



**Special edition
World Water Forum 6**

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Introduction

Dear all,

Herewith I present with great pleasure the ECRR newsletter Special, dedicated to the 6th World Water Forum, that was held in Marseille from March 12th -16th, 2012. The ECRR played an important role here, as it coordinated one of the European regional target sessions: "Water ecosystems protection & restoration", with specific focus on River Restoration. More than 100 participants, coming from several countries attended this session.

Based on the results of the seminar "Forging Targets and Solutions for River and Water Ecosystem Restoration" held in November 2011 in Ljubljana, and on forehand provided information, facilities, presentations etc. by many actors made this event at the WWF6 successful. Thanks to the efforts and commitment of the seminar participants and all actors, and especially that of our chairman Bart Fokkens, who coordinated the regional target preparatory process, the session proved to be very fruitful and delivered real solutions and lots of inspiring ideas and input for the enhancement of river restoration.

The main target of the session has been defined as follows:
By 2015, evidence based developed best practices of ecological restoration measures and land use planning will be adopted by at least 3 integrated river basin management plans. Moreover the by this way gained new know-how and knowledge will

be disseminated by field visits, study tours, seminars, conferences etc. during the three year period until the next WWF. In this newsletter, you will find lots of information about the content of the session, presentations, main outcome of the discussion rounds and some recommendations. After a general introduction by our chairman Bart Fokkens, a range of articles is presented addressing following topics: Land Use, Public Education, Sustainable Tourism, Sharing Best Practices and Integrated River Basin Management.

The results of the forum provides us with new, additional input to prepare the next steps to reach the targets. Thus implementing the main results and solutions that came out of the session. In a concluding article by Bart Fokkens, reflecting on these outcomes, you will read what follow up steps and activities are foreseen after the forum.

All presentations, articles and findings of the WWF6 session can also be found on the website of ECRR, via a link with the seminar proceedings at www.ecrr.org. As usual a list of new events coming up is also incorporated in this newsletter. I wish you pleasant and fruitful readings.

*Hil R. Kuypers
Secretary ECRR*



ECRR secretary, Hil Kuypers and chairman Bart Fokkens visiting the Forum Exhibition.

Introduction to WWF6 Time for solutions and commitments

The goal of the 6th World Water Forum was to tackle the challenges our world is facing and to bring water high on all political agendas. There will be no sustainable development while water issues remain unsolved. Everywhere on the planet! In total, 12 priorities as well as 3 conditions for success were defined before the Forum as well as priorities and targets for Africa, Americas, Asia Pacific, Europe and 2 cross continental regions. One of the European targets was the development of new knowledge and know-how on rivers hydromorphology, restoration and protection of water ecosystems.

For river restoration recent policy shifts have occurred, requiring more holistic and integrated larger-scale restoration. Drivers include floods over the past decade leading to a view to the use of floodplains for natural storage; improvement to water quality and morphological

status; improved land use planning and management and more extensive agri-environment schemes.

Although there are ongoing calls for policy shift, the more common premise is that there are institutional structures and learning lessons which can perhaps be transferred from one country to another. 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, lessons learnt and stakeholder involvement 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 educate, raise public awareness and increase public involvement, participation, interest

and support to the preservation and restoration of aquatic ecosystems, via various communication tools. But, how efficient are these?

Tourism can have a tremendous impact on water resources and aquatic ecosystems. Many charters and certification programs already exist for tourism, embracing a more or less wide scope of sustainability aspects. One of the main challenges, for further improvement of the interaction between tourism development and preservation / restoration of water resources and aquatic ecosystems, is probably to seek integrated planning of land use, tourism development and water management.

Bart Fokkens
Chairman ECRR

Strategic land and land use planning;



Hil Kuypers, Programme coordinator Water of DLG and Secretary of European Centre for River Restoration, presented a [short video](#) on the need to acquire land for river restoration, and to involve and commit stakeholders.

Land use planning and land banking tools are important in successful river restoration. They are among the core businesses of DLG. Based on our experiences from all over the world, these tools can enhance river restoration practice.

Most rivers rarely run isolated from their surroundings. Flowing through areas with



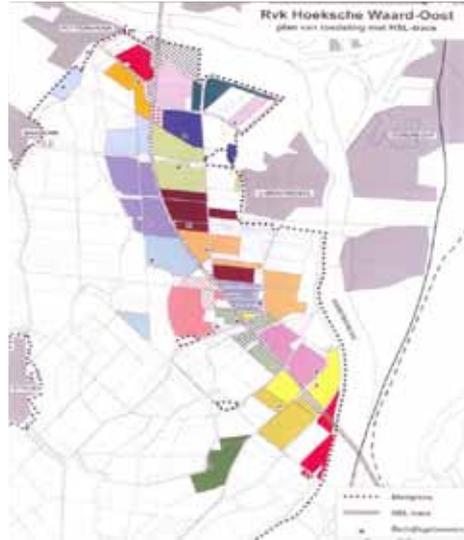
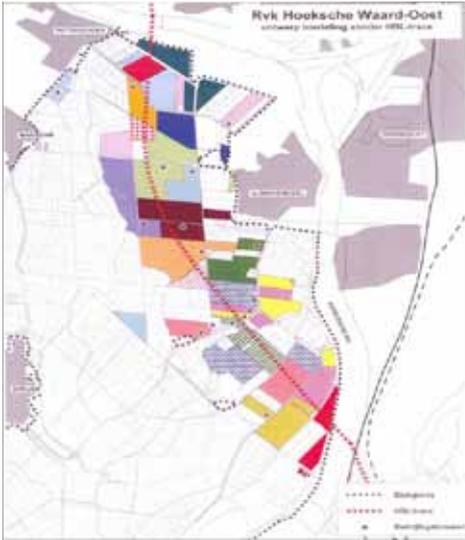
many different functions and activities, rivers are influenced by multiple stakeholders and interests. Restoration plans and projects therefore must deal with a variety of land uses and many different land users, and a large area of land is often needed to restore a river to a more natural state. Therefore, river restoration needs both technical measures and tools to involve

stakeholders and acquire land.

Land acquisition tools

Practical tools that DLG uses in the land use planning process include reparable, land banking, land consolidation, outplacement of land users or voluntary buying out of stakeholders.

DLG operates as the Land Banking author-



Advantages of proper land use planning for river restoration

- Proceedings are not hampered by conflicting interests, No long lasting legal procedures;
- Multi-functional solutions initiated and elaborated;
- Active stakeholder involvement leading to more commitment;
- Lower costs;
- Mind change: opportunities and new chances instead of threats;
- Cooperating in land development initiates new partnerships between public and private sectors and stakeholders.

ity, providing land exchange opportunities and facilities for farmers to improve their land structure or to move to other areas. This can be done through a full-scale land consolidation project, but more often by buying, selling and reparceling of lands. A Land Bank is a very effective tool in this process. It enables new river corridors to be established, and at the same time opens new opportunities to farmers, even to enlarge their plots of farmland.

Integrated planning approach, sketch and match

Many different functions exist in river basin areas, such as residential, agriculture,

industries, water and land transport, infrastructures, hydro power, flood protection. All of these need to be sustainably accommodated in river basins. This requires an integrated planning approach.

Experiences in several countries show that land acquisition problems can be prevented or more easily solved by involving all stakeholders from the start in an interactive planning process. This generates broad commitment and local support.

The “sketch/match” methodology developed by DLG starts with a workshop, partly in the field, in which all stakeholders share

their expectations and ambitions, and identify and discuss all problems.

Landscape architects put all information on sketch maps and several scenarios for solutions are drawn, calculated and compared. In discussion among stakeholders and DLG experts, an optimum scenario is selected, agreed on and finally presented to the project management.

Also, river restoration plans need to be incorporated into (existing) spatial planning procedures, to create a legal basis for finding optimum solutions to combine diverse (and sometimes competing) functions.

Moreover, communication, information and sharing of knowledge and (field) experiences with land use planning and land banking enhances the success of river restoration.

Who can do the job?

What is needed is not just an organisation that is willing to provide the funds, but that will actually develop a process, and is the legal authority that owns the process. 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.

In many cases, counties, municipalities, regional water authorities or river basin management boards could do the job.

Who can do the job?

An authority is needed that is:

- Transparent;
- Non-profit oriented;
- Participatory;
- Integrated (across governmental sectors);
- Independent and unbiased.

Hil Kuypers, DLG Government Service Land and Water Management, the Netherlands



Best practices of river restoration

Romana Gaspirc, Wetlands International HQ, Netherlands. Romana Gaspirc is Technical Assistant at the Headquarters of Wetlands & Water Resources Management. She delivered the following text in a pecha kucha presentation.



Web-based knowledge-management tool to enhance rivers and wetlands ecosystems restoration

Traditionally river restoration projects have involved non-complex land ownership issues and were restricted to single sites; often they were driven by a single piece of legislation or policy. However, recent policy shifts call for more holistic and integrated larger-scale restoration. Floods in recent decades showed that floodplains can be used as a natural storage. Additionally, there are needs for improvement to water quality and morphological status of the rivers. Good news is there are institutional structures and learning lessons which can be shared among the countries.

Problem definition – sharing best practices and lessons learned

River restoration measures can resolve river degradation and potentially improve and diversify river ecosystem service provision. However, the extent to which river restoration is being identified and implemented 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 these have been undertaken. There is a strong need for best practice and lessons learned to underpin better uptake. Furthermore lack of awareness is underpinned by a gap between resources and institutions that have experience and knowledge of river restoration and those that are responsible for policy and related practical delivery. The gap is geographically variable with some regions or countries having a much better developed linkage between knowledge base and active practitioners.

Building up a knowledge base

Therefore, it is vital that information and know-how on best practices in ecology and river hydro-morphology, restoration and protection of rivers and wetland ecosystems is developed and shared. The consensus on best practises of river restoration is an innovative solution and is based around the need to make knowledge that is based on experience and information available in a convenient way to policy makers and practitioners such that they can increase their understanding of the benefits it offers and how to take further steps to bringing it into use.

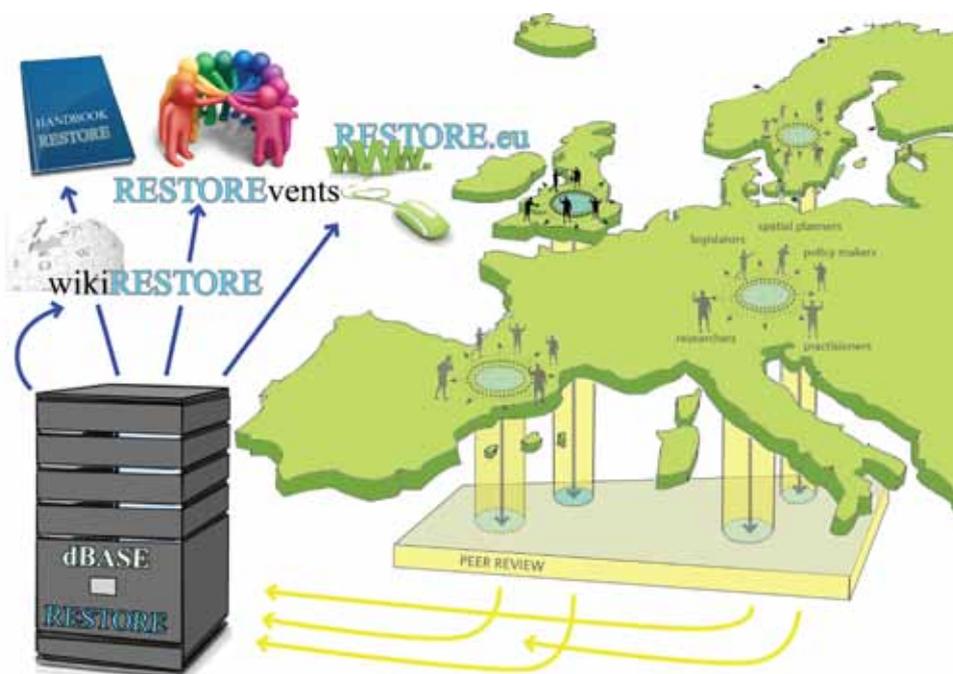
Share your experiences

RESTORE LIFE + project is developing an

innovative web-based knowledge management tool which will provide the knowledge and experience-based information for decision-makers and managers across Europe. Delivering the web based knowledge management tool with the database of river restoration projects, it provides the platform for effective knowledge transfer, information sharing and discussion of strengths and weaknesses of river restoration techniques and options.

We encourage you to share and submit your case studies once the Wiki tool becomes operational. Output and deliverables will be delivered through target action plans including pilots in Rhone and Arpa basins.

This web-based knowledge management tool is a science-policy-practice interface which will help to stimulate and support pilot approaches to integrating river restoration into river basin planning. This might include river restoration plans, catchment approaches or other similar measures to ensure a coordinated improvement to our rivers from source to the sea. This is needed to help reverse the decline in our river habitats across Europe.



Protection and restoration of river ecosystems ; role of public education

Danka Thalmeinerova, Global water partnership



Nowadays education is on the tail of our efforts to protect and restore river ecosystems. Although EU and others financial sources can be used to improve this situation, the money gets squandered by all kinds of professionals.

On the other hand we see that many educational activities are initiated by governments, donors, private sector and NGO's. Many examples can be observed that attract the attention of youth too. Also many river restoration projects are conducted with few elements to share best practises with teachers.

At the same time we see that most of those initiatives come up on an ad-hoc basis and we can question whether they are really effective. There does not exist a general and easy to find information base about methods used, nor an outline of good examples on how to attract the youth.

So it is strongly advised to give a boost to develop knowledge on RR functions and values especially aiming towards education. It is obvious that all kind of different tools and methods should be trailed. One example for this is the GWP toolbox for Integrated Water Resources Management. Also, innovative initiatives of education and capacity building should be transformed to schools curricula.

It is recommended to:

- Start studies on social perception of ecological functioning of water ecosystems
- Evaluate the efficiency of educational activities and programs (both schools, general public)
- Develop education programs on ecological functioning of rivers and water ecosystems.

Target set by GWP

- In period 2012 – 2015, support communication and exchange of information on best practices of ecological restoration measures and land use adopted in IWRM plans
- By end of 2012, support (lead) an assessment of the effect of public education and stakeholder involvement in river restoration projects



Sustainable Tourism

Jean Philippe Torterotot: Past president of EWA deputy director of strategy and research at Irstea presented the theme: improve the link between tourism development and quality of water systems.



In general it can be stated that it is a matter of a development from mutual impacts to high interdependence” and a wide diver-

sity of local situations”.

It is a well known fact that tourism has several negative impacts on water systems.

The phenomena are: habitat fragmentation, pollution of dis-

charges, destruction of fragile ecosystems and even loss of biodiversity. These effects are caused by construction of man-made infrastructure and irresponsible use of scarce water resources.



On the other hand we see a growing dependency of tourism on water ecosystems. Tourists need water consumption, bathing water of good quality, sight seeing. Moreover we observe a trend in eco-tourism and increasing attention for observing the "carrying capacity" of water systems with regards to tourism.

In recent decades we find even positive impacts such as a growing awareness of the value of water ecosystems that even leads to increasing political involvement on water issues and improved policies. These effects are stimulated by positive financial aspects as generating more financial resources, introducing ecosystem service development, implementation of water pricing and growing investments on waste water treatments.

The policymakers are aiming at water savings up to 50%, promoting suitable water treatment, enlarging awareness and tourist behaviour, certification towards sustain-



able tourism practices, and development of eco-tourism. In some countries policies are coming up now that integrate water and tourism in long term planning systems; so called sustainable tourism development by Integrated River Management Planning.

At last an appeal is made to succeed those developments everywhere, to develop criteria for assessment of the level of integration and sustainability, initiate pilot projects and to stimulate exchange and disseminate experiences and case studies.

Case presentation: Danube River Basin

Philippe Weller, Executive Secretary International Commission on the Protection of the Danube River (ICPDR), Austria presented the case of the Danube river as a case study of integrated river basin management across a multitude of very diverse countries.



Key conditions for truly integrated river basin management and successful restoration are political commitment, stakeholder involvement, applying the right monitoring methods, and the celebration of successes.

The Danube stretches from the Black Forest to the Black Sea, and crosses a range of Western, Central and Eastern European countries, that are very diverse in many respects. ICPDR coordinates the implementation of EU Water Framework Directive & EU Floods Directive across the entire basin.

Political commitment

The main four problem factors to be dealt with in the Danube basin are organic pollution, nutrient pollution, hazardous substances pollutions and hydromorphological alterations. Legal foundations are a key element for realizing the vision for these issues, and for integrated river basin management in general. For the Danube river, such foundations were first laid in the Danube River Protection Convention (1994). This focuses mainly on three areas:

- the protection of water / ecological resources;
- the sustainable use of water in Danube River Basin;
- and on reducing inputs of nutrients and hazardous substances.

Another key element for building towards truly integrated management of the Danube River Basin is the Danube River Basin Management Plan of 2009. This reflects the water status of the Danube River Basin waters and its significant water management issues. It outlines a Joint Programme of Measures, and the evaluation of implementing measures, which forms the basis for drawing conclusions on investment & funding.

Moreover, these legal foundations are supported by EU legislation, as the Water Framework Directive has changed the previous mainstream understanding of rivers on sole quantitative and chemical aspects; and has brought concern on ecological aspects.

Stakeholder involvement

Different sectors often have different interests, but in many cases common grounds can also be established. There is therefore a need to interact with sectors such as navigation and fisheries, and with the general public. The Danube River Basin has for instance produced a joint statement on the guiding principles for the development

of inland navigation and environmental protection of the Danube River Basin, as leading transport and environment policy makers agree that new infrastructure has to balance ecology and waterway needs. This began with the Joint Statement on Navigation and Environmental Protection (2007) and has developed further in the EU PLATINA Project as an interdisciplinary dialogue organised by the ICPDR. The most important output of this is the 'Manual on Good Practices in Sustainable Waterway Planning' that outlines good practices in sustainable waterway and established a new legal framework, new approaches in integrated planning, a general practical guidance for integrated planning, and presents examples for ecology-oriented waterway & river bed engineering.

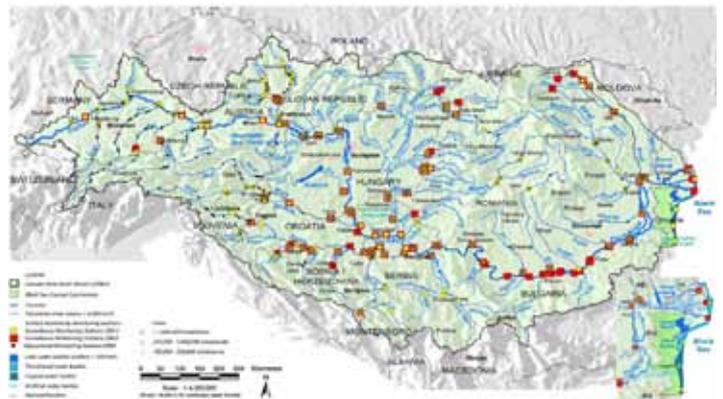
Monitoring

It is essential that the entire system is monitored. To this end, the TransNational Monitoring Network (TNMN) is set up which consists of a network of surveillance monitoring stations and operational monitoring stations.

Celebrate success

Essential successes be celebrated, with events such as Danube Day, promoting Danube solidarity among the general public.

In meeting these four key conditions a solid base for successful integrated river basin management is laid.



Discussions and feedback from the audience

Acquiring feedback from and engaging in discussion with the audience was one of the main objectives for the 'Time for solutions and commitments' session. Many attendants of the session took this opportunity to share their thoughts and experiences. Also, people were asked to fill in a brief questionnaire to gauge their support for the targets and solutions proposed during the session, to indicate their interest to be informed about the progress, or to become actively informed. About half of the attendants filled in a

questionnaire, revealing that a diverse range of river restoration professionals was present. Among the respondents there were people from countries from all corners of Europe and even Brazil. The occupations represented cover spatial planners, hydrogeologists, policy makers, students and directors, working at universities, river basin authorities, knowledge institutes and NGO's. The questionnaires show that agreement with the targets and solutions for all four themes (land use (planning), best practise sharing, stake-

holder involvement and sustainable tourism) was high. The respondents particularly stressed the importance of involving local communities and integrated river basins management. The ECRR is delighted to see that almost all respondents expressed their interest in being informed about or participating in the subsequent ECRR WWF process. Best practise exchange, land use planning and public education were mentioned particularly often in this respect.



One of the most repeated ideas in all the discussions was the necessity of sharing best practices information. There is not much done to see how effective restoration projects are. The general perception was that we need to share more best practice examples of river restoration. One member of the audience gave the example of France, where it is commonly considered that restoration has been effective, but there are no river restoration indicators of success. These are needed in order to as-

sess whether restoration has been useful. In this sense it was also remarked that in an international context, rivers have entirely different characteristics and thus require very different approaches across different countries.

Also, river restoration projects need to be integrated more in general land use planning, and linked with this idea, is the need to involve stakeholders, scientists, and institutions. The latter are particularly important actors, as they are the ones to address in order to make sure that restoration becomes integrated into legislation and legal systems. Specific examples of messages to be communicated include the value of rivers in ecosystem service provision, and the celebration of success stories.

A second idea brought forward by the audience was funding. How to get more long term funding, to achieve long-term engagement of politicians in these projects. In order to obtain the support of stakeholders and private funding the importance of knowing what is happening in other countries was also stressed. This discussion was very enriching as the differences between western and eastern Europe were remarked. Additionally, experiences in river restoration in other countries like Brazil were explained, where landowners have to protect the riparian area by law and to reclaim those areas have to ask downstream water users; there are penalties for those who don't restore. The importance of private funding (farmers, fishermen, recreation) for ecosystem's restoration and conservation was stressed in the discussions, which may seem contradictory in many cases, but can be used quite successfully



if applied well. Both these concepts were supported by positive feedback in the questionnaires.

Finally a comment was made on measuring the results of river restoration projects; it is not always the case that ecological good status is good. The problem has to be understood well in order to know how to drive restoration.

The feedback during the session and in the questionnaires makes clear to ECRR



Askoa Ibisate



Rogier Vogelij

that the path that was chosen to achieve the targets and solutions connects well to the needs of the audience. Important commitments were made to bring further the wider process towards the 7th World Water Forum, in joint action. Seeing the enthu-

siasm among the audience gives good confidence that this process fulfils a need felt among a wide range of river restoration practitioners, researchers and policy makers.

At last

In the European Synthesis Session that was held later on in the week the outline of the target plan was presented and the following plea was made and endorsed:

- Support achievement of the Target by seeking the means for and taking a role in
- The maintenance of an active network,
- Supporting continued exchange of (technical) information and communication,
- Influencing the EU policies and implementation of Directives for enhanced river restoration

Rogier Vogelij, Secretariat of European Centre for River Restoration
Askoa Ibisate, CIREF/ University of Basque Country)

Commitments and follow-up

Responsible organisations for the (initial) elaboration and development of the solutions and the achievement of the sub targets of the four themes are:

1. Strategic land use planning solution and two local land banking initiatives: DLG with Ukrainian Institute of Water Problems and land Reclamation and Wetlands International Kiev office
2. Best practice river restoration solution and a designed web based tool:

Wetlands International with RESTORE partners and the ECRR

3. Public education solution and an assessment proposal on the efficiency of public education programmes for river restoration: Global Water Partnership, Sweden and CEE Office, Slovenia
4. Sustainable tourism solutions through integrated planning of tourism development, land use, and water manage-

ment: EWA (with an organisation yet to be identified)

For the implementation of the overall target(s) there are four river basin authorities invited / nominated and two are already committed.

Arpa River Basin

The Ministry of Nature protection of the republic of Armenia expressed after the

WWF6 seminar on “Forging Targets and Solutions for Rivers and water Ecosystem Restoration” held in Ljubljana, Slovenia on November 16 – 18, 2011 the readiness to enter into a process of including river and water ecosystem restoration measures in IRBM for the Arpa River Basin of Armenia, which are expected to be developed by the end of 2013.

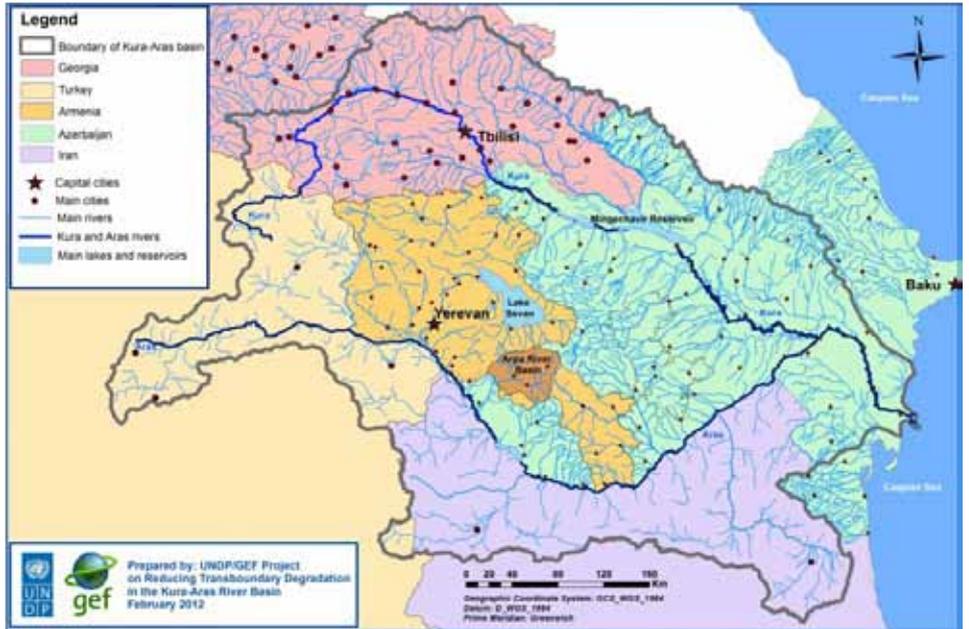


Volodya Narimanyan

Rhône River Basin

Agence de l’Eau RMC confirmed the willingness to take part, alongside ONEMA, in the process of Integrated River Basin Management Plan development for the period 2012-2015 for the river Rhône catchment area.

River restoration on the river Rhône basin is not a new subject and has been undertaken for decades. In 2000, a decennial plan was identifying priority reaches on the river Rhône to be restored. Integrated river restoration management plans have also been designed and implemented on many sub-catchments (on the river Ain, the river Drôme, the river Saône, on many Alpine rivers etc...). While much knowledge has been gained on the emergence of projects and on actual river restoration techniques, it is felt that there are areas which could most definitely benefit from best practice



Arpa River Basin

experience. This is for example the case for the link between tourism and water management as we have only a few successful instances (the river Drôme basin for instance) in that area. The same applies to the efficiency of public education. This international cooperation is taken as



Benoit Terrier



an opportunity to share and gain experience on all four aspects of IRBM plans identified in the process.



Follow-up and monitoring

The following recommendations were made on the follow up and monitoring of the implementation of the promising solutions and the targets to reach:

- To mandate the ECRR to be the organization for the follow – up and monitoring of both the implementation of the solutions and the achievement of the overall target of implementing the new knowledge and know how in a number of IRBM plans by 2015.
- To mandate the ECRR for the overall coordination, reporting and communication of the Target Action Plans.
- To include these tasks in the elaborated (multi) annual work plan of the ECRR (secretariat).
- To mandate the ECRR Board to approve this work plan and to use all relevant means in supporting the ECRR Secretariat with the implementation of the work plan.

- To mandate for the follow up and monitoring of the four subsequent themes:
 - Land use: Government Service for Land and Water Management (DLG)
 - River Restoration /stakeholder involvement best practices approaches: Wetland International
 - Public education: ONEMA to start, taken over by ?
 - Tourism: EWA/IRSTEA to start, taken over by ?
 - To make contact for cooperation with the FP7 project REFORM (REstor- ing rivers FOR effective catchment Management) with 25 collaborative partners.
 - REFORM is to provide a framework
 - For improving the success of hydro-morphological restoration measures
 - To reach, in a cost-effective manner, target ecological status or
 - potential of rivers.
- Bart Fokkens, Chairman European centre for River Restoration*



By the end of 2012 at least one more basin should be committed, preferably in an East European country. River basin management authorities that are interested to participate in the target implementation are invited to contact the chairman of the ECRR, Bart Fokkens, Wetlandman@planet.nl

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.

Events calendar

For events in other continents please consult the website

Date / periode	Titel/issue	Location	Links
24/25 may and 29/30 May	Training workshop RR habitat	Lausanne	http://www.rushingrivers.org/courses/LCH_Annonce_Workshop_MesoHabsim.pdf
17th June	Monitoring effectiveness of RR	Denmark	www.reformrivers.eu
26-28th June	Integrative sciences and sustainable development of RIVERS	Lyon	www.isrivers.org
17th September	RR and natural fish passage	Vienna	www.reformrivers.eu
September	REFORM General Assemble	Polen	Tom.Buijse@deltares.nl
17-21st September	9th int. symposium on eco hydraulics	Vienna	http://www.ise2012.boku.ac.at
February 2013	REFORM stakeholder workshop	Brussels	www.reformrivers.eu



Government Service for Land and Water Management
Ministry of Economic Affairs, Agriculture and Innovation

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