











## Restoring Europe's Rivers

### **RESTORE Bulletin**

June 2013

## Website update - How to do river restoration

We've updated the **RESTORE** website to make the **How to do river** restoration section even better.

By using our step-by-step guide you will have the building blocks to plan, design and review a successful river restoration project.

Step one looks at planning your project; step two, the design, objectives and pre-monitoring phase, while step three focuses on project construction. The final step looks at how to share information and further best practice. We will continue reviewing and adding to these pages in the coming months.



All the information can be found in our newly published guide: Rivers by Design which is free to download from our website.

#### **News in June**

Updated pages

RESTORE in Switzerland and Germany Tweet of the month - RNLI

### **Articles**

Switzerland – nature-like bypass channels Legislation and restoring rivers in Romania

### Events in 2013

5<sup>th</sup> European river restoration conference CIRF summer school, Venice, Italy

### **Events in 2014**

RRNW call for papers, Washington, USA 9<sup>th</sup> European conference, Oulu, Finland



## RESTORE visits Switzerland and Germany

Thirty river restoration experts from ten countries took part in a RESTORE excursion to Switzerland and Germany in May, organised by our partners SYKE (The Finnish Environment Institute) and the RRC (River Restoration Centre, UK).

Participants were able to see different types of river restoration

practices in action in the Munich and Basel areas.

Pinja Kasvio from SYKE said 'We discovered how river processes, habitat connectivity, fish access and fish spawning opportunities have improved, especially at hydropower plants. Restoration has improved fish passage on the River Isar as well developing recreational areas for residents and visitors'. Pinja also explained that using nature-like bypass channels on the River Rhine has also improved the river's ecological state by taking environmental flow

into consideration.

The excursion was a great success despite the endless rain that covered the region in May. The combination of interesting site visits, flavored with various conversations helped strengthen the European river restoration network and encouraged participants to carry on this work at home.

A nature-like bypass channel in Wettingen attracts migratory fish and people! (Photo by Pinja Kasvio, SYKE).

# Switzerland – a land of nature-like bypass channels

Some fish such as salmon need access to freshwater but obstacles such as dams and hydropower plants can act as barriers and prevent them migrating and spawning.

However, rivers in Switzerland, which are all regulated, have benefitted from some innovative solutions to reduce the impact of hydropower plants and dams on fish. To solve this challenge, bypass channels or fishways have been built at almost at every dam and weir. Rheinfelden is one of Switzerland's many nature-like bypass channels. Located on the River Rhine, it is the largest fish pass facility of its type in Central Europe. It stands out with its three fish ways, a vertical slot pass, bypassing river course and a rock cascade pass.

The environmental aspects have been taken into consideration by providing constant discharge of 10 m³/s to the bypassing river course as an environmental flow. Additional discharge up to 25 m³/s can be provided via the regulated gates, in order to provide a dynamic flow regime. Discharge of 10 m³/s is also provided to the main channel as a landscape flow – purely for landscape reasons.

Even though this bypass channel has been in operation for only a short period of time, its environmental benefits are already evident. It has been estimated that the amount of fish in the by-pass channel is up to 30 000, many times more than most bypass channels.



Left photo: Rheinfelden fish pass facility. Middle photo: a rock cascade pass. Right photo: a vertical slot pass (photos by Sini Olin, SYKE).

## Tweet of the month

RESTORE rivers\_@RESTORErivers\_

We're asking readers to Tweet a picture of their local river. We'd like to see river restoration in practice, rivers that could do with a helping hand, urban, rural - just go out and discover your river.

We received this wonderfully atmospheric photo of the River Thames (London, UK) from TowerRNLI @RNLI

pic.twitter.com/4Sp3JNNUU0





Tower Lifeboat (River Thames, London) is the busiest station in the RNLI (Royal National Lifeboat Institute). They provide a 24-hour on-call service to cover search and rescue requirements on inland waters and out to 100 nautical miles from the coast of the United Kingdom and Ireland.

Check them out on http://www.towerrnli.org.uk/

# Improving Romania's rivers with legislation

International legislation to improve water management has been a powerful means of change along the Danube.

More than 10 years ago Romania together with neighboring governments of Bulgaria, Republic of Moldova and Ukraine signed The Lower Danube Green Corridor Declaration; Europe's most ambitious wetland restoration project.

The agreement built on work carried out in the early 90's when Romania began a series of projects aimed at improving flood protection and preserving natural habitats. The first schemes were carried out in the Danube Delta Biosphere Reserve at Babina and <a href="Cernovca">Cernovca</a> which had been drastically affected by damming and drainage activities

However, with the implementation of the Water Framework Directive in 2000, analysis of River Basin Management Plans showed that 36.5% of all water bodies in Romania were at risk of failing to achieve the required 'good status' for surface waters and groundwaters by 2015.

This led to a further series of large scale restoration projects on the Danube, including Popina and Fortuna, which took a more holistic

approach to water management by integrating environmental, social and economic needs. Another notable project was the modeling, monitoring and reconstruction undertaken in the Prut basin and the restoration of <u>Ciobarciu</u> wetland, which plays an important role in flood control.



Babina polder before and after restoration

Despite the number of projects completed, Romania is still at an early stage of river restoration and progress has been slow. There have been problems with working with national and regional agencies, objections from local people, implementing plans and allocating funds.

However, the achievements of the pilot projects and the support of national and European legislation have been critical to the success of the restoration strategy so far. The restoration programme continues to restore and protect Romania's rivers and wetlands and it has enhanced water security and flood control for the area's many people.

For more information contact: Elisabeta Cserwid (National Institute of Hydrology and Water Management)

Email: Elisabeta.cserwid@hidro.ro

## **Upcoming events**

### **Booking reminder**

5th European River Restoration Conference in Vienna 11 - 13 September 2013 & first European River Prize

The conference will include a presentation of work, networking events, site visit and post conference report. The announcement of the first European river prize will be held in association with the conference.

The conference will also assess the results of RESTORE and how gathering and transferring knowledge has benefited the practical work of those involved in river restoration during the course of the project.

For more information on how to participate in the ECRR and RESTORE European Conference - <a href="http://www.errc2013.eu/">http://www.errc2013.eu/</a>

Register Here



Vienna 12 September 2013

For more information: restore@environment-agency.gov.uk

### CIRF and WaterDiss 2.0 Summer School

Summer school for young researchers and professionals on 'Increasing sustainability in river basin planning and management: concepts and tools for river restoration'

5th August to 11th August 2013 Location: San Servolo Island, Venice, Italy

The WATERDISS 2.0 Summer School has been organised by CIRF (Italian Centre for River Restoration), the University of Oxford and other partners.

It is an opportunity for talented young researchers, PhD students and freelancers from all over Europe to work intensively with some of the leading academics, researchers and practitioners in the field.

The low fee of €220 includes accommodation in single rooms, two meals a day (breakfast and lunch), refreshments and all materials. Travel to the site visit and accommodation in Lienz. Travel to and from Venice, dinners and extra nights must be arranged and paid for individually.

The deadline for registration is getting close, so hurry up and register by June 14.

Details of fee payments will be given on application but must be paid before July 1, 2013.

### Further information from:

Anna Baginska, Environmental Sustainability, University of Oxford Email: <a href="mailto:anna.baginska@earth.ox.ac.uk">anna.baginska@earth.ox.ac.uk</a>

# Call for papers! River Restoration Northwest, USA for 2014

Seems like a few months away...but you know how time flies! Get those ideas flowing and on paper.

River Restoration Northwest is gearing up for the 13th Annual River Restoration Symposium at Skamania Lodge in Stevenson Washington February 4-6, 2014! They have issued a call for Abstracts and Sessions.

Session Proposals are due August 17th.

Abstracts for oral and poster presentations are due September 14th.

To get all the details please visit the website at www.rrnw.org



# 9th European Conference on Ecological Restoration, Oulu, northern Finland

### August 3-8 2014

The Conference theme is Restoration, Ecosystem Services and Land Use Policy.

Proposals are welcomed for special sessions, which can be related to the main theme of the conference, or any other relevant issues related to restoration. The conference will explore:

- \* Restoration of ecosystem services
- \* Ecological, economic and socio-cultural values of restoration
- \* Approaches, methods and tools to increase the link between science and decision making
- \* EU 2020 biodiversity strategy

Further information: www.ser2014.org

Conference contact email address: ser2014@metla.fi

### Read more on the RESTORE partnership.

If you have any news items for us please email by 20<sup>th</sup> June 2013: restore@environment-agency.gov.uk

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