The network for best practices of river restoration in Greater Europe
ECRR
European Centre for River Restoration

In this newsletter

Editorial

In previous editions we reported about the foreseen evaluation of the European Water Framework Directive ('Fitness check'). To accompany and inform this process, the European Environment Agency (EEA) has produced a report on the state of Europe's water that was recently published.

Striking news in the status report is that, only and still, around 40% of surface waters are in a good ecological status. With the main significant pressures on surface water bodies, hydro-morphological pressures (40%) diffuse pollution sources (38%), particularly from agriculture, and atmospheric deposition (38%), particularly mercury, followed by point pollution sources (18%) and water abstraction (7%).

Very recent this report was followed by a report of the World Fish Migration Foundation with the title 'Removing tens of thousands of obsolete dams in Europe will bring life back to rivers'. And a new initiative called *Dam Removal Europe* aims to start an era of dam removal.

These two reports, both available on ECRR's website www.ecrr.org , present it clear that river restoration is till a must, but also that if hydro-morphological measures are taken, nature can remarkably fast recover.

This all means that river restoration is still needed, even more than ever. Fortunately, the content of this ECRR Newsletter shows that the river restoration and river management communities are more, and more together on the move for this. The articles about the IS Rivers 2018 Conference and the GWP-CEE Summer School 2018 'Towards Agenda 2030' witness a real drive by the youth and the science. Then the articles of the winner of the UK River Prize 2018 'Hill to Levels', the French river continuity restoration approach and the Yecla de Yeltes Dam Removal, in Spain prove that the (best) practices are available.

The DriDanube Project article on the 'Drought Risk in the Danube region' describes an advanced approach for monitoring, early warning and impact assessments of droughts for the development of a strategy to improve drought emergency response.

A number of informative announcements are in this issue highlighted as well: The World Rivers Day on the 23rd of September, a handbook presentation 'From sea to source 2.0' on river connectivity restoration, and a call for cooperation on knowledge about all aspects of riparian vegetation by the COST CONVERGES Action. We want to remark the 16th EUROPE-INBO 2018 International Conference on the implementation of the European Water Framework Directive will be held in Sevilla, Spain and finally the international river restoration event calendar is updated extensively.

Well, enjoy the read and we are looking forward to meeting you.

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

Dutch – ECRR Delegation IS Rivers Conference Gala Dinner, June 2018, Lyon © IS Rivers

An impression of the IS Rivers 2018 Conference and ECRR sessions
on 4 to 8 June in Lyon France

Introduction

The ambition of the conference on integrative sciences and sustainable development of rivers is to promote multidisciplinary approaches to engage all stakeholders and to build links to stimulate European and international collaborations between scientists and river managers. ECRR had two labeled session in the conference: 1. Ecological continuity and 2. Restoration and ecosystem responses. The conference and the sessions were very successful with respectively more than 500 participants for the conference and with almost 100 participants for each session. There should be mentioned that almost 75% of the audience was French and about 25% international, with 60% out of it European.

Opening Session IS Rivers 2018 Conference © Bart Fokkens

In general the content of the presentations was very research related, although many good practical examples were presented. Especially form the Rhone restoration, being very impressive. The two ECRR sessions had mainly an international participation with a good presentation of cases and studies. These were all presentations of submissions from conference participants and (thus) not influenced by the ECRR. The organizers showed themselves very thankful for the ECRR sessions and are looking forward for broader cooperation with the ECRR in the future.

Ecological continuity

Key points:
Concern for the impact on river continuity of both low-head weirs and high dams, with in particular:

- Evidence of impact of low weirs on non-migratory-fish movement and habitat accessibility.
- Evidence of impact of high dams on the whole fish community.

Concern about the importance of longitudinal hydromorphological continuity, in particular:

- Importance of combining stakeholders' interest with hydromorphological changes approaches.
- Evidence of positive hydromorphological effects from lowering dams in in incised rivers.

Science is challenged to provide knowledge and evidence background for stakeholder engagement in river continuity decision making process.

Follow-ups:

- Effectiveness of theoretical and flume based predictive models.
- Continue annual fish monitoring, preferably by camera's.
- Combining stakeholders' interests with hymo approaches.
- Studying hymo effects from lowering dam incised rivers.

ECRR Session: Ecological Continuity © Bart Fokkens

ECRR Session: Restoration and Ecosystem Responses © Giancarlo Gusmaroli

On the "Confluence" tour © Bart Fokkens

Restoration and ecosystem approaches

Key points:

Different types of restoration were presented: site-based, reach-based and habitat enhancement work.

- The case studies were detailed and included many elements of best practices such as clear definition of objective based on detailed hydromorphological diagnostics, a vision for reach-based restoration, stakeholder engagement and monitoring.
- Monitoring was linked to objectives and included innovative elements (e.g. connectivity assessment). Altogether, the case studies presented a structure that was conducive to learning and were very good examples of potential best practices.
- Multiple benefits such as access to new sites for local population were also apparent in some of the case studies.
- Scientists, stakeholders and funders worked closely together.

Follow-ups:

- The case studies were extremely detailed and benefitted from a large amount of investment between local stakeholders, funders and scientists which was a clear success factor.
- There was significant funding available over the long term, including land buy.
- Are these case studies representative? Does a size matter? Do small rivers get the same levels of interest and funding from stakeholders and scientists?
- How sustainable are the schemes? Wood introduction without tree planting requires maintenance. Changes in discharge do not necessarily promote natural sediment process?
- The presented restoration schemes of the Rhône are impressive. However, the presentations made not clear how far the connectivity principles were followed, concerning lateral, longitudinal and vertical connectivity. So, the strategic approach was not clearly presented and seems therefore needing more attention.

In addition to the scientific-technical content, with oral and poster presentations, of the conference the programme offered a walking tour through the "Confluence" district followed by a gala dinner, with on the days after a choice of 'field excursions' on or along the Rhône river. Altogether, the conference was well organised, very informative and showing a great hospitality. And in addition to the downloadable extended abstracts all participants were provided with a printed compendium with the full programme and all abstracts in French and English. So many thanks to the IS Rivers 2018 Conference Team!

Summer School brings youth in CEE a step closer to 2030 Agenda

For a second year, the Global Water Partnership Central and Eastern Europe (GWP CEE) organized a Summer School on current global water topics for the youth of Central and Eastern Europe. This year, with the title 'Towards 2030 Agenda: A summer school for climate change, innovation and youth advocacy in water management, it took place on the 1st – 6th July at the Warsaw University of Life Sciences in Warsaw, Poland.

The Summer School brought together forty-six MSc and PhD students from 18 countries – Armenia, Bulgaria, Germany, Hungary, Italy, France, Latvia, Lithuania, Poland, Macedonia, Moldova, Montenegro, Romania, Serbia, Slovakia, Slovenia, Ukraine, Trinidad and Tobago. The students' backgrounds ranged from natural sciences, geography, engineering, to landscape ecology and international relations.

The Summer School curriculum aimed at presenting the most current global and regional water issues, as well as possible ways to address them with innovative approaches. Profes-

Benoît Terrier, Water Agency Rhône, Mediterranean and Corsica and representing ECRR, presents river restoration best practices, ©GWP-CEE.

sors, speakers and practitioners from different countries and organizations like UNESCO WWAP, European Centre for River Restoration, University of Ljubljana, Josh's Water Jobs and GWP were invited as guest lecturers to present different perspectives and approaches.

Amongst the main topics were: Integrated Water Resources Management (IWRM), international water governance, the SDGs, green infrastructures, innovative solutions, ecosystems, nature-based solutions, river restoration and river basin management, integrated urban water management and others. Some case studies were presented and discussed, as well as other practical exercises and group work sessions. The interactive sessions aimed to teach the participants the multi-disciplinary aspects of water governance such as transboundary water issues, participatory approaches, and different conflict resolution techniques. The students had the chance to step in the shoes of different stakeholders, to identify concrete problems, create innovative solutions, or even make the first steps towards creating a project.

The programme included a special session on river basin management and river restoration, which aimed at presenting many practical aspects of river restoration to the students. Benoit Terrier from the European Centre for River Restoration presented the best practices for river restoration, emphasizing the importance of the social and economic context, of communication and stakeholder involvement. The participants had the chance to work on a real case study, where they were challenged to design river restoration solutions. Youth's main messages after the session were that rivers should be perceived by everybody as assets. They came up with the conclusions that more green solutions are needed, as well as native plants, green rooftops, setting back embankments to give more space for water, recreational features, etc.

Roundtable discussions, ©GWP-CEE

Climate change was another key topic, which brought the students closer to some of the most globally discussed climate topics at the moment. The participants had the chance to learn more about how the planning and decision-making at national and regional level is influenced by the latest analyses and processes at global level.

The climate change session was linked with another integral part of the Summer School, which was the Dialogue for Water and Climate Change Policies between youth and decision-makers called Youth Voices → Policy Choices. The participants had the chance to present their messages, concerned and identified solutions to the decision-makers, who gave them a feedback and advised them on future steps. The invited decision-makers represented the Slovak Ministry of Environment, Slovenian Ministry of the Environment and Spatial Planning, ICPDR, European Bank for Reconstruction and Development, and the EU Strategy for the Danube Region Priority Area 5.

Providing an interactive platform for a dialogue between the young water advocates and the decision-makers, the dialogue will help the youth to finalize their vision for a change and to present it at the 24th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP24), to be held on the 3rd – 14th December 2018 in Katowice, Poland.

The dialogue Youth Voices → Policy Choices has been made possible thanks to a collaboration between GWP CEE, Solidarity Water Europe, and Youth Water Community Central and Eastern Europe (YWC CEE), and was funded by the European Union's Erasmus+ program.

Summer School 2018, a jump towards Agenda 2030 ©GWP-CEE

'Hills to Levels' project wins 2018 UK River Prize

This year's winner of the prestigious 2018 UK River Prize was 'Hills to Levels' in Somerset – a partnership project led by Farming & Wildlife Advisory Group (FWAG) SouthWest. The announcement was made at the annual UK River Prize Awards Dinner on the 24th April at the De Vere East Midlands Conference Centre, in Nottingham.

The success of the 'Hills to Levels' project has been built on the relationships between partners through knowledge exchange, support and funding. Local Councils, advisory groups, community action groups and landowners worked together, sharing knowledge and expertise, and aiming towards the common goal of flood alleviation. Flow path modelling highlighted areas to target restoration works, as well as utilising local stakeholder knowledge on key areas of erosion and sedimentation in the catchment. The Environment Agency, Natural England, Somerset Rivers Authority and organisations in Belgium and the Netherlands all contributed to the project's success.

The project began following the floods of 2013/2014 in the Somerset Levels. It is one of the largest catchments (2871 km^2) implementing Natural Flood Management (NFM) in the UK. Therefore, it is a good example of the so-called Natural Water Retention Measures (NWRM). As well as reducing flood risk, the project provides advice on soil and land use management in order to reduce sediment runoff, improve infiltration, hydrological processes and drought resilience.

Many of Somerset's rivers are failing the Water Framework Directive due to sediment, phosphate and fish. Somerset also has a large number of heavily modified water bodies, many of which will be difficult to restore, so habitat improvements are critical to improve the biodiversity of the rivers.

"Every field, every farm and every stream has a part to play" is the project's message. This is reflected in the 453 natural flood management structures that have been put in place, including 232 woody structures; ponds helping store 25,000 m^3 of flood water; planting 11ha of woodland; and restoring the function of 3.5 km of headwater streams. Additionally, 400 farms were visited across five main catchments – River Parrett, River Tone,

'Hills to Levels' winner UK Riverprize 2018 © The RRC

West Somerset Streams, River Brue and River Axe, with tours carried out across the catchments.

The long-term vision is for NFM to become part of land management, for farmers to become ambassadors of NFM, encouraging others to implement techniques, and strive towards the land acting like a sponge, providing healthy river systems.

Commenting on the winners' achievement, Martin Janes, Managing Director of the River Restoration Centre said: "After Somerset became the focus for so much bad news and hardship as a result of the 2013/14 winter flooding, it is excellent to see such a well-coordinated approach has emerged to managing both the sources of flooding and poor river ecology. Such catchment-scale approaches need the level of commitment and enthusiasm that 'Hills to Levels' displays, to involve the huge number of landowners and to partner with them to make significant change happen."

The UK River Prize is administered by the River Restoration Centre, partnered by Arup, South East Water, the Scottish Environment Protection Agency and Natural Resources Wales. For more information see the project description in the RRC/ECRR River Wiki Case_study: Hills_to_Levels

Woodland planting © Farming & Wildlife Advisory Group South West

Leaky Dams in Flood © Farming & Wildlife Advisory Group South West

WORLD RIVERS DAY 23rd SEPTEMBER, 2018

World Rivers Day is this year falling on the fourth Sunday in September and, while the event is still a few months away, it will be here before we know it. Consequently, as we saw last year, we're hoping that river advocates from around the globe will be part of this year's World Rivers Day celebration, which has taken place annually since 2005.

There are already numerous confirmed events, ranging from activities along the great rivers of Europe – to the planned '7 Rivers Festival' in West Java, Indonesia. – And from celebrations along the many rivers of Dominica (the Nature Island) – to numerous festivities in Australia, with the support of the International River Foundation based in Brisbane, our co-lead. – And from many planned events across the US as part of the 50th anniversary of their *Wild and Scenic Rivers Act*. And In Canada, there will be the always huge BC Rivers Day across the Province of British Columbia (organized in concert with the Outdoor Recreation Council.

Join the Celebration!

Visit the website at www.worldriversday.com to find out more about World Rivers Day. **World Rivers Day** organizers encourage all of you to come out and participate. In particular, consider starting a Rivers Day event of your own, which might range from a stream cleanup to a community riverside celebration. And if you create an event, be sure to tell them about it!

Iset river in Ekaterinburg © Bart Fokkens©Bart Fokkens

Ivan Kupala (John Baptiste) Day Celebration: Ancient Russian Water Festival

Restoration of river continuity: actions targeting multiple issues in France

The French National River Restoration Centre, led by the French Agency for Biodiversity (AFB), organised on the 9th November, 2017, a workshop and field visits in the Paris suburbs on river continuity restoration initiatives with the support of the Yvette valley hydraulic-development syndicate (SIAHVY) and the regional nature park of the upper Chevreuse valley (Haute Vallée de Chevreuse Regional Nature Park).

This event was the opportunity to present some projects for the restoration of river continuity across Europe (UK, Finland and Italy) and actions carried out on the River Mérantaise in the Seine catchment in France. In addition to the main aim of improving the ecological status of watercourses, restoring river continuity can also meet other aims such as contributing to the development of recreational fishing, flood mitigation or slowing coastal erosion by promoting sediment transfer.

Ors river before restoration on 9-11-2017 © Bart Fokkens

Aval dus bassin de la Mérantaise after restoration on 9-11-207
© Bart Fokkens

The restoration of continuity largely depends on the local, national and even regional context. However, this approach is not always easy to implement, regardless of the country. The lack of sufficient financial resources, difficulty of some local stakeholders in taking ownership of issues and the lack of acceptability or leadership for these projects are just some of the barriers limiting the development of these actions. To promote the interest in restoration and facilitate its implementation, the bodies responsible for these actions can also draw on other issues not directly associated with gains in aquatic environments. Restoring the continuity of a watercourse will, in many cases, reduce the risks of flooding and make landscapes more attractive, while even preserving and promoting historical heritage.

The local approach used in the United Kingdom varies depending on the country: in Northern Ireland, actions are mainly aimed at reducing flood risk, whereas in England and Scotland, these approaches mainly seek to provide a solution that targets multiple issues.

The issue of migratory fish movement and their habitats is also at the heart of the current river restoration initiative in Finland. A strategy was defined in 2012 to promote the removal of river obstructions, especially hydroelectric plants no longer in operation, with priority given to rivers with endangered migratory fish, such as salmon and sea trout.

In Italy the large number of barriers and small hydroelectric plants on watercourses is also an increasing problem as these structures retain sediments upstream, leading to coastal erosion. A new legislative framework has required that each basin agency develop a sediment management plan for the 2021 update of their WFD river basin management plan.

The site visit on the river Mérantaise allowed the participants to witness an ambitious multi-objective project. Removing a series of weirs and ponds, in combination with returning the river to its valley bottom which has reduced flood risk to the town of Gif sur Yvette. The project has also restored habitat connectivity for Brown trout over a significant stretch and created a new landscape for the town. For more information on the subject of the article, click here!

To find out more about the day workshop, exchanges and field, visit: here!

The French national centre provides access to a selection of resources on its website aimed at helping practitioners to carry out restoration projects. For instance two short films have been produced by the French Agency for Biodiversity to help raise awareness on the importance of preserving and restoring the river dynamics. See the following links: A new type of river management is coming and Rivers in good health. To access the website of the French national centre: http://www.river-restoration.onema.fr/

Restored Mérantaise River and flood control spillway © ERN

Ors culture heritage and watermill obstacle © Valentin Viennot

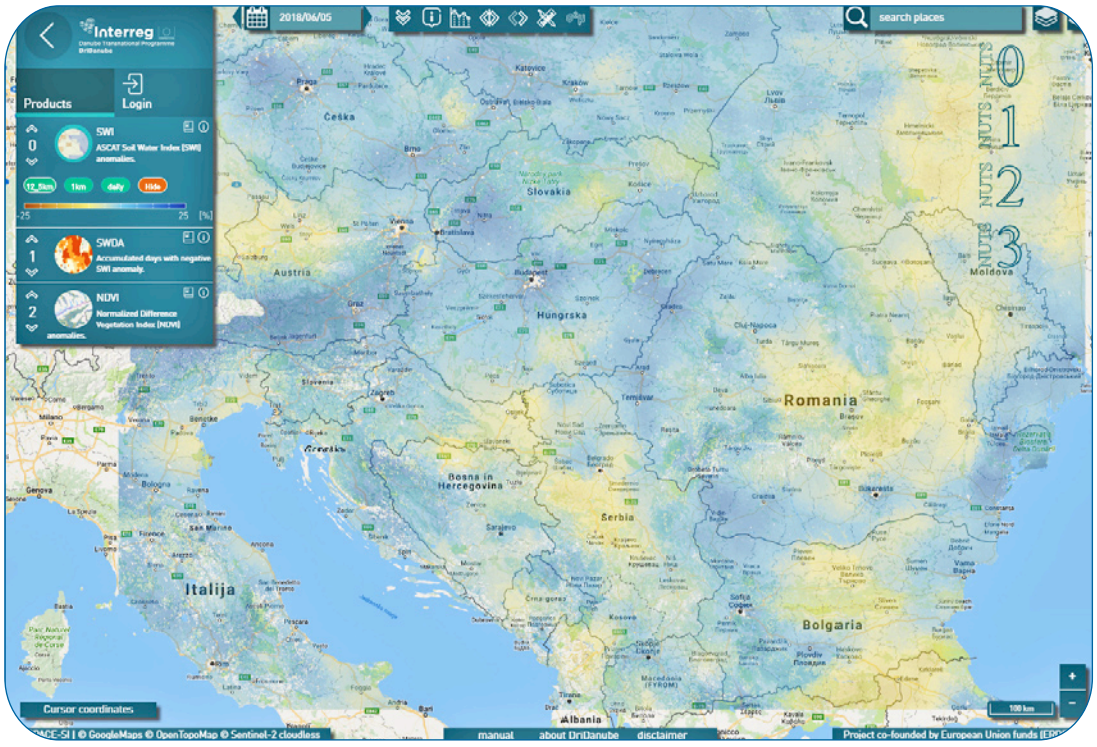
Drought Risk in the Danube Region – DriDanube project

Drought is still considered as a rare phenomenon in the Danube region but is in fact becoming a regular feature of our climate. In 2017, was just the latest in a series of significant drought events which also occurred in region in 2015, 2012, 2007, 2003, etc. and forecasts show that 2018 will likely join the row. Although frequency and intensity of droughts are growing, the problem is not getting enough attention and people continue to react only when drought is already in place causing irreversible losses and damages. This reactive approach is a typical feature of drought management in the region and DriDanube's aim is to make a shift towards proactive approach, i.e. from crisis management to risk management.

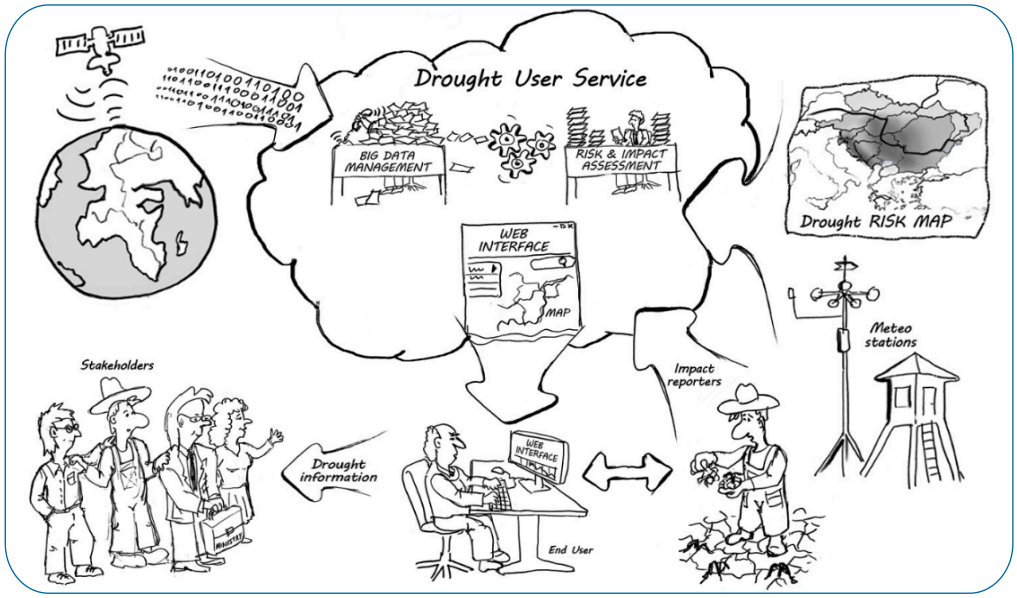
Obedska Bara, Serbia, summer 2017

DriDanube aims to help all stakeholders involved in drought management to better cooperate, become more efficient during drought emergency response and prepare better for next drought by bringing practical tools for their future work.

One of the most practical outputs expected to be widely used by national authorities and end-users such as farmers, foresters or water managers, is the **Drought User Service (DUS) – an innovative tool for more accurate and efficient drought monitoring and early warning**. It will include a set of earth observation data processed into ready-to-use drought information available to public through web-browser interface.



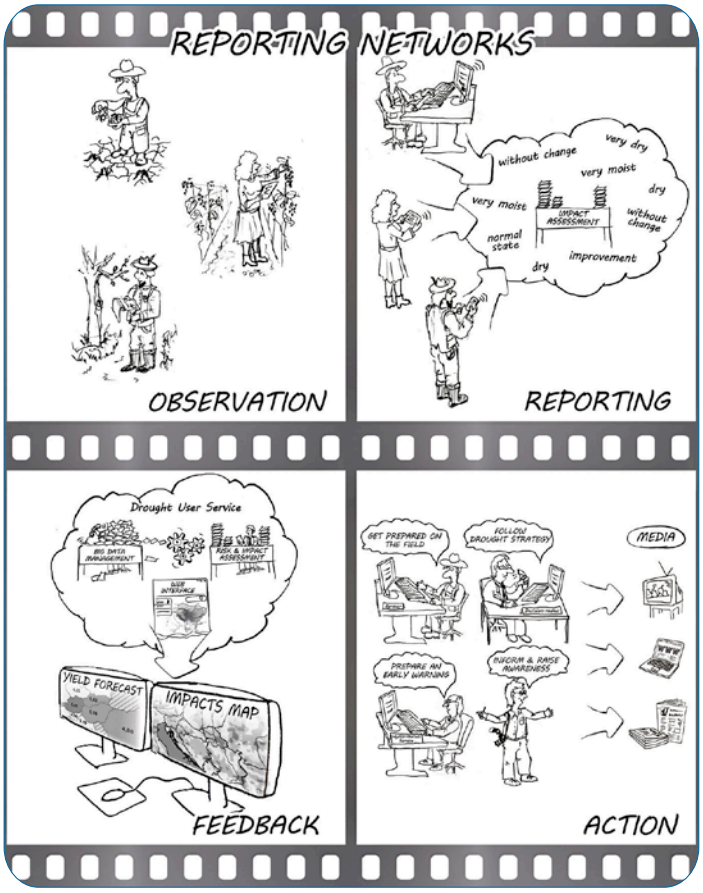
Prototype of the Drought User Service (DUS).



Based on existing achievements in participating countries and on EU guidelines, DriDanube will **harmonize currently heterogeneous methodologies for risk and impact assessments** that will be likewise integrated into the DUS.

Simplified scheme of the Drought User Service which combines data from satellites, meteorological stations and field reporters into ready-to-use drought information.

The assessments of drought impacts will be harmonized across the participating countries by establishing national reporting networks, consisting of field reporters weekly reporting on drought impacts in their own district. Impacts data collected this way will further validate and complement the DUS entry data from satellites. Reporters' observations will be then collected, evaluated and transformed into drought status and forecast maps based on which stakeholders will be able to take appropriate actions.



Process of drought impact reporting within reporting networks

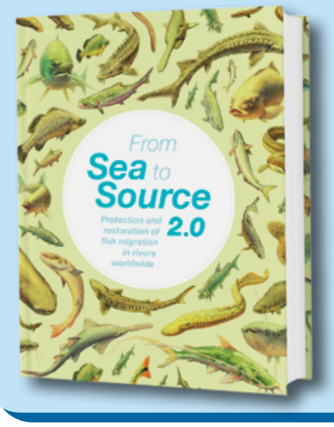
DriDanube's main expected result is a **Strategy to improve drought emergency response** which aspires to improve drought management in the Danube region. It is built upon process started within the Integrated Drought Management Programme for Central and Eastern Europe, where a guidance document for preparation of Drought Management Plans as part of RBMP was developed. It is also continuation of work done in the region by the Drought Management Centre for Southeastern Europe. The Strategy will offer guidance for overcoming gaps in drought decision-making processes and will help to improve responses before and during drought, support quicker recovery and increase preparedness for the next drought. It will create common grounds for a better cooperation among operational services and decision-making authorities in the region.

DriDanube partnership consists of 23 partners from 10 countries, led by the Slovenian Environment Agency. Global Water Partnership (GWP) Central and Eastern Europe leads work package on communication. The project duration is January 2017-June 2019 and has an overall budget 1,974,750 EUR, co-funded by the Danube Transnational Programme. Learn more about the project from promo-video, leaflet or webpage http://www.interreg-danube.eu/dridanube.

Interreg
EUROPEAN UNION
Danube Transnational Programme
DriDanube

FROM SEA TO SOURCE 2.0

World Fish Migration Foundation has recently launched a **new international book** on Fish Passage and river connectivity experiences, called "From Sea To Source 2.0". This book provides a practical guidance to tackle river connectivity issues to promote the protection and restoration of fish migration in rivers worldwide. "From sea to source 2.0" is a unique collaboration of over 100 international fisheries professionals from the fish passage network. It is supported by river managers, governments, research institutes and NGOs including WWF and the Nature Conservancy. Aimed at practitioners but also a wonderful resource for the general public, the book is full of inspiring stories, hard lessons learned and great successes from nearly every continent on the planet. The book can be downloaded for free at: http://www.fromseatosource.com. Feel free to forward this link in your network. Book presentations to highlight the outcomes are currently prepared around Europe. If you are interested in a presentation then get in contact with Herman Wanningen (herman@fishmigration.org).



WORLD FISH MIGRATION FOUNDATION

Yecla de Yeltes Dam Removal, Spain.

Pao Fernandez Garrido, WFMF on behalf of Dam Removal Europe

This spring, **a very special dam removal** took place during the World Fish Migration Day 2018 (https://www.worldfishmigrationday.com). The dam was named as the village nearby, Yecla de Yeltes, in Salamanca Province (west of Spain, on the border with Portugal). This 22m height dam was built in 1958 to provide drinking water from the Huebra River to another town. However, other infrastructures were built later, that is why the use of this dam was no longer justified, in addition, the license had recently expired, therefore the Duero River Basin Authority (Confederación Hidrográfica del Duero) decided to remove the dam, with the goals avoiding further maintenance costs and improving the ecological status of the river.

The dam was located at a Site of Community Importance and a Special Protection Areas, both belonging to the Natura 2000 network. Furthermore, the Huebra River is one of the rivers included in the CIPRIBER LIFE project which aims to improve and increase the population of endemic species of fish (Cyprinidae family) in Spain, specifically in the Duero River Basin (more info, http://www.cipriber.eu/en/index.html).

An analysis of the present habitat was conducted to this site through this LIFE project and parameters such as dissolved oxygen, pH, temperature, conductivity, river habitat diversity index, quality of the riverine forest, macrophytes presence, macroinvertebrates communities and fish communities were checked. For this specific site, the results indicated that there are problems with the oxygen levels in the river. Regarding the heterogeneity of the river, it showed moderate values with adequate diversity of inner habitats (swift *vs* slow moving waters, as an example) but also a decline of the fish population (trout and the endangered endemic species Sarda, *Achondrostoma salmantinum*). The CIPRIBER project planned to carry out monitoring test to follow-up the improvements (estimated) due to the project activities.

With the removal of the dam, 27 km of river were reconnected and different species of animals besides fish will benefit, for example otter, European pond turtle and Black stork. In this frame, the dam removal will revert the situation, especially in the lower part of the Huebra River, because it will have two effects:

- it will eliminate an obstacle for the small cyprinid (endemic and endangered according to the Habitats Directive list of species) to move up and down a significant stretch of the river, and
- it will improve habitat condition of the river resulting in a general improvement of the parameters used to assess the conservation status (ecological status as defined by the Water Framework Directive), because it will contribute to re-naturalized river stretch.

More information on this dam removal, and new and planned dam removals in Europe see: https://www.damremoval.eu

Yecla de Yeltes dam, starting removal
© Herman Wanningen WFMF

Yecla de Yeltes dam during removal
© Herman Wanningen WFMF

Yecla de Yeltes dam just after removal
© Herman Wanningen WFMF

16th EUROPE-INBO 2018 International Conference FOR THE IMPLEMENTATION OF EUROPEAN WATER DIRECTIVES

17–20 October 2018 – SEVILLE – Spain

The 16th "EUROPE-INBO 2018" International Conference, organized by the Group of European Basin Authorities for the implementation of the European Water Directives will be held at the invitation of the Spanish Authorities, in Seville – Spain at the Conference Centre of the Seville Melia Hotel.

The "EUROPE-INBO 2018" Conference, is especially addressed to all interested in and handling the implementation of the Water Framework Directive, and of its "Daughter and related Directives", especially for better adapting river basin management to the effects of climate change. Attends will come from European Union's member and candidates' countries and all of the other countries of Eastern Europe, the Balkans, Caucasus, Central Asia and of the Mediterranean basin.

The conference is a suitable forum to communicate and instigate the interest for the river rehabilitation and restoration to a

wider audience. These actions are fundamental in moving European administration towards a more sustainable management of our rivers. Therefore, terms such as Natural Water Retention Measures, Green Infrastructure, Nature Based Solutions for Climate Change Adaption should be keywords for the conference. Various participants and disciplines from ECRR's river restoration community should be present to make it happen.

The conference will be organized around **a preparatory workshop and 4 roundtables in plenary sessions** on the updated issues of the practical implementation of the Water Framework Directive and other European Water Directives, especially the Flood Directive and the Marine Strategy Framework Directive.

- Workshop **"Invasive Alien Species: Prevention and Management Solutions"** to be held on **Wednesday 17 October from 10:30 to 16:30**,
- **The 4 roundtables will take place in plenary sessions on Thursday 18 and Friday 19 October on the following topics:**
  - **Roundtable 1** – Prevention of Drought: Adaptation Planning at the Basin Level, Reuse and Desalination.
  - **Roundtable 2** – Efficiency and Multiple Benefits: The Interest of Combining Hydraulic Infrastructure and Nature-Based Solutions to face the challenges of climate change in a scarcity environment.
  - **Roundtable 3** – International Cooperation: Twinnings and Peer-to-Peer Exchanges, Neighbourhood Area, Transboundary Waters,
  - **Roundtable 4** – Revision of the Water Framework Directive (WFD): Improving Coordination with other European Directives (MarineSFD, Flood, Renewable Energy Directives…).
- **A technical visit will be organized on Saturday 20 October from 09:00 to 13:30**, to discover the hydraulic installations of the 1992 Universal Exhibition site on the La Cartuja island, and the emblematic monuments of Seville history, such as the Spain Square (Ibero-American Exhibition of 1929), and, in the old town, the Cathedral and its Giralda and the Alcazar.

Any information about the event (programmes, documents, logistics) and the online registration form are available on the INBO website: www.inbo-news.org/en/events/europe-inbo-2018. **Please let the organisers know if you would like to present a short paper at the Workshop or at one of the four roundtables.**

COST CONVERGES Action

Riparian ecosystems comprise the physical environment and biological communities that lay at the interface between freshwater and terrestrial systems. They are recognised as ecosystems that are highly diverse and contain specialist ecological communities, as well as providers and conductors of multiple ecosystem services. Recognizing of the importance of riparian ecosystems has resulted in growing interest of this kind of research within Europe. Despite of this issue and policy motivation, progress in improving the state of riparian ecosystems across Europe has been very limited. This is probably because of a misalignment of 'frames'; i.e. the diverse ways in which different individuals or organisations know and conceive of such complex systems, from different backgrounds, geographical origin, cultural contexts, or purpose.

The overall aim of CONVERGES Action is to create a European network to bring together the diverse knowledge that exists across Europe for all aspects of riparian vegetation (physical processes, ecology, societal and management issues, etc.).
The Action's principal research coordination objectives are:

- Synthesise current knowledge to characterise the status of riparian vegetation, their main stressors and management responses across Europe.
- Convey and share riparian knowledge among scientists, policy makers and stakeholders from different scientific disciplines, geographical regions and management contexts.
- Identify misalignments among actors in how riparian vegetation has been understood and conceptualized in order to prioritise areas for knowledge conversion efforts as well as research gaps and policy/strategy.
- Determine evidence-based best practice in riparian management and develop effective tools and indicators to assess ecological status using riparian vegetation.

CONVERGES First Management Meeting in Rennes 6-7 February 2017 @ Patricia Maria Rodríguez González

If you are interested, contact simon.dufour@univ.rennes2.fr

CONVERGES
European Riparian Ecosystems

The network for best practices of river restoration in Greater Europe

ECRR
European Centre for River Restoration

THE ECRR ASSOCIATION MEMBER AND PARTNER ORGANISATIONS

I.S. Rivers Integrative Sciences Recherches et Actions

3rd INTERNATIONAL CONFERENCE
Integrative sciences and sustainable development of rivers
4 > 8 JUNE 2018 Lyon - FRANCE

NORWEGIAN ENVIRONMENT AGENCY

SYKE
Finnish Environment Institute

AGENCE FRANÇAISE POUR LA BIODIVERSITÉ
ÉTABLISSEMENT PUBLIC DE L'ÉTAT

CIREF
centro ibérico de restauración fluvial

CIRF

WORLD FISH MIGRATION FOUNDATION

Global Water Partnership

WARSAW UNIVERSITY OF LIFE SCIENCES
SGGW

Wetlands INTERNATIONAL

stowa
FOUNDATION FOR APPLIED WATER RESEARCH

INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS

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THE RIVER RESTORATION CENTRE
Working to restore & enhance our rivers

ECRR Events calendar 2018

Date / period	Title / issue	Location	Links
19–24 August, 2018	12th International Symposium on Ecohydraulics (ISE 2018)	Tokyo, Japan	http://ise2018.com/
26–31 August, 2018	World Water Week	Stockholm, Sweden	www.worldwaterweek.org
5–9 September, 2018	WRW2018 – 4th International Conference Water resources and wetlands	Tulcea, Romania	http://www.limnology.ro/wrw2018/abstract.html
10–14 September, 2018	Freshwater Ecosystems – Key Problems (FEKP – 2018)	Lake Baikal, Irkutsk, Russia	http://www.lin.irk.ru/conferences/fekp2018/en/
21–23 September, 2018	X Congreso AEIP – APENA-EFIB-ECOMEDBioingeneering in Mediteranean environments (in Spanish)	Madrid, Spain	http://congresoecomed.aeip.org.es/
24–26 September 2018	Dam Removal Europe Workshop	Hudiksvall, Sweden	http://www.damremoval.eu/sweden/
25–27 September, 2018	Ecwatech	Moscow, Russia	http://www.ecwatech.ru/en/News1/ECWATECH-2018/
10 October, 2018	AQUACROSS FINAL CONFERENCE	Brussels, Belgium	https://aquacross.eu/final-conference
17–20 October, 2018	16th EUROPE – INBO 2018	Sevilla, Spain	www.inbo-news.org/agenda
22–26 October, 2018	4th Italian River Restoration Conference	Bologna, Italy	www.cirf.org
3–5 April	11th International Sednet Conference	Dubrovnik, Croatia	https://sednet.org/sednet-conference-2019/
3–6 June, 2019	LuWQ2019 – 4th International Interdisciplinary Conference on LAND USE and WATER QUALITY: Agriculture and the Environment	Aarhus, Denmark	http://www.luwq2019.dk/

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

Free ECRR Network Subscribent

All who are interested in river restoration and sustainable water management are encouraged to join the ECRR. Subscribents 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.
To register, go to www.ecrr.org.

If you want to unsubscribe for the newsletter, please send an email to info@ecrr.org.

The network for best practices of river restoration in Greater Europe
ECRR
European Centre for River Restoration

This news letter is a co-production by the Iberian River Restoration Centre (CIREF) and the Russian Research Institute for Integrated Water Management and Protection (RosNIIVHk) as National River Restoration Centres and members of the European Centre for River Restoration (ECRR).