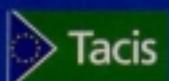
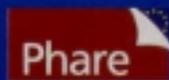


Danube

The Magazine of the Environmental Programme for the Danube River Basin

Watch

4/99



Industry
Clean Technologies
to substitute end-
of-pipe solutions



European Life Line
High biodiversity
and unique cultural
heritage



Wetlands
NGOs play a virtual
role in restoration
projects

DANUBE WATCH

Editorial

This issue of the Danube Watch concentrates on two demonstration projects of the Strategic Action Plan Implementation Programme for the Danube Basin that were funded by the EC-Phare Multi-beneficiary Programme for the Environment. These demonstration projects relate to improved environmental practices and clean technologies in industry on one hand and on wetland restoration and improved wetland management in some of the very valuable remaining wetlands in the Danube Basin on the other hand. What may even be of more interest is that this issue of the Danube Watch introduces two new initiatives. One is a special "corner" for children and one is the initiative "Artists for the Danube". The children of today are the decision-makers of the future. If today children are well educated about the importance of the environment and nature then there is a good chance that they will apply that knowledge in their future decision-making. For this reason at the Danube PCU we were thinking about producing a special children's page. In this edition of the Danube Watch the result is launched! We do hope that children will be as excited about this idea as we are, and that teachers of schools will use this page in their environmental educational work and in English language lessons. For this reason we would like to ask the readers to give their Danube Watch to a child or to a teacher, or to make copies of the children's page to be distributed to children and schools.

Another new idea is the initiative "Artists for the Danube". The net income of this initiative is to be made available to nature conservation projects in the floodplains of the Danube Basin. At this place I would like to wish both creative initiatives all the best in their development and I hope



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Statement on the fundamental orientation under § 25 Mediengesetz of June, 12 1981:

The Danube Watch is intended to be an instrument to support the flow of information on the Danube environment in general and on the EPDRB and the Danube River Protection Convention activities in particular.

Any views expressed in Danube Watch do not necessarily represent those of the members of the Programme Management Task Force or the staff of the Programme Coordination Unit.

Clean Technologies for a Clean Danube

Industrial pollution of the Danube River in Romania, Bulgaria and Slovakia has induced mobilisation to evaluate the status of the river in these countries

The objectives of the Phare-project „Clean Technologies and Industrial Waste Management” are to evaluate technologies and strategies and select methods for further reducing pollution of the Danube River from industry in three national (sub)-projects: Romania, Bulgaria and Slovakia.

The project was implemented in seven stages and consists of three components:

- Viscose and polyester production plant Slovensky hodváb in Senica, Slovak Republic;
- Paper and pulp mill Letea, Bacau, Romania and
- Combined waste water treatment plant for industrial and household wastewater in Sevlievo, Bulgaria.

The paper and pulp mill in Letea

The main environmental problems of Letea (Bacau, Romania) relate to a too high water use, liquid effluents and SO₂ emission into the air. Several scenarios for future production capacities have been investigated and it turned out that the most cost-effective and realistic remedy-scenario would be a combination of process integrated measures and end-of-pipe measures.

In order to achieve these goals a five-step programme has been worked out. The first step is the preparation of a feasibility study for the completion of the waste paper pulping line. The study should confirm the feasibility for waste paper collection and

pulping at Letea. Furthermore creditworthiness of the firm after implementation of this project is an important aspect.

The second step is based on the outcome of the study. The (new) owners of Letea may initiate discussions with Phare and the Romanian Investment Fund to finance the preparation and implementation of the process integrated measures and completion of the waste paper pulp line.

Then an upgrading of the primary and secondary wastewater treatment steps as well as the sludge handling may proceed in steps three and four. Based on the results of the upgrading of the current treatment plant, the necessity for the implementation of a tertiary step has to be confirmed through adequate monitoring of the effluent.

Step five will have to focus on the continuity of sound operation and management of the environmental investments as implemented in the previous phases.

Wastewater treatment in Sevlievo

The feasibility study anticipates process-integrated measures to reduce especially chromium and nitrogen loads from the Sevko tannery. Nine alternatives have been identified and assessed in the study. From the technical, financial and economic assessment it finally turned out that combined treatment of household wastewater and pre-treated wastewater from Sevko is

PHOTO: PHOTODISC®



Pollution of the Danube River derived from industry has to be reduced

the most cost-effective scenario.

Both the municipality and the local industry (including Sevko) will profit from a combined treatment as compared to separate treatment. The set-up of a private shareholder company offers a variety of chances to get the necessary financial fundings for the project.

The production plant Slovensky hodváb

Main problem parameters in the viscose and polyester production plant are sulfate, zinc, BOD, COD and TSS (Total Suspended Solid). A key issue is the reduction of the volume of the wastewater quantity, which is discharged to the Waste Water Treatment Plant (WWTP), because the present Biological Waste Water Treatment Plant (BioWWTP) of Slovensky hodváb is overloaded.

The Board of Slovensky hodváb decided to implement process integrated measures which should result in a lower loading of its own BioWWTP and ChemWWTP in terms of hydraulic loading as well as reduction of the pollutant loading. ▶

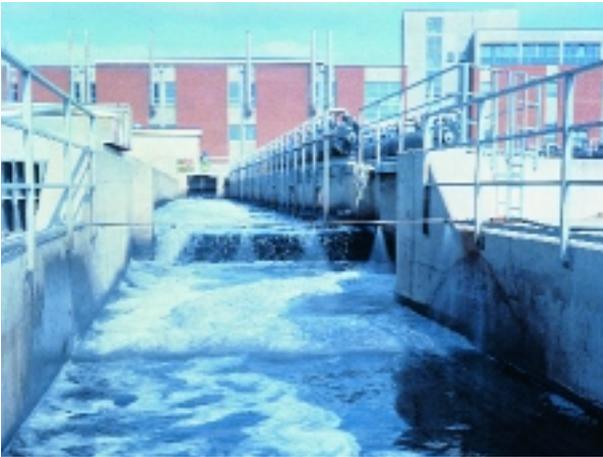


PHOTO: BUENOS DIAS

The aim of the Phare Project is to evaluate technologies and strategies for reducing industrial pollution in three Danube River Countries

Based on the results of the study, it was agreed to continue with a reduction of water use and zinc and sulphate emission of the viscose plant as well as a reduction of water use in the polyester plant. The viscose plant will implement the following options on short term: Firstly, dumping of spin bath into the sewer should be avoided by producing and selling more glaubersalt. In this way a sulfate emission reduction from the present (1998) 3,700 ton/a to 3,000 ton/a is feasible. This amount of 3,000 ton/a is still above the permit of 1980 ton/a. This problem may have to be discussed with the authorities. A trade-off may be proposed to reduce the maximum permitted zinc concentration to half of its present level against an increase of the permitted load of sulfate. In

case there is no room for re-negotiation, then the enlargement of the glaubersalt production capacity should be considered. The performance of the BioWWTP has been improved

A market study to increase the selling or disposal of glaubersalt is to be implemented. As agreed and laid down in a Memorandum of Understanding this is the task of Slovensky hodváb. Furthermore a reduction of primary water use by re-using the second wash water for the first wash and distillation is to be achieved. This would save about 400 m³/day which is about 12.5 % of the water use in the viscose plant. The investment costs are relatively low (< 1 million Sk) and operational costs are minor. Finally better housekeeping measures with the aim of limiting the quantity of water involved in cleaning and maintenance operations are to be introduced.

For the polyester plant cooling towers with heat exchanger system between the cooling towers and the injectors haven been chosen as an option to improve the performance of the BioWWTP substantially. The occurring discharge of water by the ejectors, which is fluctuating between 700 m³/day and 2,600 m³/day, has been reduced to 50-100 m³/day, which then will become constant

over the year.

The reduction of drinking water use of 0.33 million m³/a to 0.13 million m³/a has been implemented with a combination of measures: some investments may be required as well as a change of working methods by the staff involved. Implementation of this measure will reduce the total effluent volume further down to 1.3 million m³/a.

After implementation of the above defined measures the hydraulic load of the BioWWTP will have been reduced to one third of its former hydraulic load. It is recommended to await the results of these changes on the performance of the BioWWTP before taking further measures on the treatment plant itself. The same holds for the ChemWWTP.

The activities implemented so far, fit well within the process of qualification for ISO 14001. The company also committed itself to implement a market study with the aim of increasing the selling of glaubersalt. No new investments would be required to increase the production of glaubersalt.

A great outcome of the project „Clean Technologies and Industrial Waste Management” is that has directly lead to future investment projects. Now the next step is a concrete technical design and further agreements for investments.

**SLOVENSKY HODVÁB,
SLOVAK REPUBLIC**

Identified measures:

- Reduction of water use and zinc and sulphate emissions from the Viscose Plant
- Reduction of water use in the polyester plant

Investment costs:

- 19-41 million SK (0,52-1,13 MEURO)

**LETEA,
ROMANIA**

Identified measures:

- Completion of the waste papier pulping line water
- Bark press
- Clarifier and press for debarking plant
- fluidised bed boiler
- water consumption reduction
- primary and secondary treatment
- tertiary treatment
- training programme and feasibility study for the waste water pulping line
- completion of the waste paper pulping line

Investment costs:

- 9.7 MEURO

**SEVLIEVO,
BULGARIA**

Identified measures:

- process integrated measures at the Sevko tannery including pretreatment of its waste water
- combined treatment of industrial and household waste water with the low-loaded activated sludge technology

Investment costs:

- 10.9 MEURO

The European River Lifeline Needs Protection

The first initiatives to save the unique corridor through five countries started at the beginning of the 1980s



PHOTO: SCHNEIDER-JACOBY/EURONATUR

The Bilja Castle at the door to the Kopacki Rit National Park

Rivers, as well as mountain ridges, have been used in many cases as natural borderlines. Ecologically, geographically, and often also culturally, the whole valley or mountain forms a unit and both sides – now in different countries and under different regulations – have many common features. State borders are mostly defined as the middle of a river, and the riverbeds are stabilised by concrete and embankments.

A very good example of this phenomenon is the Drava-Mura corridor between Austria, Slovenia, Hungary and Croatia. The most interesting part is the Croatian-Hungarian border, about 180 kilometres long. The border is one thousand years old and was even

preserved during the Austro-Hungarian Empire.

During a major flood 300 years ago, the river washed out a new bed starting at the estuary of the Mura. The Drava cut off a 9,850 hectare area from Croatia which since that day is situated on the north side of the river. The people here today speak mainly Hungarian because they were separated from the other villages by the 30 kilometres long change of the riverbed.

[A unique corridor through five countries](#)

During the times of the Iron Curtain most of the floodplain was not accessible for people, and the natural dynamic formed one

of the most diverse stretches of river in Europe. More than 350 kilometres of river from Austria down to the Danube remained, while upstream 27 dams were built on the Drava and 15 on the Mura. The free running rivers Mura and Drava form a unique corridor through five countries and a European lifeline which needs protection.

The first initiatives in the different countries started at the beginning of the 1980s. People of the Mura region in Slovenia protested against seven dams planned on their river. The regional emotion and the sensitivity for the Mura as the soul of the region was so strong that, even in a country that was still socialist, the planners had to give



PHOTO: SCHNEIDER-JACOBY/EURONATUR

The Drava in Slovenia

up. Already in 1984 the nature protection authority in Maribor prepared a project to establish the “Mura” Regional Park.

In 1989 the newly formed Hungarian regional NGOs (national focal points) started to fight against the big dam near Djurdjevac which was planned by Hungary and Yugoslavia. In 1991 the Hungarian parliament changed its policy on the Drava River project and decided to create the Danube-Drava National Park. Meanwhile, in Croatia, foresters criticised the planned hydroelectric plant because the alluvial and lowland forest was much more valuable than the energy that the power plant could produce.

Ecological importance and cultural values

In Austria EURONATUR prepared a feasibility study for the development of the “Border Mura” – the only free flowing part of the lowland Mura in Austria. The main findings were that the alluvial forests are the second largest in Austria and that the area needed better protection. Measures were proposed to restore the alluvial dynamic and to improve the value of the region not only ecologically but also for tourism.

The main value of the Drava-Mura region is its high biodiversity. More than 40 pairs of

white tailed eagles, 110 black storks and 400 ferruginous ducks breed along the rivers. More than 50 fish species and 54 dragonfly species have been registered in recent years.

The old towns along the Drava and Mura from Graz and Bad Radkersburg to Osijek and from Maribor and Ptuj to Pec are well preserved and offer a unique view of the history of the defence of Central Europe against the invasion of the Ottoman Empire over several centuries. The Drava-Mura region was part of the military border, and towns like Varazdin have a long, interesting history. The region is famous for its large number of thermal spas but there is no infrastructure to connect health tourism with nature. The landscape offers unique opportunities to combine both: for instance, to have a nice warm bath after a cycle ride along the river.

Effective steps towards protection of nature

The first step to promote protection of the river ecosystem after the national protests against dams was the formation of a work group in 1992. A series of Drava-Mura conferences began in Kaposvar in 1993 during the first project phase with the support of the town of Kaposvar, Alpe-Adria and the German government. In

1996 a second conference was held in Radenci in Slovenia with the support of the Slovenian government and the thermal spa.

As a part of the PIN-Matra project, financed by the dutch government, the last conference was held in Zagreb in 1998. All conferences were important steps towards promoting ecological value and international cooperation. They were organised by EURONATUR and the appropriate NGO in the country itself.

During the first Drava Conference in Kaposvar 1993, the idea of a Biosphere Reserve Drava-Mura arose. Three years later, after the first collection of basic materials on biological diversity, protected areas and tourist infrastructure, the proposal was discussed in the thermal spa of Radenci again and an initial set of background material was sent to the UNESCO. The international organisation invited the countries to apply for the nomination of the Drava-Mura region as a Biosphere Reserve (UNESCO 1996). A clear concept for co-operation cross borders and the creation of a protected area was found.

Since the end of 1997, the Dutch PIN-Matra Programme has supported the project. The programme was set up to support the Pan-European Landscape and Biodiversity Strategy. First results are very encouraging. Ten years



PHOTO: SCHNEIDER-JACOBY/EURONATUR

A floating mill at the Mura River (Howenien)

ago only one large protected area, the Nature Park Kopacki Rit, existed along the whole river corridor. Now, more and more protected areas have been established.

A new cross-border co-operation

This co-operation is still informal although contacts have been established and the exchange of information has been improved. The first bilateral contacts have been made between the nature protection authorities of Croatia, Hungary and Slovenia. In recent years, important protected areas have been established or are in a process of implementation. The major protected areas with an administration of their own are the Danube-Drava National Park in Hungary and the Nature Park Kopacki Rit in Croatia. Regular visits started in October 1997 in Kopacevo.

Establish an agreement between the states

On the Mura River the Regional Park Mura in Slovenia will become an important partner for transnational co-operation. The partner on the Hungarian side is the Balaton-Upland National Park directorate, which is planning the Mura Landscape Protected Area. An Interreg/Phare project between Austria and Slovenia is already improving protection and regional development along the "border-Mura".

The most important step now is to establish an agreement between the states. It would improve the work of the specialists and the protected areas and ease the fund raising for the project. The transfrontier protection of the Drava and Mura as well as the development of protected areas (Nature Park Kopacki Rit/HR, Drava Forests/HR, Drava/HU-SLO and Mura/SLO) are already included in the Strategic Action Plan for the Danube River Basin (Task Force 1994).

The nomination of the region as a Biosphere Reserve with the protected areas as core and buffer

zone could follow soon. UNESCO criteria can be fulfilled by the large number of protected areas along the rivers. Now a common strategy of the countries to develop the region without destroying its unique biodiversity is needed.

Many activities have already started

Excellent research is being carried out by the universities in Pecs, Osijek, Maribor, and other scientific institutions along the

tremendous role in the regional climate. Meadows and pastures are also important biotopes that are used sustainably and need long term preservation. Fish ponds play an important role as feeding and breeding sites for birds and can be included in the buffer zone of a future Biosphere Reserve.

Most important is the creation of a chain of protected areas along the river to secure the free flow of water and sediments, and the migration of animals, as such otter, and fish. Along the Drava



PHOTO: SCHNEIDER-JACOBY/EURONATUR

The free running rivers Mura and Drava form a corridor through five countries with a unique biodiversity

rivers in close cooperation with the protected areas, e.g. Danube Drava National Park and Nature Park Kopacki Rit. Species lists have been prepared for the whole river and only a small part of the alluvial wetlands of the Mura in Austria was excepted by the European Council as a Biogenetic Reserve.

Old traditions such as the floating mills on the Mura and traditional measures for water management are already being used to demonstrate the connection of the people with the river. Sustainable use is already a part of forest management in most of the lowland forests especially in Croatia. The oak forests, although economically used, host a very rich flora and fauna and play a

and Mura Rivers the natural dynamic was preserved partly by the Iron Curtain. After the political changes, better solutions for the protection of the unique ecosystem have to be found.

The protection of a riverine landscape in five countries is a long process. The informal working group and three conferences held in Kaposvar 1993, Radenci 1996 and Zagreb 1998 played an important role during the conception, promotion and formulation phases.

New protected areas have been planned and created by the States over the last ten years. Already more than 120,000 ha are protected or proposed for protection. Politicians, nature protection authorities and



PHOTO: SCHNEIDER-JACOBY/EURONATUR

A set of restoration measures should save the values of individual wetlands and re-establish the original proportionateness of different wetland types in the region

Saving Natural Paradises in Europe

The project “Small Scale Wetland Restoration” was jointly organised by the World Conservation Union and the WWF and financed by EU Phare Multi Beneficiary Programme for the Environment

The Strategic Action Plan of the Danube River Environment Programme adopted in 1994 acknowledged the important role that wetlands play in the nutrient balance of the Danube River and in ensuring a healthy Danube River. Floodplains perform an essential role in water purification, reducing flood hazards, and preserving dwindling biodiversity.

The SAP states: “Conservation, restoration and management of riverine habitat and biodiversity are important for maintaining the natural capital of the basin (its

biodiversity) and to establish its natural purification and assimilative capacity”.

[A portfolio of potential sites has been identified](#)

In recognition of this fact the European Union Phare programme funding for the Danube has supported projects in subsequent years involving the restoration of wetlands. Among these has been an ambitious project to identify a portfolio of potential small scale wetland restoration projects. The project

which began in April 1997 involved a basin wide effort from NGOs and research organizations to identify a portfolio of potential sites and to train a group of local NGOs in wetland restoration techniques.

National focal points in each country, together with other national colleagues, elaborated a comprehensive list of small scale restoration sites for their country. The longer list of sites was then evaluated and judged according to a set of criteria developed to determine “priority sites” for restoration. A priority list of 20 sites has been developed and published and includes such sites as the Mur River in Slovenia, a portion of the Gemenc floodplains of southern Hungary and the lower Prut River of Moldova.

It is hoped that international and national funding agencies will support the projects on the list. Important about the list is that the projects identified are “small scale” – involving restoration costs of less than 100,000 ECU. The small scale wetland restoration project is a complimentary project to an overview of wetland

restoration needs in the Danube River Basin generated by UNDP.

Among the factors taken into account in evaluating the potential for restoration were the hydrological and geomorphological uniqueness, as well as species diversity and life communities. Priority was given to identify projects that would not only save the values of individual wetlands, but also re-establish corridors and connections and, where appropriate, the original proportion of different wetland types in the region. The participants in the programme also determined the likelihood of success as a key factor.

NGOs play an important role

A critical component of achieving success in how we manage and treat wetland areas is the involvement of people at the local level. NGOs and academic organizations have effectively played a major role. Philip Weller,

director of the WWF Danube Carpathian Programme, said that “local NGOs have an important and valuable role to help conserve, restore and ensure sustainable use management of wetlands.” The success of any restoration project will depend upon the support of the local population.

The more the local population understands and support the project, the more effective is the results. In recognition of this important component of successful projects, Phare supported as part of the project a two week training programme involving over 20 NGO representatives from all countries in the basin. A sharing of information and techniques among people from different parts of the basin was achieved. As one participant noted it was important “to realize that our little project in Slovakia is connected to many other projects throughout the basin.” Together these projects make a big difference.

The Danube PCU hopes that

the list of small scale wetland restoration projects will form a component of the ongoing efforts to bring about environmental improvement in the Danube River Basin and is pleased that both the EU Phare supporting implementation of some of the projects identified, i.e Morava River in the Czech Republic, Little Braila Island in Romania and Lower Prut in Moldova. As Team Leader of Danube PCU, Teun Botterweg has stated „although initiatives of NGOs are essential for enhancing wetland conservation, donors and supporters from both in and outside the region will be needed to realize the full range of projects identified“. The project has, however, set in motion important activities involving the identification and recognition of the potential for wetland restoration at a small scale with a recognition that a lot of small scale projects could add up to potentially big changes in the health of the Danube ecosystem.

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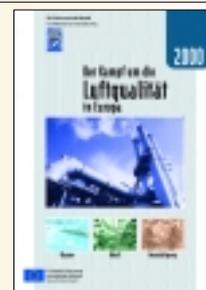
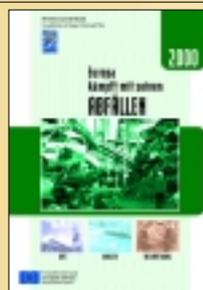
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The fact that the environment knows no boundaries requires the harmonisation of policy at a European level. Therefore it is essential that the public and environmental professionals have access to an authoritative source of information in key areas



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PHOTO: LESY CESKE REPUBLIKY

Within the Phare project, improvements in the water supply of floodplain forests of the Czech Dyje river was achieved

Wetland Management Goes Beyond Borders

Engineers and ecologists from Slovakia, Czechia and the EU have started innovative ways of river and wetland management in the Morava-Dyje region

It was “thanks” to the Iron Curtain that the traditionally extensive land use in the floodplains along the Lower Morava and Dyje rivers (border between the Czech Republic, Austria and Slovakia) did not intensify over decades. This secured the survival of many rare wetland species such as the white and the black storks, the corncrake or the greylag goose. They still breed in large numbers in this 250 km² large mosaic of old floodplain forests, large open meadows and numerous water bodies. It is true

that river engineering over the last 30 years caused various detrimental interventions for the various wetlands but the political confrontation of the “Cold War” prevented intensification of land use that has degraded most European river landscapes.

After 1989, the new economic development became visible along the borderlines but the same applies for nature conservation activities (e.g. establishment of protected Ramsar sites in all three states). With the starting in 1997/98 of two EU-Phare wetland

restoration projects under the Danube SIP (Strategic Action Plan Implementation Programme), this wetland region gained new speed in its development as a model area for innovative transboundary river and wetland management.

An expert team assessed restoration possibilities

It was in early September 1997 that the new Phare project team met for the first time. It was composed of Czech foresters, German and Austrian floodplain ecologists, and a Slovak NGO. Their task was to jointly prepare over the next 18 months both concrete restoration proposals for degraded floodplain meadows and forests in selected sites along both rivers, as well as to implement pilot restoration action.

A similarly unusual team was formed in May 1998, composed of Czech and Slovak river management institutions, fish biologists, nature conservationists as well as a river engineer from Germany and a limnologist from Austria. Working in the same region, their separate task was to assess restoration possibilities for migrating fish and disconnected river meanders.

Team leader and co-ordinator was an international NGO (WWF who commissioned Zinke Environment Consulting) which itself linked the local activities with the EU-Phare consultant Carl Bro International in Denmark and with the Danube PCU in Vienna. None of the local actors had experience with EU project administration and with such a diverse working team.

On 3rd December 1999, the results of these teams’ activities were presented in an international workshop in Bratislava, gathering 36 government and other experts from 10 Danube basin countries. On request of the Danube PCU and with the financial support of the Austrian Chancellery and the Phare Multi-Country Environment Programme, the experience made in the Morava-Dyje region was then shared and commented with representatives from other basin areas where similar action is at

stake.

The results of the Phare projects are multiple

A long list of **restoration proposals was made ready for implementation**. Repeated team discussions secured that restoration ideas were shaped into activities which are realistic from technical, ecological and financial

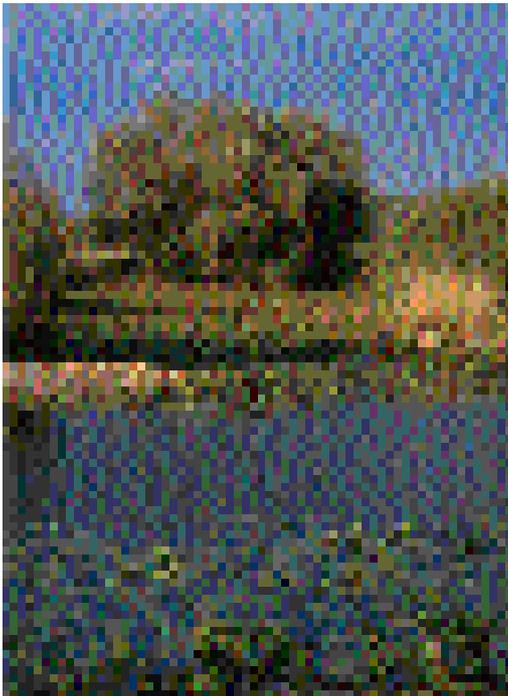


PHOTO: A. ZINKE

The Morava-Dyje border region is a unique mosaic of wetlands

point of view. This includes measures such as fish pass-ways over or around migration-blocking weirs, re-openings of disconnected meanders and improved hydrology of degrading forests and meadows.

Three **initial restoration measures** were **successfully started** which result in visible improvements of selected biotopes. For instance, a 3.2 km long old forest channel which was filled up with leaves and dead wood, was cleared. Since early 1999 it provides again the water needed to stop the decaying of 250 ha of Dyje floodplain forests. In another action, 130 hectares ploughed meadows benefited from Phare funds: Slovak farmers agreed to harvest seeds from intact floodplain meadows and to sow them on former meadow land.

A **new strategy for wetland restoration** was jointly developed. Common ground and starting

point was a conceptual framework which defined the reference levels for restoration (hydrology, physical habitats, hydrobiology, geographical boundaries), the impacts to be addressed and the restoration potential and objectives. This allowed to confine to the priority activities within the Phare projects (Phase I). As a concrete output from this process, a draft Trilateral Wetland Restoration Strategy was developed.

The intensive, open discussion within the new team was positively used to establish new national and cross-boundary working groups. While in the beginning, the personal positions reflected many differences, the open and honest discussions finally lead to **new alliances in wetland management**. A substantial role was played by altogether five EU experts who brought in international experience and secured an efficient use of local ideas and competence.

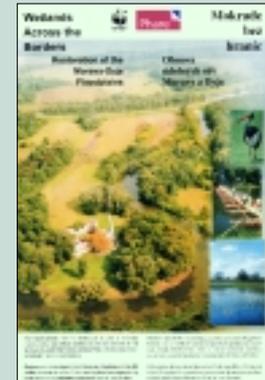
The need and usefulness of co-operation became also apparent with the Austrian side where another expert team happened to work on a very similar wetland restoration project, funded through EU-Life. The related repeated exchange of data and experiences was beneficial for all partners involved. It much contributed to the recent establishment of a "Trilateral Morava-Dyje Ramsar Platform" which is co-ordinated by the three environment ministries in Vienna, Bratislava and Prague.

Internal communication was extended to the wider public on a regular base. Three "Authorities Fora" were organised to inform and get feedback from local villages, authorities and other experts from all three countries. In addition, the first results in form of project proposals and first visible action are being presented in an information poster (Slovak-English) and in an 18-minutes professional video (in Czech and in English). They are being distributed both in the region (to communities, schools etc.) and internationally to **increase the**

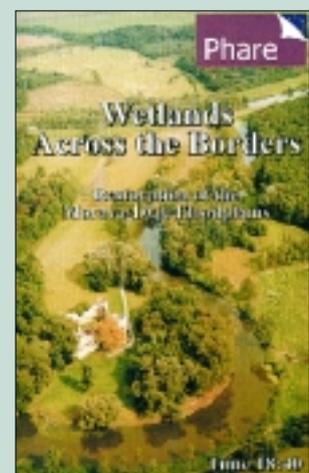
public attention and interest.

The very positive experience and the obvious success of these Phare projects needs now to be expanded: Both by securing follow-up funding for more restoration action in the Morava-Dyje region and by starting similar projects elsewhere in the Danube

INFORMATION



The information poster is available in Slovak/English. An 18-minutes professional video is also available in Czech and in English and describes model activities of the Phare-projects and shows the beauty of the wetlands. These videos and the leaflet are distributed both in the region and internationally to increase the public attention and

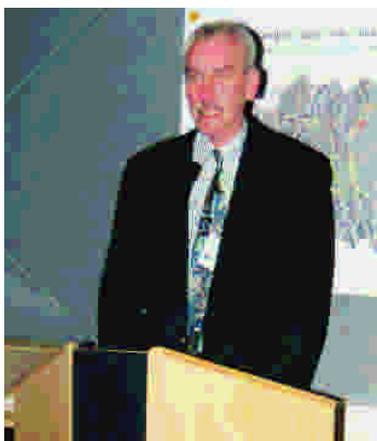


basin. It is a very rewarding task.

FURTHER INFORMATION ON THIS PROJECT IS AVAILABLE AT:

Artists for the Danube: sucessfull start

The Danube Programme Coordination Unit and Aqua Press International have launched the initiative "Artists for the Danube"



Teun Botterweg opens the initial event in the Vienna International Centre

CREDIT: P. JANISCH

The initiative "Artists for the Danube" was officially launched on November 30, 1999, with a vernissage at the Vienna International Centre that welcomed about 100 visitors. Teun Botterweg, Team Leader of the Danube Programme Coordination Unit for the implementation of the environmental programme for the Danube, stressed in his opening address the significance of this initiative: "Artists for the Danube" was created to support projects protecting and revitalising unique natural areas on the Danube and in the Danube delta. Apart from the programmes and projects of international organisations and financial institutions a new approach is being created here that goes well beyond environmental protection.

Karin Zambra, initiator and artist, is also underlining the "different nature" of this idea: "Nature is an important source of inspiration for artists of various art domains and are therefore a unifying element in a unique

cultural area."

Funds for wetlands in borders regions

A video by the well-known Hungarian nature film producer Istvan Nadaskay – "Wetlands Across the Borders" – led the visitors to the border-crossing wetlands of the Morava-Dyje region, which are the object of the first fund-raising action. The net financial profit from the limited edition of prints of the copper engraving by Karin Zambra "Water Forces" will support a renaturalisation project for the wetlands of the Morava-Dyje region.

"There are no environmental projects along the Austrian, Czech and Slovak border for the time being due to a lack of funds", knows Zambra. "Only the first inventory and proposals for the renaturalisation and preservation of wetlands and riparian meadow landscapes were funded by the Phare Programme of the European



Alexander Zinke presents the project and the video

CREDIT: P. JANISCH



CREDIT: P. JANISCH

ICPDR-President Wolfgang Stalzer unveils the engraving

Union," explains the artist.

The highlight of the event was the unveiling of the copper engraving by Dr. Walter Stalzer, President of the International Commission for the Protection of the Danube. The partially coloured copper engraving titled "Water Forces" printed on 250 gramme Dutch paper symbolises the power of water in nature. Soft, wave-like lines suggest water movements and dynamics. Delicate colours underline the pithy arrangement of lines.

"This event is meant to be the first in a series in order to present more works from artists from the entire Danube Basin," says Zambra. "Artists for the Danube" is based in Vienna, but it will closely cooperate with the other Danubian countries and the artists living there.

"In addition to the international approach, further initiatives shall be created on a national level. First contacts with interested persons in the Danubian countries have already been established," Zambra is glad to say.

The next event is planned for the International Water Day on March 22, 2000.

FURTHER INFORMATION:

**KARIN ZAMBRA, DANUBE PCU,
VIENNA INTERNATIONAL CENTRE,
P.O. BOX 500, A-1400 VIENNA**

Danube

Artists for the Danube

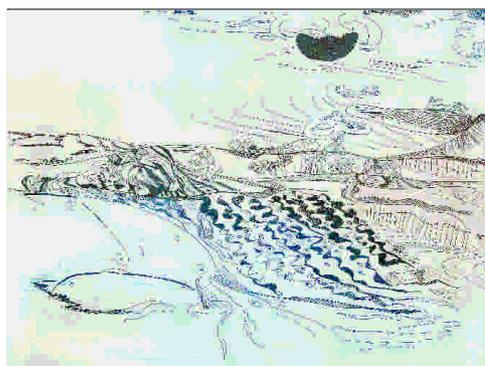
an initiative of the Danube PCU in cooperation with Aqua Press International (Bohmann Verlag)

“Artists for the Danube”

is a new initiative to support the protection of the Danube River Basin environment. This initiative focuses on fund raising for environmental actions that lack financial support.

“Water Forces”

is a multi-colour engraving, printed in a limited edition of 500 and it will be sent to you for a donation of 120 EURO (larger donations are welcome). The net financial profit of “Water Forces” will be dedicated to the restoration and saving of the original habitat of a variety of rare wetland species like the white and black stork, the beaver and the zingel and streber fishes along the Lower Morava-Dyje Rivers in the Danube Basin. These rivers form the borders between Czechia, Austria and Slovakia. The preparatory phase for the wetland restoration in the Morava-Dyje region was financially supported by the Phare Multi-Beneficiary Programmes of the European Union but now new funding is needed. A video on the natural beauty of the Morava-Dyje region, prepared under the Phare funded phase, will be shown at the take-off event on 30 of November, where the engraving “Water Forces” will be presented. Each work of art is hand made by the artist, printed on deckle-edged paper of 250g, using the technique of partial colouring.



“WATER FORCES”

*Image Size: 24x18 cm / Paper Size: 53x38cm
Colours of actual engraving are lighter than shown here. To see a more accurate picture please visit the Danube PCU Home Page. The artistic composition highlights the prominence of the water element in the environment. The flowing and wavy lines vividly suggest the forces of water in motion. The dependence of Life on the presence of water is forcefully articulated.*

THE ARTIST

Karin Zambra, started her artistic career in 1984. Among her exhibitions was a solo showing in the America-House in Vienna on the artwork she developed during her stays in the US and a group show in the Carpenter Center at Harvard University. Since 1997 she has been associated with the Danube Programme Coordination Unit.

Order Form:

Please fax or mail to the Danube PCU, Vienna International Centre,
Room D0418, P.O. Box 500, A-1400 Vienna, Austria; Telephone: +43 1 26060 5616, Fax: +43 1 26060 5836

Please send me copies of the engraving “Water Forces”

Name:..... Address

Signature: Date:

Please transfer your donation to the account of WWF Carpathian Programme in Vienna, Austria
Description of Payment: “Water Forces”, Name of Bank: PSK, Bank Code: 60000, Account Code: 90.010.02,
The payment of min. 120 EURO includes postage costs. The engraving will be mailed to you upon receipt of your donation.
For more information please contact: Ms. Karin Zambra at the Danube PCU,
e-mail: Karin.Zambra@unvienna.org, Danube PCU Home Page: <http://www.rec.org/DanubePCU>

EVENT

"A River of Life"

In October 1999, the Danube Environmental Symposium "A River of Life, Down the Danube to the Black Sea" gathered 125 leaders from the fields of religion, science, and the environment. Over the course of ten days "Symposium III"

travelled the length of the Danube River, from Passau, Germany to the delta in Romania and the Ukraine. During that period, delegates heard statements from over 30

international and regional experts on various aspects of the Danube and participated in plenary sessions, workshops and informal briefings. "Principal Findings & Recommendations" on ecological health and water quality, navigation, the post-conflict era and capacity building are a product of that process.

"The European Union should commit to a long-term programme with sufficient political and financial means to address the Danube region's major ecological and social challenges," summarizes Wolfgang Stalzer, president of ICPDR, the main results.

"Furthermore the programme could establish working groups comprised of representatives reflecting the Danube's national, ethnic and religious composition", says Stalzer.

Promoters of the major event were the Ecumenical Patriarch of Constantinople, the head of the Greek-Orthodox Church, and the European Commission. The Symposium, held from October 17 – 25, 1999, was the third event of this kind. The two former venues were the Aegean region and the Black Sea.

The organiser of the event is the NGO "Religion, Science and the Environment" based in London and Athens. It was founded in 1995 and is inviting representatives from the churches, scientists and



Symposium participants are enjoying the trip

Environmental issues across international borders

The Annual Conference on the Danube Region was held at the Vienna Austria Center from December 9-10, 1999, this year already for the second time. The talks centred on the economic perspectives of a larger Europe and the advantages of a cooperation between economy, science and research in Central and Southeast Europe. About 400 representatives of Austria, the EU countries and the Danube region discussed topics on economic cooperation and mutual transfer of knowledge. "The Conference is a positive contribution to the discussions on the advantages and disadvantages of EU enlargement. This event shall contribute to weaken the negative positions toward EU enlargement with arguments", explains Ivo Stanek, General Secretary of the organizers, the International Vienna Council.

The topics of the Conference comprised the areas transport, logistics, environment, cooperation between universities, academies, research institutes and industry, banking and finance, high-tech and infrastructure. "Through the exchange of experience and meetings with decision-makers from politics, science and the economy, concrete solutions can be found", says Stanek describing the advantages of the conference.

In many Danube regions the protection and renaturalisation of natural areas is one of the primary tasks of national governments and international organisations. "However, this goal can only be achieved if the concept of sustainable development becomes the basis for economic development and progress", summarises Leopold März, Rector of the Vienna University of Agricultural Sciences. His Working Group "Environment" discussed issues of sustainability, agriculture, regional planning and water

protection. The most important recommendations of this Working Group were an obligatory environmental education beginning with kindergarten, the promotion of alternative forms protecting water, soil and biodiversity – for instance organic agriculture, and the implementation of water protection projects resulting from the Danube Basin Strategic Action Plan with funds from the Stability Pact.

Under the chairmanship of Gerhard Weber, Director General of the Vienna City Planning



PHOTO: HENISCHPIOLA

Bureau, the Working Group "Urban Technology" identified a common future strategy for all the Danube Basin countries based on the aspects of avoidance and reduction. "Recycling strategies, an efficient management of material flows, and the reuse of raw materials in the production process are necessary instruments for avoiding emissions", summarises Weber. Among the major results contributed by the Working Group to the final document were mainly two recommendations:

- An analysis of the current situation with regard to water management, wastewater disposal and waste management in the various countries of the Danube Region is necessary.
- In order to achieve EU standards, Danubian states, in particular those that plan to join the European Union, need substantial investments in environmental technology.

A major result of the discussion process in the individual Working Groups is the Final Document,

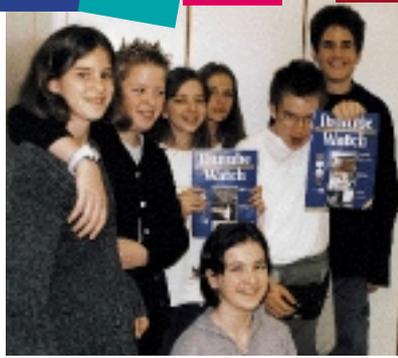
SPEAKERS CORNER

● Here, young people write their opinion on the Danube! Read and see for yourself how different their statements are!

One of the sights near the Danube is the Bratislava Castle. From there, you have a beautiful view of Bratislava's panorama and the flowing Danube.

Jednou z pamätihodností pri Dunaji je Bratislavský hrad. Je z neho nádherný výhľad na panorámu Bratislavy a tadiaš pretekajúci Dunaj.
Andrea Christova, Slovakia

Donau este foarte frumoasa acolo te simtifoarte bine. Dar apa ei este foarte murdora, noi oameni trebuie sa facem mai



The editorial staff of the teens corner

mult pentru mentinerea curateniei. Cind privim apa ei ne simtim foarte relaxati. Donau este atit de frumoasa ca si un vis.
The Danube is very beautiful and one can relax there. Unfortunately, the water is very dirty. We should do more for our environment !

Looking at the water is very relaxing. One can dream a lot.
Ana Bona, Rumania

Na Dunavadi je jako lepo. Tamo moze se voziti bicikle i roleri. Ali najljepse je kad Dunavadom proseta sladoledzia.

It's really great at the Danube ! There you can go bicycle riding or roller skating. But the best thing is that the ice-cream vendor sells ice-cream all the way along the riverbank.
Adriana Belonic, Yugoslavia



KNOWLEDGE TEST

Are you a real Danube expert?
Mark the right answers and add up the points.
The evaluation is at the end of the page.

9 How many riparian states to the Danube are there?
6? (5 points)
8? (15 points)
or 10? (23 points)

8 What's the length of the Danube?
1,974 km (17 points)
2,857 km (34 points)
3,494 km (27 points)

7 Therefore, the Danube is the world-wide
the fifth longest river (7 points)
the 15th longest river (9 points)
or the 20th longest river (10 points)?

6 The Danube flows from
the Red Woods to the Red Sea (5 points)
the Yellow River into the Yellow Sea (12 points)
the Black Forest into the Black Sea. (15 points)

5 Floodplain Forests are ...
a. Precious habitats for thousands of species of plants and animals (17 points)

b. Worthless regions which will be drained in the next few years (13 points)

c. Breeding places for thousands of mosquitoes and therefore a health hazard to human beings (14 points)

4 On its first thousand kilometres, the Danube is dammed up
33 times (12 points)
58 times (24 points)
62 times (20 points)
by Danube power stations ?

3 The symbolical bird of the Danube delta is
The pelican (19 points)
The seagull (15 points)
The heron (17 points)

Solution:
Add up the points:
120 to 142 points: Congratulations, you are definitely a Danube expert!
90 to 120 points: Well done, you know more than most teens at your age.
75 to 90 points: H'm, you shouldn't miss any of the Danube Watch issues!



Hi, I am Aquarius, the water teen from the Danube. When I grow up (well, of course, I feel grown-up already!), I'll become a waterman like my father, my grandfather, my grand-grandfather and all the watermen before us. Naturally, our lives have changed dramatically over the last few years. Nobody would have dreamed of that a water teen should write for a newspaper one day. But times change and I have to work on my career after all!!

Therefore, you'll meet me in the future issues always on this page. Here, I'll inform our young readers about news on the Danube region. So, listen up: if you have got something to tell us, write to my editorial office:

Auqarius,
c/o Teens-Corner by Danube Watch, Bohmann Verlag
Leberstr. 122
A-1110 Vienna

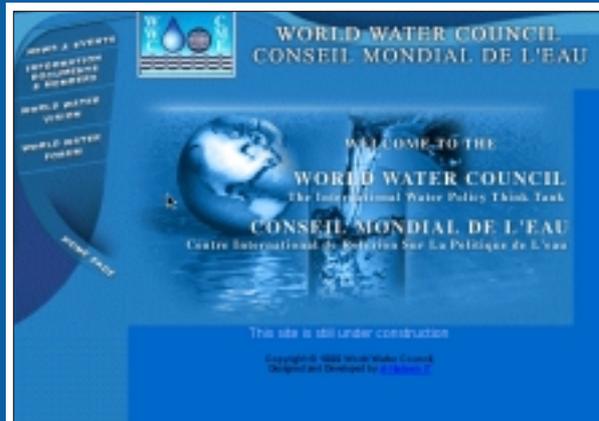


SOLUTION: 0. (10), 1. (2857 km), 2. (20), 3. (from the Black Forest to the Black Sea), 4. (a.), 5. (58 times), 6. (The pelican)



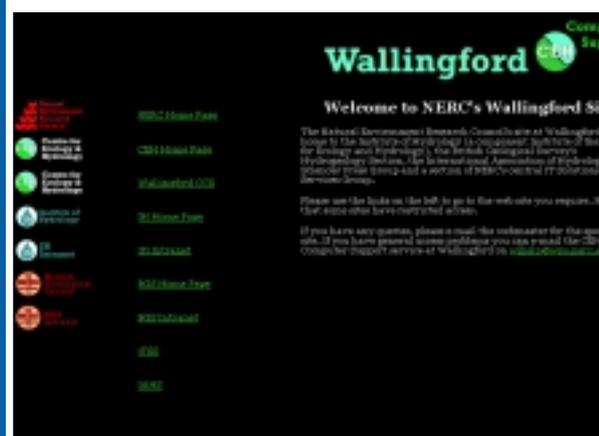
Water Webs

The International
Water Policy
Think Tank



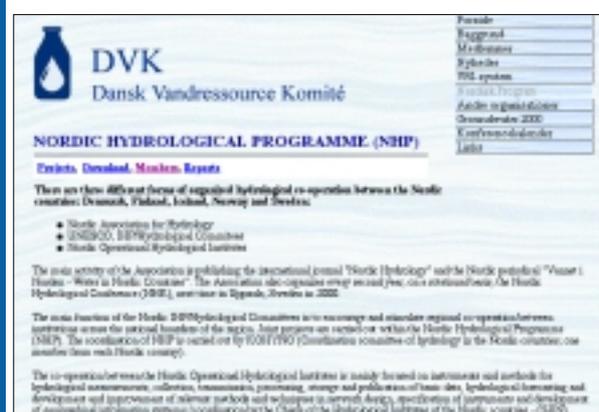
World Water Council:
<http://www.world-watercouncil.org>

A competence
centre for ecology
and hydrology



Natural Environment
Research Council:
<http://www.nwl.ac.uk/>

Encouraging
regional
co-operation



Nordic Hydrological
Programme:
<http://www.vandressource.dk/nhp-dk.thm#top>

Building a network
for Sustainable
Water Management



Global Water
Partnership:
<http://www.gwp.si-da.se/gwp/welc.htm>