the European Commission. The EC is evaluating whether this directive is ‘fit for purpose’. This evaluation is similar to the EC Fitness Check on the Birds and Habitats Directive carried out a couple of years ago. The EC tries to collect as many views as possible from the public and the wider stakeholder community. Everyone can express his or her view in the consultation.

“Yes, it is fit for purpose”, is – in short – the reaction of Wetlands International, WWF, the European Environmental Bureau, the European Rivers Network and the European Anglers Alliance. These organisations have joined forces in the coalition Living Rivers Europe. It states: “To our opinion, the WFD has proven to be an effective, flexible and modern piece of EU law embedding principles of integrated river basin management into the legal framework governing water management in the EU Member States as well as neighbouring countries”.

The homes of dragonflies are being destroyed
Our rivers and lakes are under attack. Act now
#ProtectWater #ProtectWildlife

The homes of kingfishers are being destroyed
Our rivers and lakes are under attack. Act now
#ProtectWater #ProtectWildlife
Water Framework Directive

The WFD is one of the most important parts of EU environmental legislation. The WFD establishes a legal framework for the protection, ecological enhancement and restoration of our waters. It also sets goals to prevent deterioration of the ecological status. The year 2000, when the WFD was adopted, marks a break with the fragmented, national based water policies of before. The WFD has a holistic approach, integrating environmental, economic and social systems and has a fundamental premise that protecting the aquatic ecosystem shows a cost-benefit balance more positive than restoring them once they are (more) degraded.

Fit, but better implementation needed

The Living Rivers Europe coalition aims to show the progress which has been made towards achieving ecologically healthy rivers and wetlands under the Water Framework Directive. At the same time, the coalition highlights that there is room for improvement in the implementation. Among other things, the coalition stresses the need for amplified measures to restore our rivers in order to achieve the WFD’s environmental objectives.

The focus should be on stepping up ambitions to achieve the objectives until 2027. Water ecosystems in the EU are still experiencing significant degradation and progressive loss of biodiversity. This trend should be reversed through more ambitious and effective River Basin Management Plans (RBMPs) and Programmes of Measures (PoMs), e.g. by applying proper public participation, incentive water pricing and ensuring sufficient allocation of funds. Also, better integration of sustainable use and management of water into other relevant policies (i.e. agriculture, energy and transport) at all levels is needed.

About #ProtectWater

#ProtectWater aims to achieve support for strong EU water policy from the general public. The campaign tries to catch the public’s attention by linking themes such as beer and wildlife to the status of freshwater ecosystems and the EU policies that protect them. By providing a webform on their websites, the 100 campaigning NGOs facilitate a response from the public to the EC consultation.

From here on

The WFD public consultation by the European Commission will run until the beginning of March 2019. If you wish to support the #ProtectWater campaign through your organisation, social media account or other communication channels, please contact me at eef.silver@wetlands.org.

* More information about the campaign: https://europe.wetlands.org/protectwater
* The position Paper by the NGO coalition Living Rivers Europe on the effectiveness, efficiency, relevance, coherence and EU added value of the WFD: https://europe.wetlands.org/download/3155/

REPORT OF THE 16th “EUROPE-INBO 2018” INTERNATIONAL CONFERENCE FOR THE IMPLEMENTATION OF THE EUROPEAN WATER DIRECTIVES;
Seville, Spain 17 – 20 October, 2018

Introduction

The conference gathered 237 participants, representatives of national administrations, basin organizations and elected officials as well as of NGOs, companies, international and regional organizations and academic institutions, coming from 42 countries. The work of the “EUROPE-INBO 2018” conference was organized around a workshop on Invasive Alien Species and four roundtables on the current issues hereafter. The full report is downloadable by EUROPE-INBO Declaration.

Roundtable 1: Prevention of Drought: Adaptation Planning at the Basin Level, Reuse and Desalination

Adaptation of water resource management therefore becomes essential, and to be effective, should to be developed in river basins and their sub-basins and the underlying aquifers. Climate change adaptation measures should be planned in the short, medium and long term with Basin Management Plans as part of the implementation of the WFD and the Flood Directive.
Beyond adaptation, a “drought crisis” or “water scarcity” management plan should be drawn up to have a proportionate and coherent response, especially in terms of priorities for water uses. In the transboundary basins, it should be accompanied by exchanges of quantitative data between the different riparian countries. These arrangements can be considered through International River Commissions or ad hoc bilateral or multilateral protocols and should include agreements for transboundary aquifers.

Roundtable 2: Efficiency and Multiple Benefits: The Interest of Combining Hydraulic Infrastructure and Nature-Based Solutions to face the issues of climate change

To meet future challenges on water resources, especially those related to climate change, the Nature-Based Solutions (NBS - green infrastructure), using the properties of ecosystems, are convincing tools. The services provided by ecosystems are now better understood with regard to droughts and floods. The restoration of wetlands, ponds, marshes, preservation and management of floodplains, actions enabling the infiltration of rainwater, the reduction of runoff are all examples that have shown the relevance of NBS. As part of the WFD implementation, it is necessary that this approach be fostered, especially to achieve the objective of Good Ecological Status of Water Bodies.

The participants in the “EUROPE-INBO 2018” conference recommend that the EU, in conjunction with the International Union for the Conservation of Nature (IUCN), provide support for disseminating guidelines on the use of NBS in sustainable water resources management, to enhance knowledge in this field and to improve their technical implementation and their financing mechanisms.

Roundtable 3: International Cooperation: Twinning and Peer-to-Peer Exchanges, Neighborhood Area, Transboundary Waters

The European Commission has very recently evaluated national and regional WFD and FRD Basin Management Plans, as well as international ones, confirming its consideration of this dimension. International cooperation for the development of IWRM and the improvement of water governance in the basins are a major factor of progress. This applies to the Member States as well as to the countries of the EU’s neighborhood area, particularly the countries of Eastern Europe, Caucasus. Concerning the exchanges between practitioners of the Member States, the EUROPE-INBO Group invites the basin organizations to formulate proposals to the secretariat of the “Peer-to-Peer” project for a support mission to the implementation of the Water Framework and / or Flood Directives Framework, or to propose to their experts to contribute. Registration documents related to the exchange mechanism are available at: www.aquacoope.org/peertopeer/

Roundtable 4: Revision of the Water Framework Directive (WFD): Improving Coordination with other European Directives (MarineSFD, Flood, Renewable Energy Directives, etc ...)

In 2017/2018, Member States and the European Commission proceeded with the evaluation of their River Basin Management Plans. In 2018, the European Environment Agency published a report on the status of water resources in the EU. Before the end of 2018, the Commission will present to the European Parliament an evaluation report on the second management cycles of the WFD and the first cycle of the Flood Directive. This report will underline the need to re-examine the WFD. The first results of the evaluation of the 2nd cycle basin management plans showed that:
  • Stakeholder participation has often been well assured;
  • Major progress has been made in terms of knowledge of the status of water bodies, uncertainties are now low;
  • The deterioration of the water status has stopped everywhere in Europe;
  • The link between pressure and impact needs to be better understood;
  • The monitoring of substances and the implementation of management measures remain a major challenge.
  • If the monitoring networks and their coverage have been adapted, there are still some gaps, sometimes an insufficient frequency, and the monitoring of priority substances is very different depending on the Member States.
Editorial comment

In relation to the recommendations and conclusions of the EUROPE – INBO 2018 article we like to bring to the attention of the readers that in the previous ECRR newsletters a couple of interesting articles were published.

First on Guidance towards Drought Management Plans and the Integrated Drought Management Programme in Central and Eastern Europe (October 2016). In addition, some examples of Good Practices and Learned Lessons concerning water scarcity and droughts can be found in the website of EU Environment.

Secondly, you can find a good example concerning Nature Based Solutions, especially Natural Water Retention Measures (NWRM), NBS - NWRM, the project winner of the UK River Price 2018 (Hills to Levels).

Conclusions of the Workshop on Invasive Alien Species: Prevention and Management Solutions

Invasive Alien Species (IAS) represent a major threat to native plants and animals in Europe, causing damage worth billions of Euros to the European economy every year. The EU regulation (1143/2014) on invasive alien species entered into force on 1 January 2015. It provides for a set of measures to be taken across the EU in relation to the species included on a list of IAS of Union concern.

The practical exchanges in working groups have allowed underlining the importance of seeking synergies between the RBMP development and the IAS policies. In terms of surveillance systems, the WFD monitoring programmes are already collecting interesting data that could be used for IAS surveillance purposes.

A more systemic approach to the assessment of Water Bodies (quality of biodiversity and habitats) and a more integrative one would reduce chemical monitoring (expensive and not always relevant for continuous monitoring);
• On the latter point it should be noted that assessment systems are not always adapted to tropical and / or island basins; a work of adaptation for these specific ecosystems should be carried out.

The participants in the EUROPE INBO conference stress the need to involve the Member States and basin managers as closely as possible in the work, including at the stage of finalizing the Commission’s report and the Fitness Check of European legislation on water. The participants in the EUROPE INBO conference recall that the first challenge is the future of the Directive beyond 2027, knowing that the goal of “Good Status” of all European Water Bodies will not be achieved at this date, especially if the current criteria do not evolve towards a balanced parameterization.

Quite some time ago, experts in the USA began removing these threats to rivers and this has inspired us, in Europe, to start doing the same. So in 2015, Herman Wanningen, founder of World Fish Migration Foundation, started an initiative called Dam Removal Europe (www.damremoval.eu). Nowadays WWF (NL, Finland, Switzerland), European Rivers Network, Rewilding Europe and the Rivers Trust are part of this initiative. Dam Removal Europe is a collaboration of experts and ‘positive activists’ that aim to connect people, inspire action and highlight the work done. Dam Removal Europe promotes the removal of obsolete dams and celebrates the people behind the river restoration projects.

One of the important actions that came from this initiative was the creation and publication of the Dam Removal Policy Report. This past summer we released the report to highlight and discuss the importance and benefit of dam removal to guide future environmental decisions. The document can be downloaded by following this link.

Report of the 3rd Dam Removal Europe seminar “to be or not to be …removed”, September 2018, Hudiksvall, Sweden.

A few months ago, I drove back from Hudiksvall to the Stockholm airport with a smile on my face. Alongside the road, I passed shining lakes, flowing rivers and the Gulf of Bothnia. All this water is home to the many fishes that are economically, culturally, and environmentally important to us. This water is migratory fish territory. A territory that many people work hard to protect.

Unfortunately, the swimways for these fish are often blocked. Blocked by manmade barriers like dams and weirs. Barriers impede the migration routes of fish and other aquatic fauna and this leads to the decline and even local extinction of many species. Dams can also be responsible for a significant loss of natural riverine habitat; get favouring exotic and/or invasive species. They alter the natural flow of rivers, reducing the downstream flow and decreasing the river’s natural flood frequency. And while one barrier can do enough damage, it is estimated that there is about one barrier per river kilometre in Europe!
Another integral part of the initiative is the organization of Dam Removal Europe seminars to facilitate knowledge exchange and collaboration among experts in the field. As far as the numbers of dam removals increases so does the knowledge, understanding and data. The seminar provides a perfect opportunity to share!

In September 2018, 140 experts from 23 different countries met in the city of Hudiksvall, Sweden for the 3rd Dam Removal Europe seminar “to be or not to be …removed.” This seminar was organized in close collaboration with Karlstad University, Länsstyrelsen Gävleborg and the municipality of Hudiksvall. Over two days, participants enjoyed presentations from a wide range of experts, including ecologists, engineers, politicians, social activists, NGOs, and representatives from the energy sector.

The venue was set in the halls of the beautiful Kulturhuset building in Hudiksvall. There, we learned about the importance river connectivity, dam management, the hydropower industry’s perspective on dam removals, and more. Download the full programme [here](#).

The presentations on the first day focused on the topic and implication of dam removals. On the second day, we focused on actual removal examples. Dam removals in Germany, Ukraine, Ireland, Sweden, Estonia and the USA, for example. The two days of interesting talks were closed by Herman Wanningen and Rachel Bowes. They ended the presentation portion of the seminar with the same enthusiasm brought on by the speakers and left on a note of hope for the future. The day was closed by watching the movie: “många bäckar små” (“every little bit helps”).

Hearing stories and seeing photos of removed barriers (or those on their way out) is great, but what would an international conference on dam removal be without actually seeing some dams! Luckily, the municipality of Hudiksvall recently removed two barriers in the river Nianån. And a neighbouring municipality, Nordanstig, plans to remove two hydroelectric stations in the river Gnarpåns as part of their mission to become Sweden’s first barrier-free municipality. Both municipalities have a challenging task ahead of them as Sweden’s waterways contain over 10,000 barriers, but if the drive and determination of the Dam Removal Europe 2018 conference attendees is any indication, we are well on our way.

Related links:
Crowdfunding action [https://crowdfunding.wnf.nl/](https://crowdfunding.wnf.nl/), you can remove dams yourself! Join the campaign.
Subscribe to the Dam Removal Europe newsletter here: [https://damremoval.eu/contact/](https://damremoval.eu/contact/)
All presentations of the seminar on video: [https://www.youtube.com/watch?v=kk12nXWiQDg&list=PLWXV3KenJb0uM4wJNBqAfU72p50Rk8rao](https://www.youtube.com/watch?v=kk12nXWiQDg&list=PLWXV3KenJb0uM4wJNBqAfU72p50Rk8rao)
All presentations in PDF format: [https://damremoval.eu/events/#tab-1540896800564-0-0](https://damremoval.eu/events/#tab-1540896800564-0-0)
Scheme from Laura Wildman at the bottom page, for more info check: [www.fromseatosource.com](http://www.fromseatosource.com)

Do you have questions or information regarding dam removal? Please contact Iwan Hoving: [Iwan@fishmigration.org](mailto:Iwan@fishmigration.org)
The AMBER project: a collaborative project for guidance on barrier location, removal and mitigation in Europe

Authors: Rosa Olivo del Amo and the AMBER Consortium

Scattered across the rivers of Europe are hundreds of thousands of man-made barriers, many of which are completely obsolete. Today, these barriers can provide energy, water, fishing and leisure opportunities. However, they also represent considerable obstacles to sustainable river management. Aside from presenting a potential flood hazard and subsequent costs to both the economy and the lives of local residents, barriers substantially change river ecosystems and block the natural swimways of migrating fish. Eel, salmon and many other species all rely on complete connectivity between the sea and their upstream river habitats in order to complete their life cycle.

Some estimations, based on the extrapolation from regional surveys, suggest that there may be over a million stream barriers in Europe, but nobody knows for sure, because there is no global barrier database available beyond information on large dams, even not at the European level. For this reason, one of the main objectives of the EU-funded AMBER project (Adaptive Management of Barriers in European Rivers, www.amber.international) is to produce a Pan-European Atlas of Stream Barriers that can help water managers prioritize restoration efforts, inform mitigation measures and make better decisions on river restoration. Currently the picture on river fragmentation is based on dams higher than 10 m which from AMBER’s preliminary analysis on existing databases in Europe are likely to represent less than 3% of the total existing barriers. Information about the location and density of smaller barriers is often unknown, but these smaller barriers present the biggest problem for the health of Europe’s streams and rivers.

For the first time, citizens are encouraged to become involved in efforts to reconnect Europe’s rivers with the help of the Barrier Tracker app.

Another important outcome will be the creation of decision support tools to monitor the restoration of stream connectivity (planning, mitigation, removal). Scientists will carry out a socio-economic evaluation of the effects of stream barriers on ecosystem services and of the benefits and trade-offs of various management options, including structure placement, barrier removal, or retrofit. These tools will develop information on which to make cost effective management decisions and will be implemented in nine real case scenarios scattered all around Europe.


AMBER (Adaptive Management of Barriers in European Rivers) is a multidisciplinary research project funded by the European program Horizon 2020 with 6.2 million euros. Under the motto “Let It Flow”, the project promotes the adaptive management of man-made barriers to restore fluvial connectivity. Led by the University of Swansea (Wales, United Kingdom), the consortium is composed of a total of 20 partners from 11 countries including academic institutions, public bodies, hydroelectric companies, water providers, NGOs, fishermen and local authorities. All of them are committed to solving the challenge of river fragmentation and improving the management of barriers in the context of a more effective restoration of ecosystems and an optimization of our natural capital.

For more information, visit and contact us at https://amber.international
THE ECRR ASSOCIATION MEMBER AND PARTNER ORGANISATIONS

- Finnish Environment Institute
- Agence Française pour la Biodiversité
- World Fish Migration Foundation
- Global Water Partnership
- Swedish Agency for Marine and Water Management
- STOWA Foundation for Applied Water Research
- IBNiM
- ROSNIIVKh
- International Network of Basin Organizations

The network for best practices of river restoration in Greater Europe
Free ECRR Network Subscriptent

All who are interested in river restoration and sustainable water management are encouraged to join the ECRR. Subscribers receive the ECRR Newsletter about four times a year and are the first to be informed about activities by the ECRR, its members and partner organisations.

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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@ecrr.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.

ECRR Events calendar 2019

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<th>Title / issue</th>
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<tr>
<td>30 April – 1 May, 2019</td>
<td>The 20th RRC Annual Network Conference</td>
<td>Liverpool, UK</td>
<td><a href="https://www.therrc.co.uk/rrc-annual-conference-2019">https://www.therrc.co.uk/rrc-annual-conference-2019</a></td>
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<td>12 – 14 June, 2019</td>
<td>III Iberian Congress on River Restoration</td>
<td>Murcia, Spain</td>
<td><a href="http://restaurarios.es/">http://restaurarios.es/</a> Deadline communications, 1st January, 2019 (Languages: Spanish, Portuguese, English)</td>
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