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- **22** Tisza source inspires international cooperation

I3 Sisak-Moslavina County, Croatia

A three-day workshop on riverine forests was held at the headquarters of Lonjsko Polje Nature Park to mark the International Year of Forests and the 40th anniversary of the Ramsar Convention on Wotlands





Dear readers,

We are beginning a new stage in joint water management. With the Memorandum of Understanding signed by the five Tisza countries - Hungary, Romania, Serbia, Slovakia and Ukraine - what used to be a matter for individual countries is now an international endeavour.

Under the Ukrainian ICPDR Presidency, the Tisza Ministerial Meeting was held in April 2011 in Uszghorod, Ukraine. Ministers and high-level representatives from all five Tisza countries joined to sign the Memorandum of Understanding and commit ourselves to further cooperate to protect the valuable environment of the Tisza Basin.

On that occasion we also endorsed the Integrated Tisza River Basin Management Plan, the first sub-basin plan for the Danube and a milestone in cooperation for the Tisza countries. Hungary, Romania and Slovakia are EU Member States, while Serbia and Ukraine are not. Pollution, however, does not stop at borders, and our international management of the Tisza River Basin is crucial for ensuring good water quality.

The cooperation of the Tisza countries is mirrored in the Vienna Declaration, also signed in April. That Declaration unites the Danube with the rest of the world's largest rivers to share responsibility for their protection. See the article on page 18.

Moreover, the outstanding cooperation in the Tisza Basin will serve as an important model project for the EU Strategy for the Danube Region. Our actions will help tie the entire region into this set of measures and policies, and guide others in the sustainable development of the entire Danube Basin.

For Ukraine, this milestone is even more meaningful. It is a clear sign of the dedication of the Ukrainian Presidency to pursue a strong agenda that brings Ukraine closer to the ICPDR and demonstrates our willingness to take responsibility for sustainable water management.

As we move into this new stage in water management - now is the time to put our plans into action. The Tisza cooperation carries EU policies beyond the borders of the EU to the benefit of all countries involved.

Mykola Melenevskyi

Ambassador at Large at the Ministry of Foreign Affairs of Ukraine and ICPDR President 2011



For a free subscription to Danube Watch, or to contribute to Danube Watch, please contact icpdr@unvienna.org

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Danube Watch is the official magazine of ICPDR, the International Commission for the Protection of the Danube River. Danube Watch enhances regional cooperation and information sharing on sustainable water management and environmental protection in the Danube River Basin. It reports on current issues affecting the Danube Basin, and on action taken to deal with challenges in the river basin. Striving for scientific accuracy while remaining concise, clear and readable, it is produced for the wide range of people who are actively involved in the Danube River Basin and are working for the improvement of its

The ICPDR accepts no responsibility or liability whatsoever with regard to information or opinions of the authors of the articles in this issue.

News & events



Danube Strategy Civil Society Forum

BOOK SERIES ON THE ISAR RIVER

Under the title 'Die neue Isar', a German anthology on the Isar River was published by Nymphenspiegel, a cultural forum based in Munich, Germany. The first volume, published in 2010, was recently supplemented with the closing second volume. Editor Ralf Sartori covers issues related to River Basin Management, but also essays, historic and literary works. Thereby, the two books provide an extensive overview on the Isar River as an environmental, cultural and economic entity.

Further information can be found at www.die-neue-isar.com

DANUBE CIVIL SOCIETY FORUM BEGINS OPERATIONS

The Danube Civil Society Forum, a network of NGOs, was set up in a general assembly meeting in early July. It will serve as a platform for civil society dialogue and networking in the Danube Basin under the EU Strategy for the Danube Region. The forum will function as an interface for structured consultations between civil society, and public and private authorities at the regional, national and EU level, as well as to international and intergovernmental organisations active in the region.

Further information can be found at www.danubestrategy.eu

ALPINE CONVENTION: GUIDELINES FOR HYDROPOWER PUBLISHED

The Alpine Convention has published a document that will be of key importance for the construction of small hydropower stations in an environmentally friendly way: the 'Common Guidelines for the use of small hydropower in the alpine region' include common principles and recommendations, an outline for an assessment procedure as well as a pool of evaluation criteria. Good practice examples with detailed methodologies are presented in an annex.

The guidelines can be downloaded from: www.alpconv.org





1ST INTERNATIONAL DANUBE BOX COMPETITION IN BUDAPEST

Slovakia won the first International Danube Box Competition. Though Hungary was in the lead, as host country they were outside the official competition. Knowledge about the Danube as well as creativity secured the team the victory at the event, held in Budapest in late May. National Danube Box competitions in Hungary were organised by GWP Hungary for the fourth time, supported through the Green Danube Partnership, the Hungarian Ministry for Rural Development and the ICPDR.

For more information, visit: www.gwp.org



DANUBE - ROUTE OF CULTURE

The Balkankult Foundation has launched a competition on the topic of 'The Danube - Route of Culture', in order to promote the development of cultural, artistic, communicational, professional as well as technical and economical ties within the Danube region. Over 1000 artists established contact through a Facebook page and a multi-lingual website. The information on the competition and significance of development of cultural cooperation in the Danube region was placed on more than 50 internet portals from Germany to Ukraine - and the interconnection of artists, institutions and private individuals continues.

For further information, see: www.donau-kulturstrasse.net



NEW DIRECTIONS FOR ICPDR EDUCATIONAL PROGRAMMES

The cover photo for this issue of Danube Watch depicts an international workshop that the ICPDR held in cooperation with the Danube Competence Center (DCC) around Danube Day. For three days, the "workship" united representatives of ICPDR contracting parties, NGOs and teachers from throughout the Danube River Basin to discuss future directions for educational initiatives of the ICPDR. Thereby, the workshops created a basis for building on previous success stories such as the Danube Box or national initiatives such as the Austrian generation:blue.

See also www.danubebox.org and www.generationblue.at



FOREST MANAGEMENT IN THE CARPATHIANS

The seven Carpathian states - Czech Republic, Hungary, Poland, Romania, Serbia, Slovak Republic and Ukraine - have strengthened their efforts to protect forests through approval of the 'Protocol on Sustainable Forest Management' to the Carpathian Convention. The protocol was adopted at the Conference of the Parties held in late May in Bratislava, Slovakia. The Carpathians lie largely within the Danube River Basin, so an exchange between the ICPDR and Carpathian Convention is important; the two organisations are observers of each other.

For further information, see www.carpathianconvention.org



Planning the future of the world's largest rivers

Though separated by continents and nations, the rivers of the world share some of the same problems and challenges.

Together, scientists and decision makers are working to protect all of the world's largest rivers, and sharing responsibility for their future.

Scientists and decision makers from the world's largest rivers call for the formation of a global forum to facilitate discussion of issues related to the management of large rivers.



Rivers are fundamental to life and provide us with drinking water, food, hydropower, navigation, irrigation, ecosystem services and recreation. However, they are currently threatened by unsustainable overuse, and problems of increased floods and droughts driven by climate change, leading to changes in morphology, greater pollution, degradation of aquatic habitats and the extinction of species. These changes undermine the many benefits of rivers and their continuing contribution to human needs.

To provide a scientific forum to discuss these benefits and threats, the first International Conference on the Status and Future of the World's Large Rivers was held in Vienna, Austria, from 11 to 14 April 2011, supported by UNESCO, the International Association for Hydro-Environment Engineering and Research (IAHR), the International Association of Hydrological Sciences (IAHS), World Association for Sediment and Erosion Research (WASER) and the International Association of Geomorphologists (IAG).



A commitment to the world's rivers. The main output of the conference was the Vienna Declaration, which aims to assess the existing and future needs of large rivers to better integrate their use, protection and restoration and to devise an action plan. Over 450 conference participants, from 73 nations and representing all continents, large rivers and relevant thematic fields, contributed to the Declaration.

"The Vienna Declaration provides a valuable means of drawing together their findings and messages and emphasising the global significance of these problems and challenges and the need for concerted action at the global scale," said Des Walling, Professor at the University of Exeter, England.

A time for action. The Declaration acknowledges the current challenges facing large rivers, including exploitation to meet human needs and pressures from conflicting uses, which can lead to disruption of the continuum of water and sediment transfer from source to mouth.



"It is important to create the Declaration now," said conference organiser Helmut Habersack, Head of Christian Doppler Laboratory for Advanced Methods in River Monitoring, Modelling and Engineering, "because globally there is great pressure on the large rivers, which provide essential values for mankind as well as for nature."

Current challenges and future needs. The Declaration calls for analysis of the current status, demands and future development of large rivers, the formation of a global forum to facilitate discussion of issues related to the management of large rivers and efforts to promote the preservation of the remaining near natural large rivers and the sustainable management or rehabilitation of impacted rivers.

"In the future we must aim for integrated and sustainable management of the World's Large Rivers," said Walling. "This will require careful balancing of many different needs, and perhaps opposing needs, in order to safeguard their important contribution to human wellbeing and the global environment."

The most important feature of the Declaration is the detailed action plan for the future of large rivers. "The Vienna Declaration is particularly important inasmuch [as] it foresees a concrete, realistic and timely action plan," said Giampaolo diSilvio, Professor at the University of Padova, Italy, and President of WASER. "Its practical implementation, however, may still present some challenges and delay."

Support from all levels. One of the steps in the action plan is to close knowledge gaps relating to large rivers. Based on the contributions to the conference, a UNESCO-led and internationally funded mediumterm project to assemble and analyse existing data and knowledge on the status and future of large rivers, including evaluation of potential future infrastructure projects, their impact on large rivers and possible mitigation strategies. Particular attention will be given to transferring knowledge to the next generation of scientists, stakeholders, decision makers and the general public.

"Whilst the need for such action is readily accepted by most scientists, future progress towards sustainable management and restoration will depend heavily on the support and engagement of politicians and international organisations and collaboration between river managers from across the world," said Walling. "It is important that the management of specific river basins should be seen as contributing to a wider global goal."

Continuing the discussions. The Declaration suggests that a World River Forum be established to bring together scientists, stakeholders and decision makers to promote and improve integrated management of large rivers. The commissions responsible for sustainable management of large rivers should meet regularly to exchange experiences, define common standards on integrated management and debate future needs. "The ICPDR could play a major role in the World Large River Commissions Meetings," says Habersack.

"The most important part now is to implement the action plan," said Habersack. "One action is to organise future large rivers conferences, which is already on the way for 2014 in Manaus, Amazonas, Brazil."

For more information, visit: http://worldslargerivers.boku.ac.at/wlr/.

Kirstie Shepherd is a freelance journalist living in Vienna and has called the Danube River Basin home since 2000.

"It is important to create the Declaration now," said conference organiser Helmut Habersack, Head of Christian Doppler Laboratory for Advanced Methods in River Monitoring, Modelling and Engineering, "because globally there is great pressure on the large rivers, which provide essential values for mankind as well as for nature".



Signs such as this one, reading "Warning! Flood risk area!", point to the dire necessity for long-term strategies to reconcile economic goals with environmental security and provide vulnerable citizens with durable solutions.

The environmental crises, both man-made and natural, that are becoming characteristic of the 21st century are push factors contributing to forced mobility or displacement. For portions of the Danube River Region, these crises have included the experience or threat of flooding, drought, pollution of groundwater, and wetland depletion over the last decade, events which can lead to long-term problems of food insecurity or other livelihood effects. Because these problems are a regional concern as much as a local one, the affected countries have an interest to create mutually beneficial, cross-border water and environmental management policies to ensure durable solutions and reduce the impact of slow-onset and sudden disasters on at-risk communities.

Environmental Migration. An official definition of environmental migrants currently does not exist, though the International Organisation for Migration (IOM) has developed a working definition. Environmental migrants are "persons or groups of persons who, for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently and who move either within their territory or abroad". Environmental shifts in the 21st century are making these populations a key feature of policy debates and climate change conferences.

Proactive policies that can reduce the scope and impact of disasters on vulnerable populations are known as disaster risk reduction (DRR) strategies. The Hyogo



Framework, formulated by an international coalition in 2005, outlines key disaster reduction policy goals for 2005-2015, emphasising prevention, mitigation, resilience, preparedness and vulnerability reduction, while taking gender, age and cultural diversity into account. The other option is to enhance Climate Change Adaptation (CCA), which is broadly defined as a set of actions "to reduce the impacts of climate change that are happening now and increase resilience to future impacts". It encompasses a variety of activities, including education and training, as well as more technical measures, such as increasing coastal protection and distributing drought-resistant seeds.

Regarding the Danube. The Danube River is the most international river in the world, so DRR and CCA policies will require an international agenda to ensure effectiveness since any negative developments in the river will undoubtedly strain other countries in the region. This area has already experienced temporary environmentally induced migration due to flooding, the effects of which can be mitigated through wetland protection and early-warning systems. Flooding and pollution are particularly salient issues here which will ultimately affect the poor-

est citizens, who live primarily downstream. Because those who are most vulnerable often cannot migrate, it is increasingly important to create DRR policies to help all those potentially affected by disasters and to ensure livelihood support for those without the means to move.

Other issues affecting this area, such as pollution, wetland and groundwater depletion due to the intensification of industrial and agricultural output, require long-term strategies to reconcile economic goals with environmental security and provide vulnerable citizens with durable solutions. However, because these issues are slow-onset and are not as visible as disasters, they are not usually priorities in governmental strategies. Their significance will nevertheless increase if actions are not taken to reduce their impact.

Methods of response. The IOM was among the first organisations to explore the link between disasters and human displacement as a human adaptation strategy. Based on its mandate, it has the responsibility to raise awareness of the potential impact of disasters on human mobility and the need to factor this into global, regional, national and local DRR, CCA and development strategies. The IOM has gained experience employing DRR and disaster impact management strategies around the world, through: furnishing technical assistance for flood-prone areas; developing regional preparedness strategies and cross-border mobility in drought areas; creating temporary and circular migration schemes; constructing transitional shelters; and providing primary health care to victims in regions struck by disaster. While these responses cannot (nor should they) be repeated identically in the Danube River Region, there is enough evidence portending the growing significance of these issues in future, making the development of similar DRR strategies a practical and necessary step to ensure emergency preparedness.

The Serbian government is already a proactive proponent of DRR strategies. In October 2010, it held a National Policy Dialogue on Disaster Risk Reduction in cooperation with the United Nations Development Program (UNDP), the World Meteorological Organisation (WMO) and national partners. The two-day dialogue ended with official endorsement of recommendations for future action to strengthen Serbia's DRR system. As a country located in the Danube Region, this sets an important precedent for action in neighboring states, and contributes to the dissemination of good practices in a cooperative regional dialogue.

Environmental migration and disaster risk reduction are mitigated by policies taking international development, poverty reduction and good governance into account. For the benefit of all the nations of the Danube River Region, they should follow the example of Serbia and use the expertise and experience of the IOM to develop relevant policies for international cooperation in the wake of disasters and climate-induced changes in the future.

This article was prepared by the International Organization for Migration (IOM). The IOM was founded in 1951, and is the the leading intergovernmental organization in the field of migration and works closely with governmental, intergovernmental and non-governmental partners.



Flooding and pollution are particularly salient issues here which will ultimately affect the poorest citizens, who live primarily downstream.



The Amazon of Europe

The world's first five-country protected area will safeguard a region that is one of the richest in Europe for species diversity and a major source for good drinking water, natural flood protection, healthy forests, rich fish habitats and recreation.

While the Drava and Mura Rivers once served as a symbol of the Cold War divide, they now represent progress in cross-border cooperation.



A rich natural and cultural heritage is combined in one of the most beautiful and valuable wetland areas of Europe: spanning Austria, Croatia, Hungary, Serbia and Slovenia, the lower courses of the Drava and Mura Rivers and related sections of the Danube River were recently declared a Transboundary UNESCO Biosphere Reserve by all five countries. With more than 800,000 hectares the site will be Europe's largest river protection area.

A 700 km-long 'green belt' connects highly valuable riverine landscapes such as floodplain forests, river islands, hundreds of gravel and sand banks and oxbows, and is enormously rich in wildlife. The area is home to the highest density of breeding pairs of White-tailed Eagles in Continental Europe, and hosts other endangered bird species such as the Little Tern, which, with only five to ten breeding pairs, is the rarest bird species in this area and the 'ambassador' for the dynamic Drava River.

Protected riverine areas under one umbrella. During the Cold War, the Mura and Drava Rivers formed part of the 'Iron Curtain' border and were a symbol of that divide. Over the last two decades, the transboundary river system has become a lifeline connecting the five countries. The five countries in this region have established a network of about 20 single river protected areas. This includes the Danube-Drava National Park in Hungary, the Kopački Rit Nature Park in Croatia, the Gornje Podunavlje Special Nature Reserve in Serbia and Natura 2000 sites along the Drava and Mura in Austria and Slovenia. Most recently, Croatia declared 88,000 ha of the Drava-Mura a Regional Park. A new Transboundary UNESCO Biosphere Reserve will combine various protected areas for effective protection and management of this shared river ecosystem.

Green light for Transboundary Biosphere Reserve.

On 25 March 2011 the ministers responsible for environment and nature protection of all five countries, Nikolaus Berlakovich, Jasen Mesić, Sándor Fazekas, Oliver Dulić and Roko Žarnić, in the presence of EU Commissioner for the Environment Janez Potočnik, signed a joint declaration establishing a Transboundary UNESCO Biosphere Reserve along the three rivers. The signing took place as part of the Informal Ministerial Meeting within the Hungarian EU-Presidency in Gödöllő near Budapest. This declaration is based on an agreement between Croatia and Hungary from 2009, where both countries committed to establish the joint reserve.

The Biosphere Reserve paves the way to create the world's first five-country protected area, consisting of about 260,000 hectares of core and buffer zones and of another 540,000 hectares of transition zones. "It is not only a significant step forward in protecting the region's natural treasures but serves as a striking example of how nature conservation can bring countries together," says Andreas Beckmann, Director of the WWF Danube-Carpathian Programme.

Masterpiece in the Danube Basin. The Mura-Drava-Danube Biosphere Reserve will be implemented within the European Commission's Strategy for the Danube Region. The Biosphere Reserve will support the biodiversity objectives set by the European

Given the global importance of this outstanding commitment, WWF presented the five ministers with the WWF "Wild Heart of Europe" award.



The Mura and Drava Rivers, with their gravel and sand banks, serve as a stepping stone for more than 250,000 migratory waterfowl each year.

to the objectives of the long-term 2050 biodiversity vision and the 2020 biodiversity target. Since the three rivers are covered extensively by Natura 2000 sites, it also contributes to the implementation of the Birds and Habitats Directives as well as the EU Water Framework Directive.

Council of Ministers in 2010, and will correspond

Furthermore, the initiative has a great potential to step up the regional cooperation between Austria, Croatia, Hungary, Serbia and Slovenia and bring these countries closer together, including with current and future EU members.

"This landmark cross border agreement is a powerful demonstration of a shared green vision that builds on and reinforces regional cooperation and unity in Europe," says Jim Leape, WWF International Director General.

Europe's 'Amazon' still in danger. However, despite joint protection efforts the natural river courses are under threat. The Water Management Authorities of Croatia, together with Hungary and Serbia, are undertaking plans to regulate over 100 kilometres of the natural meandering stretches of the Danube, Drava and Mura Rivers. Currently three major projects are in the pipeline to channel the Danube between Croatia, Serbia and Hungary, the Lower Drava in Croatia at Osijek and the Drava-Mura confluence between Croatia and Hungary.

TRANSBOUNDARY BIOSPHERE RESERVE

The protected area network within the future transboundary Biosphere Reserve includes:

Austria (ca. 6000 ha)

◄ Landscape Protected Area including the 'Border Mura' Natura 2000 site (ca. 6000 ha)

Croatia (ca. 111,000 ha)

- 7 Regional Park 'Drava-Mura' (ca. 88,000 ha)
- ▶ Nature Park and Kopački Rit Special Zoological Reserve (ca. 23,000 ha)

Hungary (ca. 52,000 ha)

- 7 Danube-Drava National Park (ca. 50,000 ha)
- 7 Mura Landscape Protected Area (ca. 2100 ha)

Serbia (ca. 20,000 ha)

→ Gornje Podunavlje Special Nature Reserve (ca. 20,000 ha)

Slovenia (ca. 20,000 ha)

- Natura 2000 Mura (ca. 11,000 ha)
- Natura 2000 Drava (ca. 9000 ha)

In 2009, the EU Commission initiated a fact-finding mission to Croatia, and two independent EU experts were hired to investigate regulation projects along the Drava. They found the planned regulation of 56 kilometres of the Lower Drava in Croatia to be outdated, environmentally destructive and not in accordance with international standards and EU laws. They also concluded that the Environmental Impact Assessment of the project was not done "in compliance with international standards and EU law" and that "the project should not be realised". They also stated that the extraction of gravel and sand from the riverbeds should be stopped.

The future decisions on these outdated regulation and sediment extraction plans and projects will finally prove the preparedness of the countries to implement their commitment to better protect and manage the area as a Transboundary Biosphere Reserve and to implement river management in accordance with EU law.

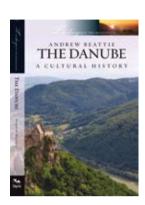
A river management concept for the Biosphere Reserve has already been developed by WWF and EuroNatur: www.sterna-albifrons.net/xoops/files/Drava-Vision-2009-2020.pdf.

Arno Mobl has worked in the transboundary area since 1992. Between 1996 and 1998 he wrote his thesis about the Croatian-Hungarian Drava River and is currently project coordinator for the Mura-Drava-Danube Biosphere Reserve at WWF Austria.

The river ecosystem of the Biosphere Reserve is vital for the socio-economic wellbeing of more than 400,000 people living in the transboundary region.

Reviewing 'The Danube — A Cultural History'

A conservation message from the past



At times gentle and slow, at times a rapid torrent of dates, quotes and images. In the book 'The Danube – A Cultural History', Andrew Beattie paints a "landscape of the imagination", as the cover promises. For this virtual journey from the springs in the Black Forest to the Danube Delta, Beattie has gathered a remarkable wealth of information.

He is particularly good at digging up information – such as 'A Thousand Miles in the Rob Roy Canoe' by John MacGregor from 1866 – that is unlikely to be found in conventional guide books. The tone, although sometimes heavy in colour and imagery, does well to transmit the look and feel of a Danube cruise.

Beattie's attention to detail is remarkable, but not infallible. Passing the Austrian capital, he describes the Vienna International Center as the home of various international organisations, but fails to include the ICPDR among them. Future editions will, as the publisher promised when we pointed out this flaw.

Nonetheless, the book is well worth reading and a nice supplement to a conventional travel guide for people touring this exceptional river – or for anyone interested in the history, literature and art linked to it.

For more information on 'The Danube - A Cultural History' by Andrew Beattie, please visit: www.signalbooks.co.uk/book.php?a=1904955665

Benedikt Mandl is the Technical Expert for Public Participation and Communication in the ICPDR Secretariat, and is the Executive Editor of Danube Watch.



Riparian forests stand as a tribute to cultural landscapes of the past, and serve as flood protection for the future.

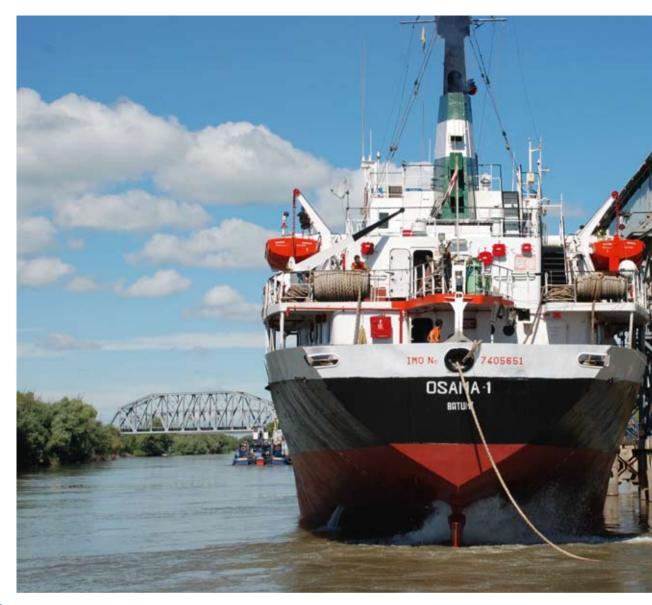
"Where else in Europe do highly natural oak stands extend over 200,000 hectares in the floodplains, and where else has their water regime remained as undisturbed as here? Not only from an economic point of view, but also with regard to science, these forests, hardly touched by man, are of extraordinary value."

The landscape described in this quotation from a 1974 publication by Horvat, Ellenberg and Glavac, 'Vegetation of Southeast-Europe', is still the same today. The Central Sava Basin includes the largest complex of alluvial hardwood forests of oak and ash not only in Europe but in the Western Palaearctic.

The quote further served to inspire a workshop marking the International Year of Forests and the 40th anniversary of the Ramsar Convention on Wetlands with its theme 'Forests for Water and Wetlands'. The three-day workshop held in June brought together 26 experts from the region to the headquarters of Lonjsko Polje Nature Park. Discussions included natural determinants of freshwater, tree-dominated wetlands, riparian hardwood forests as an essential attribute of organically evolved cultural landscapes as well as the role of those types of wetlands in flood management.

"Lonjsko Polje is a view of the future from the past," said Helmut Volk, one of the participants and lecturers. Participants agreed to continue the discussion and will organise a follow-up conference on conservation and management of riparian forests.

Goran Gugić is the managing director of Lonjsko Polje Nature Park Public Service in Croatia. The project to strengthen cooperation in the Danube Delta will focus on oil terminals, as these terminals are an increased hazard potential for the ecosystem and natural heritage of the Danube Delta.





Hazard management in the Danube Delta

Effective cooperation on industrial safety between neighbouring countries is essential. This is even more important when major hazardous industrial facilities are located along transboundary waterways, such as in the Danube Delta.

The outstanding environmental value and sensitivity of the Danube Delta requires cooperative efforts for its protection. As industrial accidents can result in catastrophic pollution of the delta, riparian countries need to work together to be able to respond effectively in the event of an accident.

In Kiev on 11 May, Moldova, Romania and Ukraine officially began a project to jointly strengthen cooperation in the Danube Delta to prevent and respond effectively to any emergencies involving hazardous substances. The project, which will run until June 2013, is coordinated by the UNECE under its Convention on Transboundary Effects of Industrial Accidents. While the Danube Delta is a unique natural heritage of global importance, it is Moldova, Romania and Ukraine that depend most on its natural and economic value. And together they assume their responsibility to improve environmental protection from industrial accidents in the Danube Delta.



Targeting oil terminals.

The numerous industrial operations in Moldova, Romania and Ukraine along the Danube and its tributaries constitute a risk of severe pollution and damage of the Danube Delta. The project seeks to first reduce these risks by preventing accidents and to improve crisis management in the event an accident does occur. The project will focus on oil terminals as hazard sources located in all three countries near the Delta: Giurgiulesti, Moldova; Galati, Romania and Reni/Izmail, Ukraine. These terminals are an increased hazard potential for the ecosystem and natural heritage of the Danube Delta. The project will improve cooperation between the three countries by enhancing and harmonising the mechanisms for approaches to efficient and effective hazard and crisis management.

Hazard management.

Good understanding of existing hazards is essential for accident prevention and effective emergency response measures. This includes the identification of hazard sources, maintenance of databases, and regular exchange of hazard information between neighbouring countries. Beyond that, partners can strongly benefit from experience sharing, exchange of new technologies and implementing joint projects. Joint improvement or harmonization of safety standards is another effective measure for decreasing risks of emergency situations.

The project aims to enhance the legislative framework for hazard management by harmonising the safety standards at the major hazardous facilities located in the Danube Delta, especially oil terminals; enhancing cooperation between competent authorities and operators of major industrial facilities; and drafting safety guidelines for oil terminals and training inspectors to enforce safety. In addition, countries will draft action plans to improve hazard management, establish bilateral or trilateral sectoral agreements related to hazard

and crisis management, and raise public awareness about the importance of hazard management through contact with media.

Crisis management. The main role of crisis management is to ensure there is a fast and effective response if there is an industrial accident. On-site contingency plans, developed and approved by authorities, are created for facilities where accidents might happen. Offsite plans cover wider areas with industrial facilities capable of causing transboundary effects. As part of this project, countries will develop and harmonise offsite contingency plans that are compatible with the existing on-site plans. The harmonisation will include an agreement on the use of alert and warning systems, establishing sectors for response and procedures and schemes for providing each other with mutual assistance.

The project will identify areas for closer cooperation to work together in the event of emergency (i.e. warning, notification, response actions, modelling) and specify areas for coordinated action when requesting and receiving assistance, in particular if there is major oil pollution in the Danube Delta. In addition, countries will review the compatibility of off-site emergency plans and draft action plans for improving crisis management.

Responding together. The project will produce procedures for hazard and crisis notification within the three countries and provide a basis for joint response in case of crisis. Further, it will provide practical recommendations for national authorities to strengthen crisis and hazard management. Moldova, Romania and Ukraine will enhance and harmonise their hazard management as well as their safety standards at the major hazardous facilities located in the Danube Delta region. In addition, they will harmonise their off-site contingency plans and establish a contingency plan for the Danube Delta. To support planning and prioritization, the project will also develop a hazard map for the Danube Delta region.

Svetlana Stirbu is a member of Monitoring and Assessment and APC Expert Groups of the ICPDR, and a member of the Working Group on Implementation of the UNECE Convention on Transboundary Effects of Industrial Accidents.



Seeing the river as a whole

An Austrian artist is creating huge panorama pictures of the Danube's riverbanks resulting in a unique 'cross-section' of Europe.

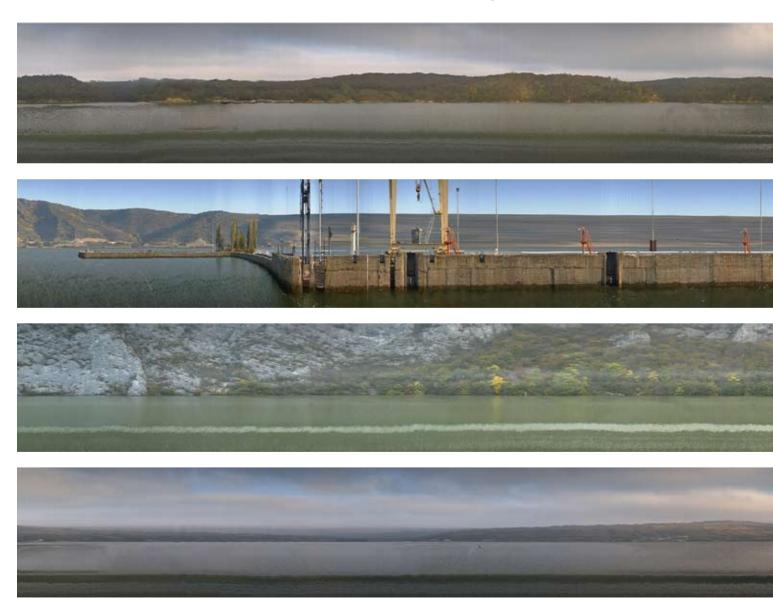
Imagine being able to experience the whole river in one glance, without borders. Landscapes changing and morphing as the river remains constant; flowing, ever flowing, to the Black Sea.

Artist Michael Aschauer has created this image of the river, mapping nearly 1000 kilometres, in pieces from Asten, Austria to the Black Sea. His Danube Panorama Project, which won the 2011 Neptun Wasserpreis, examines how cultural diversity is reflected visually in landscapes.

"It's a long-established metaphor: the river as a flow of life, and of history," says Aschauer. "Especially important for me with this project is the idea of rivers as a naturally given crosslink through continents or cultures and as a representation of a cultural landscape."

A flowing river, one frame at a time. The unique images are captured with a line-scan camera, which takes exposures through a slit in the aperture. The camera was placed on a boat going down the river, continuously recording the shoreline. Using software he developed, Aschauer has created a single image from the footage.

Recording the first stages took place in July and November 2005 as part of a river cruise from the University of Applied Arts in Vienna. "I came up with this ambitious idea to make a very long panoramic picture of the whole Danube River – which of course turned out to be not that easy to do in one trip on a tourist cruise ship."



Since then Aschauer has been slowly working on upgrading the technology to make higher resolution scans, and finding time to expand his coverage of the river. "Basically I'm doing everything myself, so it takes a lot of time."

But for Aschauer, the project is like the river in many ways, especially in its continuation. "It's not a full track – a fragment here and a hundred kilometres there, sometimes in one direction and sometimes in the other direction. But it's not the main point to seek completeness," he says.

Taking in the bigger picture. Aschauer's work, like the river itself, has proved to be a gathering point for people from many walks of life. "For me it's an art project but it's not tied to the artistic scene; there are a lot of people that can make something out of these pictures that do not have any connection to art."

He has expanded this work into a larger umbrella

project, called River Studies, and plans to make similar recordings of the world's other large rivers. "I'm interested in rivers generally, and I'm also interested in comparing rivers."

Aschauer made some recordings on the Nile in Egypt in 2006 and is planning to record some sections of the Ganges in India by this winter. Through his work, we'll be able to compare the world's rivers with our own Danube.

For more information about the Danube Panorama Project or to see more of Aschauer's work, visit: www.danubepanorama.net.

Kirstie Shepherd is a freelance journalist living in Vienna and has called the Danube River Basin home since 2000.

The panoramic views of the Danube, shown here in sections near the Iron Gate, give an impression of timelessness as they present several moments along the river, seemingly all at once.





Richard Seeber is a Member of the European Parliament, and water is a special focus of his work. He founded the first Intergroup on Water of the European Parliament in 2010, and serves as its President.

Towards a stronger Europe: an EU Danube macroregion strategy

Connecting people, ideas and needs, the Danube Strategy represents a new opportunity to address the challenges and potential of the Danube region for an integrated approach to sustainable development. Richard Seeber, Member of the European Parliament and Founder and President of the Intergroup on Water, speaks about the European Strategy for the Danube Region, and how the river and the people living in its basin will benefit from such a strategy.

Danube Watch: What are 'macro-regions' for and how can the Danube region benefit from such a strategy?

Seeber: The region along the Danube River is one of the most important nature areas in Western Europe. To protect the natural diversity and to strengthen the economy and competitiveness, the European Commission presented, in collaboration with the Committee of the Regions, the 'European Strategy for the Danube Region'. The strategy is an example of a European macro-region, which will increase efficient and effective cooperation between countries along the Danube River, and provide an appropriate use of European Funding. The European Council approved the strategy in June.

Danube Watch: Will the Danube Strategy encourage cross-border partnership?

Seeber: Macro-regions are characterised by countries or regions that share certain key challenges, brought about by similar geographical circumstances. The Danube Region encompasses 14 countries, of which eight are EU member states, and most of them are facing the same challenges such as economic, social and infrastructure disparities. Optimised cross-border cooperation is needed to address these challenges and to provide strong and ongoing development in all sectors. Therefore, the Danube Strategy focuses on four main issues within these countries: environment, competitiveness, connectivity and security.

As six countries participating in the Danube Strategy are non-EU countries (namely Bosnia and Herzegovina, Croatia, Moldova, Montenegro, Serbia and the Ukraine), the strategy also shows the European efforts for greater cooperation with EU neighbour states. Cross-border partnership is one of the main objectives of EU regional policy. While some of these countries are already candidates for membership of the European Union, others maintain strong relations in the fields of economy and industry with the European Union.

Danube Watch: What are the financial challenges of the Danube Strategy?

Seeber: We also have to take into consideration that the formation of macro-regions is based on a common set of objectives and measures, which require a certain standard in economical and political stability. Macro-regions can be an innovative framework to support the development in various sectors, but it has to be ensured that the financial resources are used efficiently and equitably. Therefore, an intensified interaction with local players for better incorporation of European funds is essential. The important role that local and regional authorities must play in such a process has to be underlined, and the important question of the principle of subsidiarity must be taken into account.

To find a balance between the EU level and the local level, and to solve the questions of division of tasks between the various actors, is one of the most important challenges within regional and cohesion policy. Decentralisation and regional self-government has to be supported by the Danube Strategy and all stakeholders which take part in the implementing process.

There has been an increasing recognition at political and policy-making level of the need to use the resources given by the European Union more efficiently. The implementation of the European Strategy for the Danube Region will not be accompanied by additional EU finance. There has already been a considerable amount of funding in the programming period between 2007 and 2013. More than 100 billion Euros

have been allocated from the European Regional Development Fund, Cohesion Fund and European Social Fund. The Strategy will focus on coordinating and strengthening the use of existing financing instruments, but no extra money, new institutions or new rules will be implemented. That's not necessary, as within the region there is already quite a lot of money available, provided through the various funds of the European Union. The Danube Strategy's aim is to provide optimised coordination and implementation of regional development programmes within the regions and countries through which the Danube flows. A bottom-up approach on this Strategy is one of the instruments needed to achieve greater effect and to show how European macro-regional programmes can help tackle local problems.

Danube Watch: What role can environmental protection play in economic growth?

Seeber: As the coordinator of the committee on the Environment, Public Health and Food Safety, as President of the Intergroup Water and as a member in the Committee on Regional Development in the European Parliament, I would like to underline the increasing importance of the protection of natural resources in the Danube Region. The main objectives of the European Strategy for the Danube Region are to boost the economy and competitiveness as well as environmental protection. The use of renewable energy sources will have a positive impact on regional development and economic growth within the Danube area. The European Strategy for the Danube Region is strongly influenced by the aims of the EU2020 Strategy. Growth and employment, joint concepts for sustainable environment protection, development of infrastructure, the involvement of local authorities and cross-border cooperation in security issues are the objectives to be pursued in this regard.

The Danube Region has an enormous economic, environmental and social potential, and I am convinced that the European Strategy for the Danube Region is an innovative project with ambitious goals. To achieve these, the Strategy must go hand in hand with the principle of subsidiarity and a strong focus on sustainable environmental protection.

Kirstie Shepherd is a freelance journalist living in Vienna and has called the Danube River Basin home since 2000.

"Decentralisation and regional self-government has to be supported by the Danube Strategy and all stakeholders which take part in the implementing process."

Sungai Perak: a special river

Though small compared with the Danube, the Malaysian river shares much with the Danube; both rivers are rich in culture and history, both supply water for life and living, and both face issues of equity, floods, water quality and environment.

The famous Royal Belum is a 110,000 ha tropical forest reserve rich in biodiversity.



The Sungai Perak Integrated River Basin Management Project seeks to install an integrated management system for Sungai Perak with strategies that provide economic opportunities and benefits to all in a revitalised river with tourism as the main theme.

Sungai Perak is the 'River of Life' for Perak State in Malaysia. It flows over 400 km in a 15,000 km² catchment that covers 70% of the state lands. The second longest river in Peninsular Malaysia, it starts from the north-western corner of the state, flows south to Teluk Intan, where it bends westward and into the Straits of Malacca. The river divides the state into two nearly equal halves and thus forms its natural backbone. And this river of life is special in many ways.

Sungai Perak is special for its Royal Stature. History recorded that whoever controls Sungai Perak has authority over the state. This adage still holds true and His Majesty the Sultan of Perak still resides in the Royal Town of Kuala Kangsar on the bank of the river. This river is central to the history and traditions of Perak Sultanate and the people; its waters are part of royal ceremonies including the investiture of a new Sultan.

A working river rich in biodiversity. Sungai Perak is special for its wide spectrum of functions and is perhaps the only one in Malaysia that performs nearly all the functions expected of a river. The first rubber trees in the country were planted on the riverbanks, and its

waters irrigate a national paddy granary and produce hydropower for the nation.

The river is also special for its nature and beauty. The famous Royal Belum is a 110,000 ha tropical forest reserve rich in biodiversity. Elephants and tigers still roam freely here. A river terrapin conservatory established in 1960 at Bota Kanan, remains one of few of its kind in the world. The lakes in the upper stretches are simply beautiful. Quaint traditional kampungs (villages) still exists between modern towns including Teluk Intan with its own 'Leaning Tower'.

For all its special qualities, Sungai Perak still needs 'something special' to survive in a rapidly changing economy. Sungai Perak needs good care to remain special forever, for future generations. Otherwise, as in many rivers, it will deteriorate gradually, unnoticed, until in a critical state.

Taking action before it's too late. The Perak State Government has taken a bold and innovative step to avoid such situations through an Integrated River Basin Management (IRBM) Project initiated by the public-private sector – fundamentally to instil the spirit

of 'love and care for rivers' before it is too late. The project master plan is expected by August 2011.

The Danube has been identified as a model for the project, and the Project Steering Committee sent a delegation to meet the ICPDR Secretariat to learn about managing the Danube. The Steering Committee Chairperson, Her Royal Highness Raja Nor Mahani Raja Shahar Shah, led the delegation, which included



Hamidah Osman, the State Executive Councillor for Tourism; Abdul Razak Dahalan, Technical Committee Chairperson; and Aminudin Zaki Hashim, CEO of Darul Ridzuan Institute for Development Strategies and Her Highness Raja Azwina.

Learning from the Danube. The delegation met the ICPDR Secretariat on 5 May 2011 for an in-depth briefing. The delegation was impressed with the achievements of the ICPDR, and especially that the many countries involved could agree on a common reference for the good of the river and basin communities.

"If 14 Countries can agree on how best to manage a river [Danube]," said HRH Raja Nor Mahani, "then it should be relatively easier to manage one river [Sungai Perak] flowing through five districts in one state of a country."

The ICPDR's public participation programmes, and especially Danube Day, impressed the delegation, and all agreed that monitoring the environment is an effective strategy for managing rivers. "It's all about quality," said Hamidah Osman, "river quality, riverfront quality, environmental quality and service quality."

Getting the public involved. HRH Raja Nor Mahani explained that, ultimately, the Sungai Perak IRBM Project seeks to install an integrated management system for Sungai Perak with strategies that provide economic opportunities and benefits to all in a revitalised river with tourism as the main theme. All stakeholders need to be excited about the plan and with the feeling of there being real connections between the river and the people.

The delegation joined a river cruise on the Danube to study its life and living environment and noted spaces for parks and bike trails, riverfronts, island development and quality. "Having adequate space for public facilities all along the riverbanks encourages stakeholders' participation and love for the river," said Abdul Razak.

Overall, the meeting with ICPDR Secretariat and the Danube experience far exceeded initial expectations. The Danube is an appropriate model and, more importantly, establishing ties with the ICPDR Secretariat will result in mutual benefits. HRH Raja Nor Mahani invited the ICPDR Secretariat to visit Sungai Perak and indicated plans for more delegations from Malaysia.

A delegation from the Project Steering Committee visited the ICPDR Secretariat to learn about managing the Danube. Pictured (from left): the author, Raimund Mair, Abdul Razak Dahalan, Philip Weller, HRH Raja Nor Mahani, Hamidah Osman, Benedikt Mandl, HH Raja Azwina and Aminudin Zaki Hashim.



"Our rivers may differ in terms of size, but we all share the same vision: clean, living and vibrant rivers for the future generations of the world," said HRH Raja Nor Mahani.

Mobd Adnan is a professional engineer and the Managing Director of Corak Zaman Sdn. Bhd., the private sector partner to the Government of Perak for the Sungai Perak IRBM Project.

Tisza source inspires international cooperation

Symbolising their collaboration in protecting the Tisza Basin, the Tisza countries placed memorial plates at the source of the river in Ukraine.



Istvan Toth of Hungary spoke to the crowd to share the Tisza countries' respect and responsibility for the Tisza River Basin. Braving rainy weather and a long climb high into the wild heart of the Carpathian Mountains, more than 70 people came together on 25 June to celebrate the cross-border cooperation between the countries sharing the Tisza River Basin. Representatives from each country – Hungary, Romania, Serbia, Slovakia and Ukraine – met at the source of the Tisza River in the village of Yasinya, Ukraine, to dedicate memorial plates in recognition of the progress made in working together for the Tisza.

This dedication was planned at the Ministerial Meeting, initiated by the Ukrainian ICPDR Presidency, held in Uzhgorod in April. At the Meeting, the Tisza countries signed a Memorandum of Understanding to commit themselves to further cooperate to protect the Tisza River Basin.

The memorial plates also represent the joint efforts of the Tisza countries in creating the Integrated Tisza River Basin Management Plan, which was also endorsed at the Ministerial Meeting. The plan will serve as the source for actions needed to reach 'Good Status' for waters as set out in the objectives of the EU Water Framework Directive.

Together for the Tisza. At the dedication ceremony, Hungary was represented by Gaspar Bodnar, Director of the Upper-Tisza Environmental and Water Directorate, Nyiregyhaza, Deputy Plenipotentiary of the Hungarian-Ukrainian Bilateral Transboundary Water Committee; Attila Lovas, Director of the Middle-Tisza Environmental and Water Directorate, Szolnok; Attila Varga, Head of Unit at the Upper-Tisza Environmental and Water Directorate, Nyiregyhaza, Secretary of the

Hungarian-Ukrainian Bilateral Transboundary Water Committee; and István Tóth, Chief Consul, Beregov. The Hungarian memorial plate reads: "Together for the Tisza".

The gift of clean waters. Romania was represented by Bogdan Stelian Ivascu, Chief Engineer, Water Management System Maramures, and Alexa Bout, Chief of Hydrotechnic Systems, Sighet. The Romanian memorial plate reads: "Let's act so that the Tisza may provide the gift of clean waters to the Danube and Black Sea."

United efforts for the future. Serbia was represented by Milica J. Milenković, Ministry of Agriculture, Trade, Forestry and Water Management, Directorate for Water Belgrade. The Serbian plates reads: "Save the Tisza for the future."

Slovakia was represented by Beata Demetrova from the Slovak Hydrometerological Institute. The Slovakian plate reads: "Let's unite efforts for Tisza conservation."

to Ukraine as well as Andriy Bublik from Coca-Cola Beverages Ukraine. Coca-Cola Hellenic sponsored the installation of four of the plates and provided necessary support to make the event possible.

Inspiring the next generation. The dedication ceremony was followed by a children's festival the next day, which included a performance on protecting the environment, a cooking competition, talent show and the 'Battle for Water' challenge, which allowed children to show off their knowledge of the Tisza River Basin. The celebration was organised with the support of Zakarpattya Oblast Administration, the ICPDR, the EU-funded protect supporting the Danube and Ramsar Conventions, and Ukraine's Ministries of the Environment and Natural Resources and of Foreign Affairs.

Kirstie Shepherd is a freelance journalist living in Vienna and has called the Danube River Basin home since 2000.

Igor Deyak, in cooperation with **www.kolyba.org.ua** provided the photos for this article.

The memorial plates installed at the source of the river represent the Tisza countries' commitment to protecting the river basin, but it is the cooperation between the countries that serves as a source of inspiration for decision makers far and wide.



Protecting common treasures. Ukraine was represented By Olexandr Bon, Ministry of Ecology and Natural Resources, and Volodymyr Chipak, Head of Zakarpattya Water Management Board. The event was opened by Dmytro Andriyuk, Head of Rakhiv Regional Administration, Zakarpattya Oblast. The Ukrainian plate reads: "Tisza, your unstoppable beauty and power is the common treasure of the five countries."

Guests also included Hans Rhein, Head of Operation Section Three, Energy, Transport and Environment, and Head of the Delegation of the European Union More than 70 people climbed 22 kilometres up to the source of the Tisza River to celebrate the cross-border cooperation between the countries sharing the Tisza River



The celebrations at the Tisza River's source, were part of larger activities organised around the Danube River Basin for Danube Day. Fold out to see a map of some of the highlights.

Danube Day 2011: we got active for the rivers!

This year proved that just a Danube Day is no longer enough to contain the huge number of events, enthusiasm and energy infused in the celebrations. So much was crammed into Danube Day 2011 that in some countries it had to expand into a Danube Month and even a Danube Summer. Once again, ministries, NGOs, local authorities, international agencies and businesses demonstrated what can be achieved by working together. Here is a snapshot of some of the things people did to contribute to a positive future for the region. A full review will appear in the autumn edition of Danube Watch.

AUSTRIA

400 kids had a fantastic adven ture in glorious sunshine at the 'Danube Challenge' at Donau Auen and Milser. The Transport Minister, Environment Ministry Secretary General and

Vienna Environment Councillor

had their own conservation

challenge at the Donau-Auen

Suzie Holt lives in Devon, UK, and is a writer on environmental issues. She has been involved in Danube Day since its start in 2004 and prior to that worked for WWF on the Carpathian Ecoregion Initiative.

GERMANY

Three days of Danube fun and discovery took place in Baden Württemberg, where visitors explored the newly restored floodplain site, sculpture trail and eco-classroom. Bavaria's action centred on youth creativity with the eighth Danube Art Master contest.

SLOVENIA

Young Slovenes were inspired by their rivers to become 'Art Masters', 'Water Detectives' and photo journalists in 2011 Volunteers Day. Find out more in three exciting national competitions. at the new www.danubeday.at. Awarded prizes by the Minister for Edu- Credit 1, 3, 4: Foto Andi Bruckcation, winning works were displayed in ner, www.andibruckner.com, the Environment Ministry in a 'Best of Credit 2: Julia Hammerle the Best' exhibition.

THE CZECH REPUBLIC

Moravia went Art Master crazy in 2011 with 720 children entering the contest! Inspired by their river to create the artwork 'Rivertree', pupils from the Jedovnice Art School scooped the top prize. Winners were rewarded at the Union for the Morava River's Danube Day with a river safari. Credit: 5, 9, 11: Czech Danube Art Master

SLOVAKIA

Gabčíkovo was the venue for a day of Danube entertainment and awareness: free boat trips; tours of the hydro plant and wetlands; children's games; launch of the cross-Slovakia cycle race; and a concert were among highlights. There was also plenty of goulash and fisherman's soup!

DANUBE

UKRAINE

High up in the Carpathian mountains, the five countries of the Tisza and also the EU paid tribute to the mighty river by placing memorial plaques at its source near Rakhiv. In the Lower Danube, teenagers got active for their river at the Izmail Danube Ecoforum and in 4-day 'Clean Bank, Clean Danube' actions.

Festivities took place in towns along the length of the Danube. The main event in Sulina was a treat for the senses: visitors marvelled at the stunning wildlife and taste-buds were tempted at the Festival for Danube Gastronomy. A conference on the EU Danube Strategy was attended by the Environment Minister. Credit 10: Irina Cristian

HUNGARY

Upwards of 200,000 people saw the Danube

With so many festivities, Danube Day became part of a Danube Month' in Budapest Day message in the city: trams were painted blue displaying Danube websites, high profile conferences were held and the cent festival was a great family day out. Credit 6, 7: Hornyák Dániel, kormanybu, Credit 8: WWF Hungary

BULGARIA

People got active at 30 events, including swimming the Danube in Silistra; clearing rubbish at Srebarna; releasing goodwill messages via the 'Neptune Post' in Baikal, and recording wildlife along the river. WWF and Coca-Cola launched the 'Danube +' website - a new way to learn about the Danube. Credit 13, 14: Milen Enchev, Dnevnik



Osijek was the location for a public meeting on Croatia's Draft River Basin Management Plan. Young people made their Danube contribution through Green Osijek's 'Art Master' contest: 15year-old winners Ivana Bek and Sandra Rasic portrayed the Danube wrapping itself around the globe.

SERBIA

With the most events in the Basin and the biggest festivities to date, Serbia is celebrating a Danube Summer in 2011. Some 100 events were planned by over 300 organisations in 25 locations! At Belgrade's main event, visitors took a stroll along the interactive 'Danube Street' meeting plants and animals long the way.

ICPDR MEETINGS	For final dates, please consult the ICPDR calendar, available at www.icpdr.org.
29-30/8/2011	LOCATION TO BE DETERMINED RIVER COMMISSIONS' SECRETARIES MEETING
9/2011	LOCATION TO BE DETERMINED ECONOMICS TASK GROUP MEETING
8-10/9/2011	BELGRADE, SERBIA IWA SPECIALIST GROUNDWATER CONFERENCE
12/9/2011	MUNICH, GERMANY ICPDR CLIMATE ADAPTATION, ROUND-TABLE DISCUSSION TEAM OF EXPERTS
18/9/2011	WORLD-WIDE WORLD WATER MONITORING DAY
21-22/9/2011	ASTANA, KAZAKHSTAN ENVIRONMENT FOR EUROPE – MINISTERIAL MEETING
26-29/9/2011	BRISBANE, AUSTRALIA 14 TH INTERNATIONAL RIVERSYMPOSIUM
17-20/10/2011	DUBROVNIK, CROATIA 6 TH GEF BIENNIAL INTERNATIONAL WATERS CONFERENCE
18-19/10/2011	BUDAPEST, HUNGARY INFORMATION MANAGEMENT AND GIS EG MEETING
27-28/10/2011	BUCHAREST, ROMANIA PUBLIC PARTICIPATION EG MEETING RIVER BASIN MANAGEMENT EG MEETING
10/2011	LOCATION TO BE DETERMINED PRESSURES AND MEASURES EG MEETING NUTRIENT TASK GROUP MEETING
11/2011	LOCATION TO BE DETERMINED APC TASK GROUP MEETING
29-30/11/2011	BRATISLAVA, SLOVAKIA INTERNATIONAL DANUBE TOURISM CONFERENCE
12-14/12/2011	VIENNA, AUSTRIA 14 TH ICPDR ORDINARY MEETING
DW 3-4/11	UPCOMING ISSUE
	Hydropower: guidelines for small hypo plants in the Alps Review of Danube Day 2011



EnviroGrids: GAP analysis