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EUROPEAN CENTRE FOR RIVER RESTORATION

National River Restoration Networks

This issue of the ECRR newsletter focuses on the Water Framework Directive seen from the angle of river restoration, and stresses how river restoration is essential in many water management plans.

The Water Framework Directive (WFD) reforms EU water legislation by introducing a new and innovative model for water management. It was officially adopted by the EU decision-making bodies in September 2000 and entered into force on 22 December 2000, the date of its publication in the Official Journal of the European Communities.

In the following a number of authors have given their views on the consequences of the Water Framework Directive to river restoration. The views are seen from different countries and organisations.

If you wish to comment on the views or have alternative views you are encouraged to send your contribution to the ECRR secretariat for inclusion in future newsletters.

Implementation of the Water Framework Directive in Denmark

by Torben Moth Iversen, National Environmental Research Institute, Denmark, e-mail:TMI@dmu.dk

The Water Framework Directive will be a challenge for Danish water management as it will all over Europe. Since the mid-1970's the approach with quality objectives and action plans has in principle been in use in Denmark - but without the binding time schedules. The 14 counties have the responsibility and looking back have been very successful in reducing emissions from point sources such as waste water treatment plants, industries and inland aquaculture, helped by national legislation. Nevertheless this years summary of the national aquatic monitoring programme concluded that "although improvements can be seen, most rivers, lakes and coastal areas do not fulfil the quality objectives". The main remaining problems are non-point emissions from agriculture and scattered dwellings and impoverished physical conditions in rivers.

New administrative and legal structures.

Denmark is characterised by many small rivers and river basins, and in many cases larger river basins cover two or more counties. This is certainly not facilitating a river basin approach and therefore a first step in Denmark is to analyse the possibilities for an alternative future administrative structure. The overall responsibility for implementing the Water Framework Directive lies in the Danish Environmental Protection Agency.

Similarly the many laws regulating water management in Denmark will be revised as a consequence of the Water Framework Directive. A main weakness in the present Danish set up is that although the counties are responsible for fulfilling the quality objectives, they do not have all the necessary instruments to regulate non-point pollution of P and N from agriculture. Therefore an analysis is performed of responsibilities and competencies in order to make the necessary changes.

Rivers and river management

Ecological quality objectives of the Water Framework Directive will, for rivers, include macroinvertebrates, macrophytes and fish, whereas for decades Denmark has used only macroinvertebrates.

Danish rivers generally have low gradients, about 90% of the natural rivers have been channelled and in most of them the weed is cut once, twice or even more per year. The purpose has been to facilitate drainage of agricultural land to enhance agricultural production. The ecological consequences have been a dramatic reduction in macrophyte biodiversity, where species rich communities have been changed into communities of very few species adapted to weed cutting. Hopefully the focus on macrophytes as indicators of ecological quality will change our attitude to rivers. There is a need for a changed balance in river management between considerations for ecological quality and considerations for drainage of agricultural land.

Since the 1980's several hundred river restoration projects have been performed in Denmark including opening of small piped rivers, removal of dams and weirs and remeandering rivers. This effort has significantly improved the situation for migrating fish and other animals, increased river continuity and created nice rivers. However, it is still less than 1% of the



channelled rivers that have been physically restored. A main problem is that river maintenance, including weed cutting, keeps rivers in the channelised state. I am sure that if river maintenance ceased in more rivers, the natural physical forces through time will restore the rivers and enhance the return of the natural communities of plants and animals. This further underlines the need for a changed balance between considerations for ecological quality and considerations for drainage of agricultural land.

The European perspective

The Water Framework Directive calls for European cooperation, coordination and harmonisation. In principle good river quality in Denmark must be comparable to good river quality in Northern Finland and in Southern Italy and the same goes for the documentation of the fulfilment of the quality objectives. This is certainly a challenge.

The implementation of the Water Framework Directive is a long process with a period of 9 preparatory years. However, there are many complex issues to address. The diversity of possible scientific, technical and practical solutions make the timetable extremely tight. Recognising that the challenges of the Water Framework Directive will be shared by all Member States the EU Water Directors, together with the Commission, have agreed to develop a Common Strategy on the Implementation of the Water Framework Directive. The aim is to allow a coherent and harmonious implementation of the Directive recognising that the responsibility for the implementation lies in each Member State.

Establishment of a number of working groups on key aspect of the Water Framework Directive is an important part of the strategy. The themes of the working group include: heavily modified bodies of water; classification of inland surface water status; and identification of reference conditions and monitoring.

The European Centre of River Restoration (ECRR) has raised awareness on river restoration as an important and cost efficient measure to improve rivers and river valleys. In the future river restoration all over the EU including the future enlargement will be an important instrument to obtain good ecological quality in rivers and to improve the ecological quality in heavily modified rivers. This stresses the need for ECRR to continue the networking and facilitating the exchange of experiences and best practices of integrated river management projects in Europe. The Water Framework Directive will be an important element in the ECRR strategic and operational plan to be agreed at the Management Board meeting of ECRR in August.

River Restoration and the Water Framework Directive

By Mark Diamond, Jim Walker and Marc Naura, Environment Agency, U.K.

The comprehensive legislation of the Water Framework Directive (WFD) is set to dramatically change many aspects of policy and practise in water management across European. So what does it mean for river restoration? Here we make the distinction between "restoration" of function and form of the river system and "rehabilitation" at the reach scale (often with little regard to fluvial and ecological processes).

The recognition of hydromorphology as a central facet in the ecological condition of rivers (and other water bodies) initially suggests that there is widespread opportunity for improvements to the physical condition of rivers. However, the practicalities of the conflicting demands of water management are also reflected in the Directive. The designation of Heavily Modified Water Bodies (HMWB) reflects the significance of such demands as Flood Defence, Land Drainage, Navigation and Water Storage. HMWB designation will limit the improvement objectives of such river reaches to those of 'good ecological potential'.

In hydromorphological terms this is most likely to mean local rehabilitation measures to mimic natural river forms. This will rule out the wider restoration of natural river processes at such reaches on the grounds of economic non-viability or over-riding public interest.

So is this WFD separation of HMWB and non-HMWB bad news for river restoration? At first glance it might seem that a system that promotes the setting of less stringent ecological targets for heavily modified systems might serve to discourage comprehensive river restoration in the most impacted of systems. However, the designation of HMWB is little more than a formalisation of existing constraints to comprehensive river restoration. As currently in many intensively modified river systems, floodplain developments and other river uses effectively limit habitat improvement opportunities to relatively minor in-channel enhancements.

The WFD now offers extensive incentives to promote rehabilitation in HMWB rivers and to undertake much wider restoration in non-HMWBs. Therefore it might be concluded that the WFD will be of benefit to European river restoration. Of course, one of the key decisions will be to decide what is meant by a HMWB !

We are currently managing three projects to support the implementation of the WFD. The first will assist in the definition of HMWBs. The second will develop a dynamic classification system for hydromorphology based on River Habitat Survey and the third will develop a system for developing physical quality objectives. Our aim is to apply the latter system to all rivers in England and Wales by 2003.



Implementation of the Water Framework Directive in the Netherlands with an outlook on river restoration

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(Partly based on material provided by Eric Jagtman, Directorate-General of Public Works and Water Management, e-mail: e.jagtman@hkw.rws.minvenw.nl)

Who is in charge in NL?

Coordination is done by a national implementation team with representatives from all authorities having a task in water management.Water managers (the water boards) as well as policy makers from the regional or national level (provinces and ministries) are represented.The Ministry of Transport, Public Works and Water Management is in charge of the implementation process.

Necessary administrative and legal transpositions

For the implementation of the WFD in national law, a bill with proposed amendments to the Dutch Water Management Act and the Environment Management Act will be made at the end of 2001. The bill will be dealt with in national Parliament in 2002. The administrative and legal framework is expected to be brought into force before the end of 2003. Among the National Water Policy documents to be published, the regional water plans and water management plans from the water boards will be kept as useful contributions to the River Basin Management Plan.

River basin districts

The identified river basin districts in the Netherlands are the rivers Rhine, Meuse, Scheldt and Ems. All of them are transboundary rivers.

Co-operation and coordination on international scale is important for a successful implementation of the WFD.

For the Rhine it is agreed that the informal international co-ordination of the implementation of the WFD is taken care of by the Rhine water directors. The experiences of the International Commission for the Protection of the Rhine will be used. It is also agreed that for the entire catchment area of the Rhine there will be one international river basin district. The possibilities to co-ordinate the implementation of the WFD for the international catchment area's of the Meuse and the Scheldt and the role of the existing international commissions is under discussion. A decision is expected to be taken during a planned ministerial conference in November 2001.

For the Ems the question on how to accommodate the international co-ordination of the implementation of the WFD is still under discussion.

River restoration

River restoration in the Netherlands started nearly 20 years ago on different scales - regional waters and also on flood plain scale e.g. along the river IJssel. Until now various restoration projects have been carried out and others are planned or already under construction.

The restoration along the main rivers in the Netherlands until now has the following main measures:

- River floodplain widening by inland relocation of the winter dykes
- · Lowering the floodplains
- Removing obstacles in the flood plains as summer dykes
- Creating retention areas inside the winter dyke area

The Dutch river restoration projects started as technical safety measures but nowadays more attention is paid to the landscape in total. It is no longer enough to design "new" floodplains from technical point of view. The value of the landscape and the emotional aspects from local people in an area are now also taken into consideration. Sometimes they can be even crucial for the success on failure of a project.

All those measures of increasing the discharge capacity of the rivers and of lowering the peaks during high water discharges cannot take the unpredictability of nature away. Therefore plans for disasters are still needed. Here, public participation can take place in order to elaborate concepts on those emergency plans and on concepts of controlled flooding together with the Cabinet, water boards, local and regional authorities.

The national Water Management Policy in the 21st century (published in December 2000) is used as a legal instrument for reaching the goals and bringing the measures into practice in regional and main water management systems.

Can WFD give a new impulse on river restoration?

The WFD pays special attention to areas that need special protection.

An example is the areas, which are designated by the Habitat and Birds Directive.Within the WFD it is necessary to establish a register with all protected areas in a river basin district. Beyond the areas for the protection of habitat and species the following types will be included: waters for abstraction for human consumption, protection of economically significant species, recreational waters and nutrient-sensitive areas.

In the Netherlands, the Habitat and Bird Directive already protect many areas. Often those are water bodies or wetlands, but also terrestrial ecosystems with a great influence of groundwater (quality) exist. The environmental objective of WFD about artificial and heavily modified waters is very important for



the Netherlands. This means to protect, enhance and restore those water bodies aiming for a good ecological potential and good surface water chemical status within the next 15 years. Ambitions in the WFD are high and this means also chances for nature and therefore for river restoration. The international scale of thinking in river basin districts offers more possibilities for making choices on suitable and/or most effective locations along the entire river.

More information

More information on the WFD and water management in the Netherlands is available on the website of the Ministry of Transport, Public Works and Water Management www.waterland.net/eu-water

The EU Water Framework Directive seen by an international environmental NGO

By Jasmine Bachmann for the WWF European Freshwater Programme, e-mail: jasmine.bachmann@wwf.at. (Partly based on material provided by Eva Royo Gelabert, WWF, e-mail: ERoyogela@wwfepo.org)

An innovative piece of water legislation ...

The European Freshwater Programme of World Wide Fund for Nature (WWF) has been accompanying the development of the WFDs text, by working both at national as well as international levels. WWF supports the final text of the Directive, given that, from an environmental point of view, its ultimate aim is preventing further deterioration of the current "status" and achieving "good status" in all waters. Further, WWF also endorses the WFDs managerial approach - integrated water management at the river basin level, which aims at ensuring overall co-ordination of water policy in the EU.

Being a "framework", the Directive focuses on the establishment of the right conditions to encourage efficient and effective water protection at the local level – by providing a common approach and common objectives, principles, definitions and basic measures. However, the specific actions required are the responsibility of the competent authorities at Member State level (whether national, regional, local and/or basin).

How can NGOs help fulfilling the objectives of the WFD?

This cannot be answered generally, as it depends on the possibilities of each organisation. Examples are given below on what WWF has been doing at the national as well as the pan - European levels. WWF's WFD work at the national and programme office level

WWF is structured in national and programme offices across Europe. The

activities carried out by these offices to assist the implementation of the WFD and the achievement of its objectives can be local, regional, national and even international.

They include:

- Information, education, awareness raising, and capacity building on WFD and related aspects, e.g. water savings campaigns in Belgium and Spain
- Participation in expert advisory groups (at national level or in international conventions: e.g. Danube, Rhine)
- River and wetland restoration projects / programmes
- Model / pilot projects for integrated river basin management (e.g. Guadalquivir, Danube, Vistula)

WWF's WFD work at the pan-European level

The co-ordination unit of the European Freshwater Programme with inputs from the national and programme offices drive the activities below. WWF/EC "Water Seminar Series"

WWF, with support from the European Commission (EC) (DG Environment and TAIEX), organised a series of seminars on water to promote the effective implementation of the WFD. The seminars facilitated a multi-stakeholder participatory process with the involvement of 300 people from about 23 countries to gather "best practice" in sustainable water management in Europe. The issues of the three seminars were 'Water and Agriculture' (February 2000), 'The Role of Wetlands in River Basin Management' (November 2001) and 'Good Practice in River Basin Planning' (May 2001). The results of the three seminars will be drawn together in a guidance document, planned for autumn 2001 – identifying tools and approaches to assist river basin managers in complying with the requirements of the Directive.

Water and Wetland Index (WWI).

WWF has developed a rapid tool to identify the strengths and weaknesses of national water policies and management of water and wetlands across Europe. The WWI provides a »snapshot« of the current ecological status of freshwater ecosystems and the main pressure on them (e.g. agriculture, industry, household consumption, forestry, tourism) and assesses the degree and sufficiency of monitoring, implementation and enforcement of national and regional laws and Directives related to freshwater. It helps to understand: the key freshwater issues in individual countries (in comparison with others); to determine where and on what issues particular action is needed; and to aid the implementation of river basin management. Finally the Index provides transparent, comprehensible, and accessible environmental information on freshwater issues to the general public.

Wise use of floodplains (WUF). This project led by Birdlife International and funded by the EU Life-Environment Programme demonstrates how floodplain and wetlands can contribute to the sustainable and cost-effective management of water resources, water quality, flood risk and land use in river basins, and thus help with the implementation of the WFD.



WWF and public participation

WWF sees public participation as a crucial element for the implementation of the WFD and the development of any activity required to achieve its objectives, in order to ensure better information, ownership, conflict resolution etc., and, in particular, enforceability. WWF has long experience of working with integrated planning approaches - with a strong public participation aspect including the involvement of many partners - for nature conservation, sustainable development and river basin management.WWF considers that public participation at the earliest possible stage of WFD implementation - including the WFD Common Implementation Strategy (CIS) – is the only way forward to guarantee that the WFD objectives are achieved by the required deadlines. Public participation is necessary across the CIS, as it is relevant to many of its working groups, e.g. characterisation of river basins, analyses of impacts and pressures, economic analysis of water use, integrated river basin management etc.

The role of wetlands and the WFD

Wetlands per se are mentioned only briefly in the text of the WFD. However, the relationship between water and wetlands and the way in which wetlands are managed have profound impacts on water quantity and quality. It is essential to examine how and to what extend wetlands could contribute to sustainable water management in order to achieve "good status" of waters. This is a particularly topical at a time when several regions of Europe had recently experienced the effects of severe flooding or acute water-borne pollution. In many cases these problems were caused, or at least seriously aggravated, by poor land use decisions and lack of an integrated approach to river basin planning. Sustainable management of wetlands, including restoration of destroyed and degraded wetlands, was increasingly being seen as a cost effective solution to a number of water management problems.

Delivery of the WFD's environmental objectives can only be possible if the crucial role of wetlands in regulating water quantity and quality are fully integrated into the River Basin Management Planning process from the beginning. The sustainable management of the remaining wetlands in Europe including wetland conservation and restoration has to be integrated in the »programme of measures« for achieving 'good status' of waters. This would be a win-win approach providing multiple economic, hydrological, ecological and social benefits.

The designation of protected areas is another example of one tool that can be applied at a wide range of different levels, from global to local. However, it essential that such areas, including Natura 2000 sites, are seen in their correct context as only one of a range of different tools that will be needed in each basin. Protected areas alone will rarely be able to maintain the ecological processes on which aquatic biodiversity and the 'good status' of water depend.

The WFD establishes also an obligation to undertake an economic analysis of each river basin. This should include the economic values of wetlands and their functions.

As a complementary step to the development of guidelines for WFD implementation by the CIS, a Task Force (or similar mechanism) should be charged with developing standards for 'good wetland status' – as a means of supporting this work, which should draw on relevant experience under other instruments, notably the Habitats Directive and the Ramsar Convention.

In addition, it has to be considered that the implementation of the WFD will be strongly influenced by a wide range of other EU policy, financial and legislative tools, particularly in the agricultural and regional development sectors. Long-term success in achieving 'good status' for surface and groundwater throughout the EU will only be realised with fundamental reforms in these two major policy areas. For the next review of EU agriculture policy in 2006 the experience gained in implementing the WFD must be used to help develop agricultural policy and financial instruments that: (a) stop the damage currently being done to freshwater ecosystems by intensive farming based on production subsidies, and (b) provide mainstream support for sustainable wetland management (including restoration and rehabilitation of wetlands destroyed or damaged by post-war agricultural intensification).

Conclusion

It can be stated that the WFD, the new EU water policy, is mostly fulfilling the expectations of WWF, which sees it as the best current tool to ensure rational, more »eco-efficient« use of water and wetlands across Europe - in order to conserve and restore the functions and integrity of freshwater ecosystems.

Nevertheless, there are still some open issues such as further elements for proper groundwater protection (e.g. criteria for assessment of pollution trends and definition of »good status«), which have to be tackled by the EC soon in order to complete the ambitious approach of the Directive. The role of NGOs and other stakeholders in the implementation of the WFD is crucial, but its development depends on the structure and possibilities of each organisation and the willingness of governing bodies.Wetlands and their ecological integrity are an important element to achieve the objective of the WFD, »good status« in all waters, therefore also the restoration of wetlands and floodplains can be seen as an important tool to fulfil the objective of the WFD. However, the EU has only provided a framework, the specific actions to achieve "good status" are the responsibility of the competent authorities at all levels

More information on the subjects mentioned in the text may be found on the Internet at the following URLaddresses:

- www.panda.org/europe/freshwater
- www.panda.org/europe/freshwater /seminars
- www.panda.org/europe/freshwater /wwi
- www.floodplains.org



SHORT NOTES

More about the Water Framework Directive

Official English WFD-text

The official text of the Water Framework Directive can be found in English at the Internet from the URL-link:

http://europa.eu.int/comm/enterprise /environment/index_home/water/ I_32720001222en000100722.pdf

Handbook on EU Water Policy

In their handbook on EU Water Policy under the Water Framework Directive, Klaus Lanz and Stefan Scheuer from The European Environmental Bureau (EEB) gives their contribution trying to make the directive transparent and understandable for the general public as well as for environmental NGOs throughout Europe.

The handbook is downloadable from the Internet at:

www.rivernet.org/general/handbook.pdf

Two WWF reports in the context of the WFD

Two new WWF reports concerning respectively "WWF's preliminary comments on Public Participation in the context of the Water Framework Directive and Integrated River Basin Management" and "WWF's activities across Europe to assist the implementation of the Water Framework Directive and Integrated River Basin Management" may be downloaded from :

www.panda.org/europe/freshwater/pdf /WFD-WWFpart.pdf and www.panda.org/europe/freshwater/pdf

/WFD-WWFact.pdf respectively.

CONFERENCES

The Centre has received information about the following international conferences with relevance to river restoration. Further information can be obtained by writing to the e-mail addresses provided.

2nd Symposium for European Freshwater Sciences (SEFS)

Toulouse, France 8-12 July 2001

At present, the scientific programme is organised around 11 major themes in aquatic ecology. Other themes may be added.

For more information URL

http://quercus.cemes.fr/~sefs

The Role of Water in History and Development – IWHA 2nd conference

Bergen, Norway 10-12 August 2001

Societies have managed and harnessed water in various ways with various implications both for water resources and for society. This conference will explore these variations in human/water relations in time and space, and examine why some societies have apparently succeeded, while others have failed to secure a sound management system of their fresh water. The conference will have three main aims:

- to present different empirical research findings and to create a forum for theoretical discussions on how the relationship between man and water can be analysed and understood in the most fruitful ways.
- to produce relevant input into present day debates about issues including the control and ownership of water, water conflicts and water pollution.
- to discuss content and profile of a multivolume World Water History planned by UNESCO in cooperation with IWHA.The conference will offer opportunities for researchers to present perspectives on water history useful for the book series.

For more information URL:

www.iwha.net



The 2001 World Water Week in Stockholm

Stockholm, Sweden 12–18 August 2001

The Stockholm Water Symposium is an annual meeting on global water issues convened each August to develop practical solutions and strategies that will help to alleviate the world water crisis.

The complete programs for the 2001 World Water Week in Stockholm and 2001 Stockholm Water Symposium are now available. The Symposium, which has as a theme "Water Security for the 21st Century – Building Bridges Through Dialogue", takes place August 13-16, 2001, as part of the annual World Water Week in Stockholm.

For more information, program details and registration form, visit:

www.siwi.org/sws2001/sws2001.html

3rd Australian Stream Management Conference

Brisbane, Queensland, Australia 27–29 August 2001

The theme of the conference is The Value of Healthy Streams, providing a focus on the technical aspects of the following major themes:

- Ecosystem services how do we quantify the values that healthy riverine ecosystems provide to humans (water quality, flood mitigation, sustainable fishery resources, stable bed and banks, etc) and to other ecosystems (on floodplains, in estuaries, etc)?
- Hydrological connectivity how do we value the important linkages between the various hydrologic elements (streams, floodplains, estuaries and ground water) and what role do these connections play in regard to stream health?
- Bio-physical integration how are the physical and biological aspects of stream systems inter-connected and how is the connection reflected in our planning and action?
- Tools and techniques what are the latest developments in science that will assist us to better plan and manage our stream systems in a cost effective way?

For more information URL:

www.catchment.crc.org.au/ streamconference/index.htm

Freshwater Fish Migration and Fish Passage –

Evaluation and Development

Reykjavík, Iceland 20-22 September 2001

The second Nordic international symposium on freshwater fish migration and fish passage is intended to examine all aspects of river migration with special focus on effects of barriers to migration. It is hoped that papers given at the conference will integrate diverse topics such as fish behaviour, fish passage, guiding of fish and technical solutions in constructing and managing fish passage facilities.

For more information URL:

www.veidimal.is

River Basin Management Conference

Nitra, Slovak Republic 25–27 October 2001

This is a world forum international conference on integrated water management in international river basins.

Rivers know no boundaries and the recently introduced Water Framework Directive recognises this by basing European water management on river basin systems.

The international conference will address the consequences of this directive, with special emphasis being placed on areas with the lowest levels of socio-economic development.

One of the aims of the directive and the conference are to ensure efficient co-operation between states sharing any particular river basin in order to prevent deterioration in the ecological, social and economic situation of the basin and its inhabitants.

For more information please contact Prof.H.C.G.Turchany:Tel: +36 52 378 295; E-mail: turchan@matavnet.hu

Environmental Flows for River Systems

Cape Town, South Africa 3-8 March 2002

The aim of the conference is to provide a forum for an international meeting of minds on the subject of managing flows for river health, and to demonstrate the positive effects of environmental flows.

For more information URL:

www.southernwaters.co.za/ conference/index.html

9th International Symposium on the Interactions between sediments and Water

Banff Springs Hotel, Canada May 5–10 2002

Symposium Themes:

- Assessing and/or Restoring Disturbed Watersheds
- Sediment-water linkages in terrestrial and aquatic (marine and freshwater) environments
- Evaluating change in saline and freshwater habitats.

For further information URL:

www.wsc.monash.edu.au/iasws /ninthconference.html



PUBLICATIONS AND VIDEOS

Publications

The ECRR has received information about the following publications with relevance for river restoration.

Harrison, A., Schmidt, G., Avis, C. & Hauser, R. (2001)

WWF's preliminary comments on Public Participation in the context of the Water Framework Directive and Integrated River Basin Management – WWF European Freshwater Programme. 18 pp.

Downloadable from URL: www.panda.org/europe/freshwater/pdf /WFD-WWFpart.pdf

Nijland, H.J. & Cals, M.J.R. (Eds.) (2001)

River Restoration in Europe, Practical approaches – Proceedings from the conference on river restoration, Wageningen, The Netherlands, 2000 – RIZA rapport nr. 2001.023. Institute for Inland Water Management and Waste Water Treatment/RIZA Lelystad, The Netherlands. 344 pp.

The second international ECRR conference on river restoration was organised by the ECRR and held in May 2000.

The conference focused on practical approaches in river restoration. Many discussions and exchange of experiences took place during the week.

Projects and experiences on river restoration differ on scale and geographic positions and therefore on conditions. Stimulation of knowledge sharing and, even more important, the possibility to find each other in new or future projects were main goals of the conference.

In the proceedings 61 papers and abstracts are grouped as follows:

- General, Key-note papers
- Eastern Europe
- Western Europe
- Southern Europe
- Northern Europe
- Outside Europe

All conference participants will receive a copy of the proceedings. On special request, a copies can be ordered for the price of 60 EURO through: CABRI Mailservice, PO box 431, 8200 AK Lelystad, The Netherlands, tel +31 320 285333; fax +31 320 24112, e-mail: riza@cabri.nl

All papers will be downloadable from the ECRR homepage www.ECRR.org from August 2001

Taugbøl, T. & L'Abée-Lund, J.H. (Eds.) (2001)

Proceedings from the CONNECT-workshop "Physical habitat restoration in canalised watercourses – possibilities and constraints" – Document no 7, Norwegian Water Resources and Energy Directorate (NVE), Oslo, Norway. 93 pp.

The proceedings contains the keynote lectures, country status reports and other plenary talks, and a summary of conclusions and recommendations from the CONNECTworkshop on habitat restoration held in Lillehammer, Norway, November 2000.

WWF European Freshwater Programme (2001)

WWF's activities across Europe to assist the implementation of the EU Water Framework Directive and Integrated River Basin Management – WWF European Freshwater Programme. 32 pp.

Downloadable from URL: www.panda.org/europe/freshwater/pdf /WFD-WWFact.pdf