

In this newsletter	
Dear readers,	1
Introduction to the newsletter seminar report.	2
The fieldtrip: The restoration of tributaries of Cerknica Lake and Škocjan Caves Park	3
Promote integration of aquatic ecosystem conservation in land (use) planning and other territorial policies	4
Sharing best practices	6
Public education on water ecosystem and resources preservation and restoration	7
Improve the link between tourism development and quality of water ecosystems	8
Outcomes of the workshop organised at the Ljubljana Seminar	8
Stakeholder involvement in river and wetland restoration – experiences from Slovenia	9
Integrated RBM and River Restoration – The Case of the Sava River Basin	10
WWF6 Session and beyond: Target action plan and milestones.	11
Call for articles	12
Free Membership ECRR!	12

### Dear readers,

It is with great pleasure that I present to you a special edition of the ECRR newsletter. This newsletter reports about the findings and main results of the seminar "Forging targets and Solutions for Rivers and Water Ecosystem restoration" that was organized in Ljubljana, on November 16-18th, 2011.

The seminar proved to be very successful. More than 100 participants, coming from 25 different countries attended this event. This seminar was organised or supported by the following partners:

- European Centre for River Restoration (ECRR) (Lead partner)
- The EU LIFE+ project RESTORE
- European Water Association (EWA)
- The French National Agency for Water and Aquatic Environment (ONEMA)
- The International Network of Basin Organisations (INBO)
- Institute for Water of the Republic of Slovenia (IzVRS)

The IzVRS hosted the seminar, and they really did a great job.

Several interesting key speeches, as well as four different working tables plus a field trip offered attendants a broad and challenging program. The inter active settings of the working tables were very much appreciated, as participants had the opportunity to bring up their ideas and suggestions etc. how to achieve a better approach of river restoration projects.

The main conclusions and recommendations of the seminar provides us with relevant input for the next WWF6 in April, 2012 in Marseille.

In this special newsletter you will find, after the introduction by our chairman Bart Fokkens, a range of articles addressing the following topics: Land Use, Public Education, Stakeholder Involvement, Sustainable Tourism and Sharing Best Practises; the latter being a specific topic for the RESTORE project, that was also one of the hosting parties of the seminar.

In addition, an impression of the field trip, that formed an interesting part of the seminar's programme is added. An example of integrated river basin management for the Sava river basin is presented by Dejan Komatina of the Sava Commission.

Furthermore, you will find a concluding article about the main results and follow up steps and activities after the seminar in this newsletter. The program, all presentations, articles and findings of the seminar can also be found on the website of ECRR, via a link with the seminar proceedings at www.ecrr.org.

Apart from that as usual, you will find the agenda on upcoming events in 2012.

#### I wish you pleasant and fruitful readings.

Hil R. Kuypers Secretary ECRR

# Introduction to the newsletter seminar report.

### The Seminar Forging Targets and Solutions for Rivers and Water Ecosystem Restoration was

organised in the framework of the World water Forum 6 preparatory process. Focusing on solutions and actions, the 6th World Water Forum – Time for Solutions! - will show how the international water community contributes to tackle the key challenges our world is facing, from access to water for all, to climate change and to food security.

The seminar therefore should assess and define solutions for one of the themes for the Greater European Region: to develop new knowledge and know – how on rivers hydromorphology, restoration and protection of water ecosystems. It should concentrate on four topics:

- Promote integration of aquatic ecosystem conservation in land (use) planning and other territorial policies
- Reach consensus on river restoration good practices as means to support delivery of European policy goals.
- Reinforce public education on water ecosystems and resources preservation and restoration
- Improve the link between tourism development and quality of water ecosystems

This seminar is organised by the following institutions:

- European Centre for River Restoration (ECRR) (Lead partner)
- European Water Association (EWA)
- Institute for Water of the Republic of Slovenia (IzVRS)
- The French National Agency for Water and Aquatic Environment (ONEMA)
- The International Network of Basin Organisations (INBO)
- The EU LIFE+ project RESTORE

Traditional drivers of river and water ecosystem restoration arise from national legislation and policy relating to nature PORGING TARGETS AND SOLUTIONS FOR RIVERS AND WATER ECOSYSTEM RESTORATION Seminar, 16-18 November 2011, Ljubljana

conservation, fisheries management, flooding and flood risk management, landscape development and projects by private developers and individuals. The majority of river and water ecosystem restoration projects undertaken to date have generally involved non-complex land ownership issues and are restricted in the main to single sites. Generally theses are projects primarily driven by a single piece of legislation or policy.

The extent to which river restoration is being identified and implemented as a

educate, raise awareness of the public and increase their involvement, participation, interest and support to the preservation and restoration of aquatic ecosystems, via various communication tools. But, how efficient are they?

Tourism can have an tremendous impact on water resources and aquatic ecosystems. Coastal zones, for instance, concentrate touristic infrastructures and visits/activities, in addition to concentrating permanent population and some forms of primary production. The choice of location



means to resolve river degradation and / or improve and diversify river ecosystem service provision is limited by planner and practitioner awareness of and access to best practice and cases. Often it is a lack of awareness of the practical approaches that are available and how they have been undertaken; there is a strong need for best practice and lessons learned to underpin better uptake. Therefore it is vital that information on best practice is developed and shared urgently.

Local, regional, national and international actions on public education on water issues exist and are taking place to for touristic premises influences strongly the impacts on ecosystems. Part of the tourism activity also concentrates on low flow periods.

The objectives of the seminar were to achieve the goals of formulating targets, actions plans and partnerships for implementation of these plans, all to be showcased in a special session at the 6<sup>th</sup> World water Forum in Marseille, March 2012.

#### Bart Fokkens,

Chairman ECRR and WWF6 European Region Target Coordinator.

### The fieldtrip: The restoration of tributaries of Cerknica Lake and Škocjan Caves Park

During the seminar, on17th November 2011, a fieldtrip was organised.

The first stop was at the Cerknica lake, which it is the largest Slovenian turloughs and also one of the most important sites in Europe. It has very special ecological conditions of the area with big diversity of plants, animals and habitats. In the past, people wanted to transform the area for their benefit and made a lot of interventions in the watercourses and sinkholes of the lake. All these interventions caused big changes of the water regime of the lake. In 2006 Notranjska Regional Park acquired financial support from European programme LIFE Nature for project LIFE 06 (LIFE 06 NAT/SI/000069 »Intermittent Lake Cerknica«). The purpose of this project was the establishment of appropriate conditions for protection and conservation of animal and plant species and their habitats on Lake Cerknica. Factors that threaten the biodiversity on Lake Cerknica are modifed watercourses, abandoning of meadow mowing and deficient knowledge of nature and its conservation. In 2009 restoration of selected watercourses: Goriški Brežiček and Tresenec were realized with the help of LIFE subsidy. The presentation of the project was done by Jošt Stergaršek and

Rok Fazarinc. Both of them emphasized that the main results of this restoration included slower runoff of low waters from the area of the intermittent lake, ground water level rise and retention of water in depressions and stream branches.

The next stop was by the karst pond in Lasatke, which was revitalised in 2006 in the process of Phare project: 1001 karst ponds. Karst ponds contain practically the only standing waters in the area of Kras. They visibly mark the cultural landscape and testify to an extremely economical method of using rainwater. In the regional sense, karst ponds create a network of aquatic biotopes that are important for the existence of numerous animal and plant species. Because of their exceptional diversity, caring for the preservation of every single karst pond is an important contribution to maintaining biotic diversity.

Our last stop was in the Škocjan Caves Park. The Škocjan Caves are a unique natural phenomenon, the creation of the Reka River. The Škocjan caves remain the only natural monument in Slovenia and the Classical Karst region on UNESCO's list of natural and cultural world heritage sites. Thus, they hold a significant position among the



**world's natural monuments.** This typical landscape that developed in limestones is named karst; the word being derived from



the name of the area - Kras. The park was entered on another list under the auspices of UNESCO: The Ramsar Directory of Wetlands of International Importance. The Škocjan Caves were included in this list due to their important natural habitat comprising highly specialized and often endemic land and water cave animal species, among them the endemic cave salamander (Proteus anguinus). Since 2004, the park is also a part of the Karst Biosphere Reserve network in the frame of the UNESCO MAB Program. The director of the Park, dr. Gordana Beltram, presented the activities, restoration projects and management plan. Cooperation with park inhabitants is exemplary and is reflected at all levels of social life, especially as regards the joint protection of natural and cultural heritage, joint work activities related to the maintenance and reconstruction of park infrastructure and the cultivation of cultural landscape. The participants took a walk, guided by Borut Perič, on the newly open trail by the Reka River and admired the natural wonders of this partly underground river.

Nataša Smolar-Žvanut Institute for Water of the Republic of Slovenia, Hajdrihova 28c, 1000 Ljubljana

# Promote integration of aquatic ecosystem conservation in land (use) planning and other territorial policies

#### Introduction

Land purchase, different forms of land use and land use planning, is often seen as the most evident barrier for river restoration. Local land use planning and land banking instruments are useful tools to implement nature conservation / river restoration projects. Initiatives to apply both instruments (combined with or linked to measures with broader objectives like control of diffuse pollution, bird and wildlife conservation) are successful to enhance and implement river restoration projects.

# Main findings and results of the workshop

#### What kind of land use issues and obstacles "occur" in river restoration projects

Although legal frameworks (WFD, agrienvironmental programs, etc) exist, implementation of measures is often weak, and responsibilities of organisations are not clearly defined (f.e. who is responsible for awareness raising in RR projects). Compensation payment, in case of 'water use'-restrictions to farmers (f.e., limited use of fertilizers), are formulated but are too low experienced. Zero-tax and/or agrienvironmental payments under the Rural Development program are examples. Too often still only top-down processes occur for river restoration. Bottum-up approach and awareness-raising is needed, starting from the early phases of project planning. This may prevent the mistrust of farmers and villagers. In addition, local people have to know, understand and accept river restoration plans; otherwise they offer resistance to river restoration projects. It was also stated that in many situations there is a need for 'land' pilot projects. It was recommended to start with simple small scale pilot projects, to build commitment, and involve stakeholders step-by-step.

Another challenging issue is the extreme fragmentation of land ownership and land use, which causes big problems in finding and contacting and speaking the many land owners and users in RR projects. Projects may be hampered by:

· Sometimes small private ownership of

river embedded parcels

- Often land registration in Cadastre is not up to date and correct
- Conflicting interests about land use: economic, ecologic, human interests...
- These conflicts that exist on different levels: national / regional / local
- Complications with purchasing land : to value the price of the lands / who will pay that budget / there is lack of appropriate 'land mechanisms'

# *River restoration activities that require 'lands' substantially*

Flood protection measures or measures dealing with water pollution form an important issue here, as they are strongly related to land use. Therefore attacking these problems requires proper land use policies. Trans boundary river basin management can play a strong role in this. Integrated river basin management like the International Commission for the Protection of the Danube (ICPDR). An alternative approach is to implement the concept of " how to live with the risks'

### *Main stakeholders in land use planning* During the workshop, many stakeholders

were defined, the most important ones are those who represent :

 Organisations with 'enforcement' on national and local level

- · Nature sector
- · Economy, fishery, other businesses
- Urban surroundings
- Land owners, land users
- NGO's

# Examples or best practices of land use planning

Some less or non-successful 'land use' practices that are mentioned are: The Mura river in Slovenia and the Ljubljana river, where farmers and villagers opposed the anti-flooding plans. Specific point of attention/fear with the initiators is: When you speak with locals at an early stage, they will come up with financial claims...

Half-successful examples are the Irpin RR plans near Kiev in Ukrain, where plans are already multi-functional, but still have to be broadened to land owners, land users, locals in bottom up approach. Success stories can be found as well: The "Sketch / match design/calculate" workshops (methodology from DLG): a way of working whereby all stakeholders work closely together in a limited time frame. The process starts at first with sharing and discussing all problems and expectations, and includes also a common field trip. All information is put on sketch maps by landscape architects; several scenarios for solutions are drawn, are





(calculated and) balanced together; an optimum scenario is discussed and leads to a final plan. This whole process takes only two or three days and is applied in NL and many countries that the Dutch are cooperate with in projects (Ukraine, Romania, Turkey, etc.)

## Organisation of land acquisition / lands becoming available for river restoration

All possible methods (land banking, land consolidation and other tools for land acquisition) were considered to be useful, depending on local conditions. However, methods are often hampered by the lack of clear ownership of land. Proper registration of ownership rights is a precondition for fruitful land banking, land consolidation and other tools for land acquisition.

In Croatia the "public water estate" mechanism exits, that implements the Water Act. This act is a legal instrument that can be used to impose restrictions on the use of lands. Restrictions may be applied with or without financial compensation. Increased values of land leads to more resistance to these restrictions. A solution would be improving the financial compensation, or to buy the land (which can be a very sensitive issue). In some cases, expropriation could also be an option, but this generally requires a long process.

#### Application of any form of land banking In Romania: land banking is used for infrastructure and construction projects, but not for river restoration. It would be useful to develop this. In Slovenia land banking is a possible tool, but isn't used a lot. In the Netherlands DLG operates as the land banking authority, providing land exchange opportunities, facilitating farmers to improve the land structure, and to move farmers to other areas for river restoration with tailor-made approaches. It was stated, on the contrary, that in

Ukraine officials and policy makers only dream about this tool to become applicable.

The Dutch approach is welcomed as a promising solution for many countries.

# Proposed solutions to achieve the target

The target of the workshop merely focussed on defining measures or tools to promote integration of aquatic ecosystem conservation in land (use) planning and other territorial policies or how to integrate river restoration / ecosystem conservation in territorial policies.The workshop did not yet specify concrete solutions, but still some important remarks ansd recommendations have been defined.

Hil Kuypers; secretary ECRR

#### Recommendations

An important notice is that what is needed to reach the targets set, is not just an organisation that is willing to provide financial funds, but that also can and will actually develop a process. Who will do the job? And who is the legal authority that owns the process? An authority is needed that is:

- transparent.
- non-profit oriented
- participatory,
- integrating (across governmental sectors),
- independent

An example of this type of organisation is DLG from the Netherlands, but every country needs to find a solution that fits the national circumstances.

Another recommendation is to develop a guideline that offers basic recommendations for organising the process of river restoration.

This task, that is very fitting for ECRR, is already planned within the RESTORE project. The group see great value in developing a guideline that gathers good practise case studies, particularly if it offers an interpretation to subsequently formulate a number of recommendations. Possibly could this could be offered as an e-learning course.

Land development requires new partnerships between public and private sectors and all kind of stakeholders and collaborative ways of working. Networks have to include a mix of organisations dealing with policy development, implementation and research/ innovation of River Restoration. Countries, regions or local governments should start pilot projects in specific areas related to river restoration. It is important to integrate river restoration programs or flood protection policies and ambitions with economic, environmental, infrastructural policies. Communication, information exchange and sharing of knowledge and (field) experiences with land use planning and land banking enhances the success of river restoration.



WETLANDS









# **Restoring Europe's Rivers**

### Sharing best practices

This workshop looked at 'Experiences on reaching consensus on **river restoration good practices**, as a means to support delivery of European policy goals.' The workshop was facilitated by the Environment Agency (England and Wales), The River Restoration Centre (UK), Wetlands International, CIRF (Italy) and SYKE (Finland) as part of the RESTORE partnership.

The workshop was attended by people from 24 countries with a variety of backgrounds such as fisheries, restoration would gain influence with those who control the budgets! We need to recognise that restoring rivers is not just vital to meeting Water Framework Directive targets, but that the environment has a value economically and socially as part of healthy functioning ecosystems. We particularly need to remember this when balancing conflicting pressure for rivers such as navigational use or hydropower.

The RESTORE partnership took away a lot of actions from the workshop and we gained an understanding of people's needs. There was a strong feeling that guidance and information are needed, database we would love to receive your feedback our input: restore@environment-agency.gov.uk.

It was clear that many countries would like information to be available in their own language in order to benefit fully from these tools. At the workshop a number of other concerns were raised. Where good case studies existed, organisations were eager to add these to the RESTORE Wikitool and highlight valuable guidance to share best practice.

The workshops showed that there is a need to share best practice, provide



engineering, hydromorphology or education but all were interested in improving their river environment. We found that regardless of where you are in Europe, we share common drivers to support river restoration. This was principally the Water Framework Directive; however the Habitats Directive was also important.

We face similar obstacles across Europe – a lack of stakeholder input, lack of funding, accessible technical guidance, bureaucracy and a need for the costbenefits analysis of river restoration. Better economic assessment of river to enable projects to use best practice techniques and the most up-to-date science available. The RESTORE partnership will be creating an online searchable database '**Wikitool**' of river restoration case studies. Please see www.restorerivers.eu. As we develop the knowledge and help each other to bring about river restoration. It also showed that European partners can work together on their river basins to achieve the best results.

Toni Scarr & Ruth Hanniffy

The RESTORE project is made possible with the contribution of the LIFE+ financial instrument of the European Community



and works in partnership with



### Public education on water ecosystem and resources preservation and restoration

This workshop was characterised by enthusiastic and valuable discussions and raised several issues that can be summarised as follows.

Local, regional, national and international actions exist and are taking place to educate, raise awareness of the public and increase their involvement, participation, interest and support to the preservation and restoration of aquatic ecosystems and rivers. Various communication tools are used for that purpose, but the question is how efficient are they?

Social perception studies show the efficiency of these types of actions over decades or questionnaires/polls are testing the knowledge of the public to assess any changes in behavior and perception. In this context the priority target group for which education needs to be reinforced, is the youth and youngsters. It is well known and universal that the most effective education is to focus on children and students

# The outputs of the discussion were a shared vision of what public education is aiming to achieve:

- To inform about river restoration projects, their goals and their benefits
- To provide support for river restoration projects
- To improve participation in river management
- To raise awareness of the importance of preservation and restoration of aquatic environments
- To boost knowledge on the natural river system function and value (importance, self-sustainability)
- · To change attitudes and behaviours

It was agreed that it is most important to focus on the younger generation, school children at primary school level, as an investment for the future. There is a strong need therefore to mobilize school teachers and prepare for educational plans.



As well it is felt that it is important to focus on the local community as they can be involved or support preservation actions or restoration projects near them.

The following recommendations were also shared:

- To start studies on social perceptionand chage of behaviour to asses the efficiency of educational activities
- To plan sufficient time for education
- To consider involving 'marketing' experts to promote rivers restoration projects and preservation, use mass-media as well
- To consider local cultural, historical & economic context (trust and safety)
  - To employ bottom-up strategies
  - To adjust language to target groups & start from basics

**The following targets** are proposed for the WWF public education action plan:

• evaluate the efficiency of educational activities (change of perception) focused on primary schools

• evaluate the efficiency of general public/ stakeholder education activities (change in participation & support) in the frame of a local project implementation

#### Conclusion

Education and knowledge building, on rivers ecosystems functioning, among society is a key for preservation of river ecosystem and for successful river restoration projects. They guarantee sustainability of water resources and sustainability of society in the long run.

Josee Peres, ONEMA and Bart Fokkens, chairman of the ECRR



#### Improve the link between tourism development and quality of water ecosystems

Outcomes of the workshop organised at the Ljubljana Seminar

Tourism, both international and domestic, is one of the very big industries worldwide, showing a strong development in the recent past and with still increasing perspectives. It tends to be concentrated in time and space, worsening the potential impacts on water resources and aquatic ecosystems, often in summer. In coastal zones, for instance, concentrate touristic infrastructures and visits/activities, in addition to concentrating permanent population and some forms of primary production. In the mountains, winter tourism can increase the population of ski resorts tenfold during a few months each year, while river discharges are low. The choice of location for touristic premises influences strongly the impacts on ecosystems.

On the other hand, some of the water ecosystems are strong attractors and assets for different types of tourism, either mass leisure or ecotourism. The quality and availability of resources and ecosystems have obvious impacts in return by supplying services to tourism: water, waste disposal, safety for recreational activities. leisure culture and scientific interests... Tourism can therefore have both negative and positive impacts on such ecosystems: water abstraction, pollution discharge, morphological changes on one hand, raising awareness and financial resources for local population and actions on the other hand. The mutual potential impacts between tourism and water resources/ecosystems are very diversified from place to place.

Many initiatives and actions have been launched, in a more or less diversified and scattered way, to improve the relationships between tourism and natural assets, among which water resources and aquatic ecosystems. There is also progress in terms of awareness of tourists, tourism industry and local populations. In spite of this, there is still much to be done in order to improve and complete the actions undertaken (monitoring and assessment, for instance), seeking for a greater coherence, and looking for the implementation of local planning approaches, integrating land and water management with tourism development.

The workshop organised during the Ljubljana seminar was an opportunity to share experience and feedback from different European contexts and from various stakeholder perspectives. The problems prioritized were considered to be under the influence of the following main drivers, with either positive or negative impacts on water resources and aquatic ecosystems:

- · pricing of water uses,
- political support,
- tourism potential,
- increase of environmental awareness of tourists by communication, information and monitoring,
- strong environmental stakeholders (lobbying),
- legislation on tourism and environment.

The actions and experience reported in the workshop addressed awareness raising, education, certification and use of best available techniques, implementation of "user pays principle", participatory actions.

# Recommendations produced during the workshop

**Waterpricing** as an instrument taking into account the vertical, horizontal dimension as well as the external costs

Promote the most important ecosystem service - the hydrological function! Use ecosystem services as a basis for discussion with all stakeholders

Economical next to environmental benefits : so far economics seems to be more important to politicians, but the notion of "ecosystem services" might help

Develop some kind of **carrying capacity for tourism** in hydrological vulnerable areas/regions.

Jean Philippe Torterotot, and Stéphanie Gaucherand, IRSTEA and Bart Fokkens, ECRR



# Stakeholder involvement in river and wetland restoration – experiences from Slovenia

Stakeholder involvement in river and wetland restoration – experiences from Slovenia

Nowadays, every model of balanced development of natural resources, its economic performance and social viability should follow the principles of sustainable development. Such models include, for example, establishment of protected areas and also wetland and river restoration projects; from the initial ideas through implementation and monitoring of the results, process of ecological restoration should involve stakeholders and require public participation. The process of development of such models could be divided into four phases (Getzner et al., 2010): prephase, basic planning, detailed planning and implementation and management.



In the pre-phase of wetland and river restoration activities it is essential to share an idea for ecological restoration of the target area, usually developed within a limited group of people, to all relevant stakeholders. In this phase efforts should be made to identify who are the key stakeholders for the wetland or river restoration project; these are all those individuals and organizations who use and value the area concerned and who are likely to be affected by the management initiative and should be identified. At this stage it is important to understand their relationships with the area, their roles and responsibilities and what is the current impact of their activities on the area (Thomas, Middleton, 2003). Several interest groups could be identified in this process; primary stakeholders are those who are directly affected (might benefit or suffer losses) in the restoration project and those whose permission, approval or (financial) support is required (land-owners, farmers, governmental agencies etc.); secondary stakeholders include those who are indirectly affected (i.e. residents) and tertiary and other stakeholders include those who are not directly concerned but have influence or political power (politicians, opinion leaders etc.) and those with specific interest (like NGOs, scientists, general public; Alexander, 2008). Development of a vision for the project should be one of the major activities in this phase and should be developed with these stakeholders.

In the phase of **basic planning**, communication and participation involve efforts to understand potential resistance against the restoration project. Key players are invited to participate in the planning process which contributes to a better acceptance of the ecological restoration in the area.

**Detailed planning** phase is usually focused on technical solutions; this is the phase where the involvement of stakeholders is not so prominent.

Communication with and involvement of stakeholders in the **implementation and management** phase of the restoration project include their participation in the management activities, but different technical information should be provided to stakeholders, decision-makers and public.

Experiences from wetland and river restoration projects that were implemented in Slovenia (Sovinc, 1999) indicate that low level of environmental awareness and inadequate inclusion of stakeholders in the process of planning and implementation of wetland restoration projects is recognised as one of the major obstacles towards successful implementation of the projects. In the ecological restoration projects where the aim was to compensate degraded natural habitat during the process of construction of major infrastructure (motorways etc.) and where the initiative of restoration was part of the overall construction process lead by investors, the level of involvement of stakeholders was usually low. Restoration of a stream and wetland in Trzin, at the time of construction of a new motorway, demonstrate that lack of stakeholder involvement almost resulted in project failure. Another example - wetland restoration in Dobrunje, again linked to construction of a new motorway- shows that lack of stakeholder involvement and information about the restoration goals resulted in an increased level of vandalism after the reconstruction works were done.

On the other side, experiences from Slovenia show that if the idea for restoration of wetland of river is born within a group of interested individuals or organizations, often NGOs, the involvement of different interest groups and promotion is usually high and even decisive for effective implementation of the project. The biggest wetland restoration project in Slovenia in the brackish lagoon of Skocjan Bay near Capodistria would never



evolve in one of the greatest nature conservation success stories without enthusiasm and efforts of the Bird Watching and Bird Watching Association – DOPPS. Key of this success story lies in intensive information and promotion campaign coordinated by this NGO during the design phases of the restoration project which mobilised support of the policy makers, local population and other stakeholders.

Andrej Sovinc, Head of Secovlje Salina National Park

# Integrated RBM and River Restoration – The Case of the Sava River Basin

The Sava river is the richest-in-water tributary of the Danube with an average contribution of 25% to the total Danube flow, and creates the second largest sub-basin sharing 12% of the Danube river basin. The Sava river basin is known for its high environmental and socio-economic values, associated not only with a natural beauty all over the basin, an outstanding biological and landscape diversity (represented by numerous natural wetlands, nature parks and protected areas) and large retention areas along the river, but also with a high potential for development, such as waterway transport, hydropower generation, tourism and recreation, as well as other activities related to the use of water. Given a strong need for economic development in the region, a balanced approach is needed to use the potential and preserve the values simultaneously. The political changes in the region, that took place in the 1990s, presented a substantial challenge to water management in the Sava river basin, by turning the Sava river from the largest national river into an international river, and confining the water management to national level of the newly created countries. Therefore, a new international framework became necessary to ensure sustainable use, protection and management of water resources in the Sava river basin, and thus enable better life conditions and raising the living standard in the region. The new framework has been provided by the Framework Agreement on the Sava River Basin (FASRB), the first development-oriented multilateral agreement in the post-conflict period concluded in the region after the agreements on peace and succession, and the subsequent establishment of the International Sava River Basin Commission (ISRBC) for coordination of the FASRB implementation and the cooperation of the four Parties - Bosnia and Herzegovina, Croatia, Serbia and Slovenia.



Photo: Mouth of the Drina river. Author: Miroslav Jeremić. Credit: ISRBC.

The overall objective of the FASRB is to establish and maintain the transboundary cooperation to provide conditions for sustainable development within the SRB. The particular objectives of the FASRB include the establishment of:

- international regime of navigation on the Sava River and its navigable tributaries;
- sustainable water management in the basin including environmental protection, and

 sustainable management of hazards, such as floods, droughts, ice or accidents causing water pollution.
By integrating all aspects of water resources management, i.e. sustainability issues such as protection of water and aquatic

ecosystem, as well as development issues associated with water use (navigation, hydropower generation, water supply, fishery, tourism and recreation), the FASRB provides the ISRBC with the broadest scope of work among European basin organizations.



Photo: Lonjsko polje - Kratečko. Author: Boris Krstinić. Credit: ISRBC.

Since the beginning of the FASRB implementation, a wide range of activities have been undertaken or launched by the ISRBC to coordinate the preparation of joint plans (i.e. river basin management plan, flood risk management plan), development programs (e.g. for navigation and tourism) and establishment of integrated systems (GIS, river information services, flood forecasting and warning system, etc.) for the basin, as well as harmonization of national regulation with the EU regulation, and development of protocols for regulating specific aspects of the FASRB implementation. Considerable attention of the ISRBC has also been paid to the issues of cooperation, public participation and stakeholder involvement. (For further information, see www. savacommission.org.)

The ISRBC approach has shown a number of positive features (cohesive and intergrated nature, transparency, conformity with relevant EU and UNECE regulation, complementarity to the cooperation on the Danube level, etc.). It is also considered relevant to the processes on a wider, Danube and EU scale (such as those associated with EU Strategy for the Danube Region and EU 2020 Strategy) and seems to be relevant to other regions (other parts of South-Eastern Europe, Mediterranean region, Western Europe, Central Asia), given their interest in the Sava model of cooperation.

Despite challenges and obstacles to the implementation, the FASRB provides a solid basis for the integrated water resources management in the Sava river basin, and its implementation is making a steady progress toward the key objective – a sustainable development of the region within the basin.

#### DejanKomatina, Secretary, International Sava River Basin Commission

### WWF6 Session and beyond: Target action plan and milestones.

#### Targets.

Based on the outputs, results, conclusions and recommendations of the seminar the following overall targets for the development of new knowledge and know – how on rivers hydro-morphology, restoration and protection of water ecosystems could be formulated.

- 1. By 2015 support a number of at least 3 integrated river basin management plans to include river and water ecosystem restoration measures and/or river restoration projects pilot projects and/or river restoration plans.
- 2. Delivery by 2015 of national and/or European policy objectives in the field of protection and restoration of water ecosystems at local to basin scale. In these at least 3 integrated river basin management plans is through new capacity development underpinned by the use of best practices of land and land use planning, of river restoration approaches and stakeholder involvement, public education and newly developed sustainable tourism planning in relation to land use and water management planning.
- In the period 2012 2015 communication, exchange of information on existing and gained new knowledge and know – how about the elaborated solutions on land and land use planning, best practices of river restoration, public education and sustainable tourism development by studies, field visits, study tours, seminars and conferences.

#### **Milestones:**

**2012.** At the World Water Forum in Marseille these targets will be refined and/or endorsed. The overall target action plan and four sub target action plans will be presented and agreed by the partners based on:

At least 3 local land use and land banking initiatives in different countries are defined as useful tools for river and water ecosystem restoration.

A designed web based tool to enable policy makers, river basin planners, and a wide range of practitioners and experts, to share information and good practice on river restoration.

Presented proposals for assessing the effects of public education on awareness raising on ecological functioning of rivers, public participation and stakeholder involvement in river and water ecosystem restoration.

Draft criteria for "good cases" of integrating sustainable tourism development in land in water management planning .



3 nominated river basins in different countries and regions for potentially implementation of the solutions to achieve the defined target.

**2012.** In autumn an international milestone seminar/network event will be organized to follow up the progress on the action plans and to communicate the preliminary results. Next to results of the four sub targets, it should include the selection of at least 3 river basin organizations agreeing to implement the solutions and to achieve the defined target based on stakeholder owned needs assessments.

**2013**. In autumn an international conference will be organized to communicate about:

- The final results of the four different sub-target actions are to be used to achieve the overall target to include river and water ecosystem restoration measures and/or river restoration projects pilot projects and/or river restoration plans in the 3 integrated river basin management plans.
- 2. The river basin organizations present their action plan (progress) to come to the IRBM plans.
- 3. The final results of the RESTORE Life+ project are based on the online database of case studies, a web based comprehensive river restoration library, 36 events and field visits to build up river restoration network capacity and to promote effective river restoration knowledge transfer.

**2014.** A seminar will be organized about River Restoration and Integrated River Basin Management Planning with presentation of the 3 draft basin plans and the related aspects land and land use, best practices of river restoration, stakeholder involvement, public education and participation and integrated land and water management concerning sustainable tourism development.

**2015.** At the World Water Forum 7 the presentation of the results with respect to the three important aspects:

- 1. The supported integrated river basin management plans with restoration measures and/or projects and/or plans.
- 2. In relation to this the gained tools and knowledge on best practices of (hydro-morphological) river restoration, strategic land and land use planning, stakeholder involvement, public education and sustainable tourism development.
- 3. The information and communication activities and the capacity development resulted on the exchange of information, tools and knowledge by the main river restoration networks.

Organizations involved in the WWF6 and the seminar committed themselves to implement the action plans together with a number of invited organizations, involved in integrated river basin management planning to achieve the defined overall targets by participating in the development of new know – how and knowledge on ecological river restoration.

Bart Fokkens, Chairman ECRR and Greater European Target Coordinator.

Date / periode	Titel/issue	Location	Links
22 and 23rd Feb 2012	CIWEM International Event - Water Management in Europe	Lille	lauren@ciwem.org
8 and 9 th March 2012	RESTORE engagement event	Arnhem	http://www.restorerivers.eu/
12-17th March 2012	WWF-6	Marseille	http://www.worldwaterforum6.org
19th April-2012	RRC conference	Nottingham	http://therrc.co.uk/2012%20Conference/1st_email_ announcement_RRC_ANC_13.pdf
26-28th June	Integrative sciences and sustainable development of RIVERS	Lyon	admin.ise2012@boku.ac.at
17-21st Sept 2012	9th int. symp. on ecohydraulics	Vienna	http://www.ise2012.boku.ac.at

### **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 Membership ECRR!

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

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

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





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