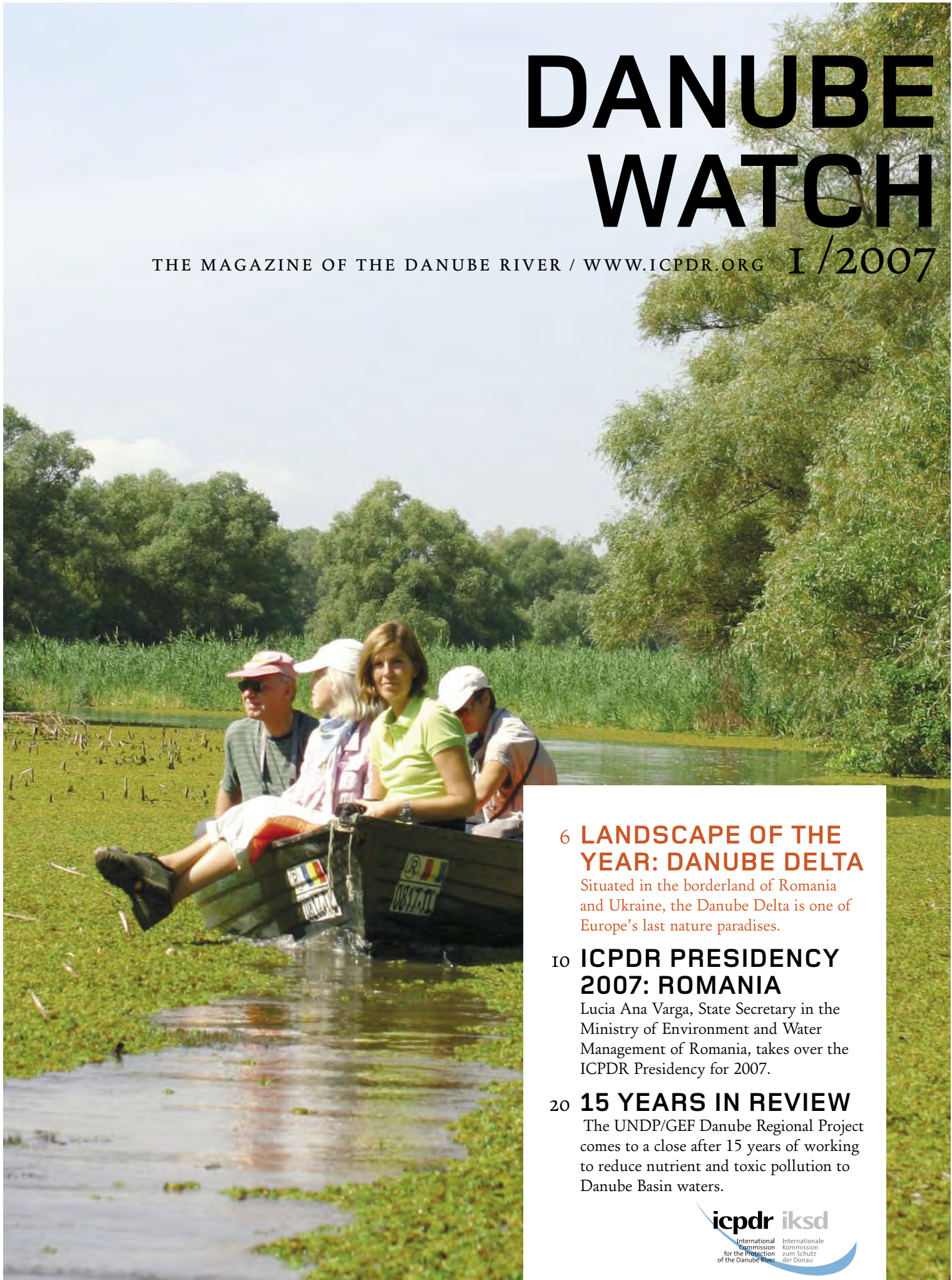


DANUBE WATCH

THE MAGAZINE OF THE DANUBE RIVER / WWW.ICPDR.ORG

I / 2007



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International
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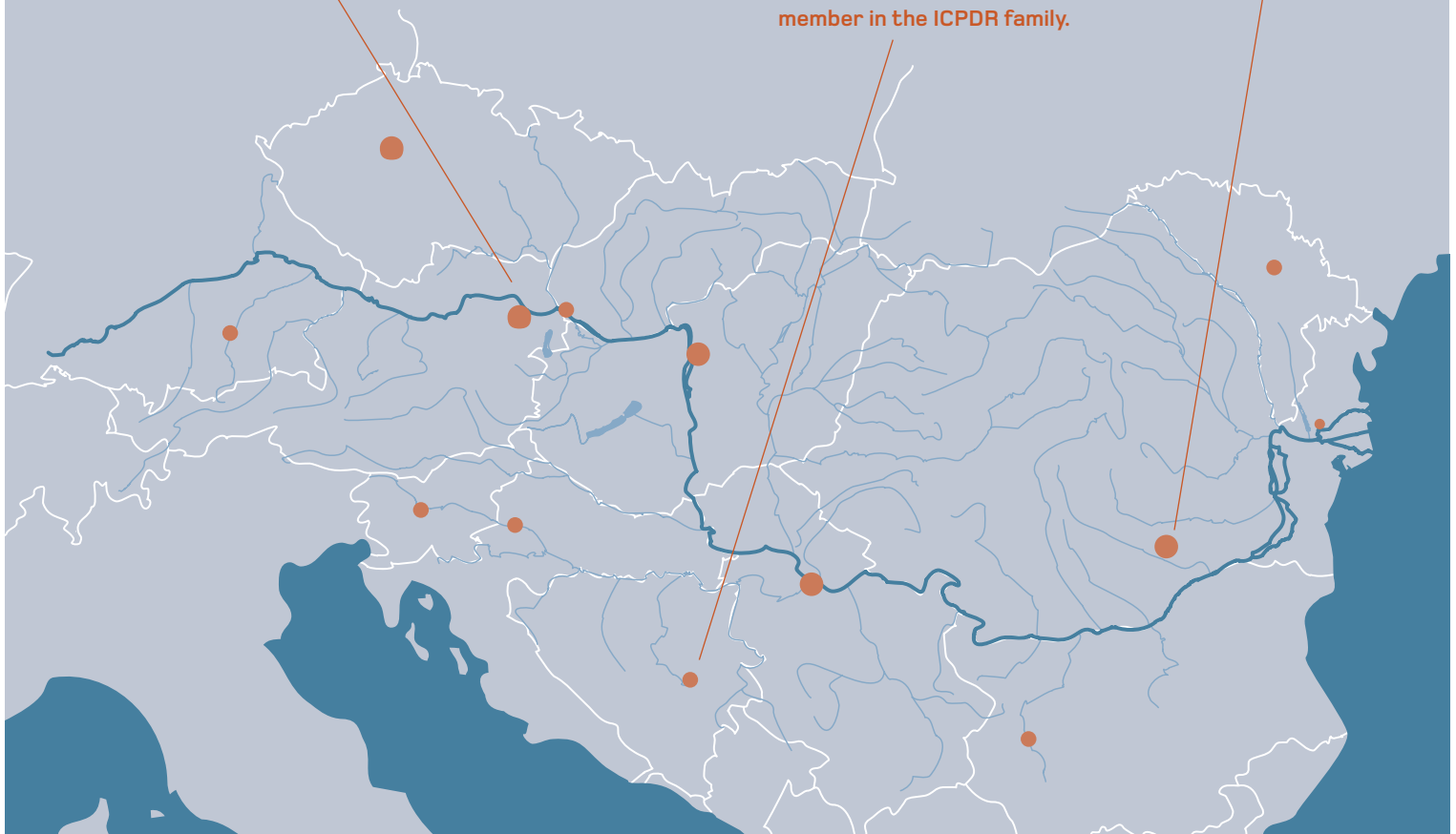
Internationale
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Credit: ICPDR/Stögmüller

Dear readers,

This issue of Danube Watch is largely dedicated to the work of the UNDP/GEF Danube Regional Project that will come to an end in June of this year. The project's end prompted Romania, holding the 2007 ICPDR Presidency, to hold a meeting of Ministers and high officials of all Danube and Black Sea countries in Bucharest to strengthen the cooperation that has developed in the region and emphasise the commitment needed to further reduce pollution and improve water quality. The final declaration adopted at the meeting (see page 13) strengthens the commitment to integrated river basin management.

The Danube also received special recognition by Stavros Dimas, Commissioner of the Directorate General of the Environment, at the EU Water Conference held in Brussels on World Water Day. In his opening statement, Dimas expressed appreciation for the achievements in the Danube River Basin to develop the mechanisms to implement the EU Water Framework Directive and ensure effective river basin planning.

It is clear, however, that the existing cooperation will need to address new challenges. At both the EU Water conference, and at a conference held in Berlin in early February under the German EU Presidency (see page

14), climate change was highlighted as a long-term threat to the Danube. The Danube Basin has already experienced some of the impacts of a changing climate, including floods and droughts. The Berlin conference underlined that the time to act is now.

Finally, the Danube region and ICPDR has benefited from the support of GEF and UNDP for the past 15 years, and as this basin-wide support comes to an end, I would like to thank GEF and UNDP. Particular thanks goes to Al Duda (GEF Secretariat), Andy Hudson (UNDP), Andy Menz (UNOPS), and the Project Team that has worked closely with the ICPDR Secretariat: Ivan Zavadsky, Peter Whalley, Andy Garner, Kari Eik, Marcela Fabianova, Sylvia Koch, Viennelyn Baba and Paul Csagoly. We are very grateful for the support and assistance they have provided and their personal commitment to making the project a success.

The GEF support has helped the ICPDR be a stronger and more effective institution and our best means of thanks will be to build upon that support and demonstrate the sustainability of the assistance we have received.

Philip Weller, ICPDR Executive Secretary



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

Danube Watch is available on the web at www.icpdr.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 environment.

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



Credit: DRP/Mello

BULGARIA CLOSES TWO REACTORS ON THE DANUBE RIVER

Bulgaria has shut down two reactors at Kozloduj Power Plant as part of the country's accession to the EU. Shutting down the two 440-Megawatt reactors was requested by the EU for security reasons. Two other 1000-Megawatt reactors, also Soviet-designed pressurised water reactors, are still in operation. Bulgaria receives €220 million in EU support for shutting down the reactors. The full cost of the disposal is a minimum of €500 million.

For more information, please visit: www.kznpp.org/main_en.php



Credit: Vienna Waterworks/Lammerbuber

GROUNDWATER DIRECTIVE COMES INTO FORCE

The new directive sets quality standards for groundwater and introduces measures to prevent or limit pollutant inputs. The directive relates to assessments on chemical status of groundwater and the identification and reversal of significant and sustained upward trends in pollutant concentrations and thus represents a sound response to the requirements of the Water Framework Directive. Member States will have to establish the standards at the most appropriate level and consider local and regional conditions.

For more information, please visit: www.ec.europa.eu/environment/



Credit: ICPDR/Literatby

ROMANIA DROPS DANUBE BRIDGE TAXES

Romania has dropped the transit taxes imposed on the Danube 'Friendship' Bridge linking the country with Bulgaria at Russe. Removing the taxes, which caused outrage among some Bulgarian residents, will bring both countries closer together in terms of business, cultural exchange and a sense of shared community. Both Romania and Bulgaria joined the European Union on January 1, 2007.



Credit: Cityfoto/Schenk

GERHARD SKOFF RECEIVES SKÅL TOURISM QUALITY AWARD 2007

Skål International Austria, the association of travel and tourism managers, presented its Tourism Quality Award to Gerhard Skoff, General Representative of Casinos Austria and president of the Danube Tourist Commission. The award ceremony took place aboard the MS Regina Danubia in Linz, on Friday, 23 March. Skoff received the award for his work to improve the quality of tourism in all Danube countries. The Skål Tourism Quality Award is given to individuals and organisations that have contributed to significant innovations and changes in the tourism branch.

For more information, please visit: www.danube-river.org

16-18/4/2007

BELGRADE, SERBIA

THIRD DANUBE COOPERATION PROCESS MINISTERIAL MEETING

On the basis of the Stability Pact for South Eastern Europe, the Danube Cooperation Process was formally launched in 2002 as a concerted action between Austria, Romania and the European Commission. The objective of the initiative, which holds its third meeting in Belgrade, is to “broaden and deepen present Danube cooperation and give to it clear political and economic dimensions, without creating new institutions, but taking stock of and using the existing structures and, where necessary, harmonizing their objectives and efforts, providing a focus, where appropriate, for their efforts within the Danube region”.

For more information, please visit: www.danubecooperation.org

7-9/6/2007

BELGRADE, SERBIA

IWA CONFERENCE: GROUNDWATER MANAGEMENT IN THE DANUBE RIVER BASIN AND OTHER LARGE RIVER BASINS

Groundwater is a vital – but too often hidden – resource for about 75% of all Europeans. One of the goals of this conference is to contribute to a better understanding of groundwater processes and groundwater management, especially referring to the requirement of the EU Water Framework Directive. It will also offer a platform to exchange technical and scientific information regarding groundwater abstraction and protection.

For more information, please visit: www.jcerni.org/activities/conferences/iwa2007/home.html



NEW WEB PORTAL OFFERS 'GATEWAY' TO EUROPEAN WATER DATA

The Water Information System for Europe, or WISE, compiles data and information collected by EU institutions or bodies which has previously not been easily available. Four EU partners, the European Commission (DG ENV, Eurostat and JRC) and the EEA are developing WISE, with the core objective to develop a comprehensive European data and information management system for water, including river basins.

For more information, see the new portal at: www.water.europa.eu



Credit: ICPDR

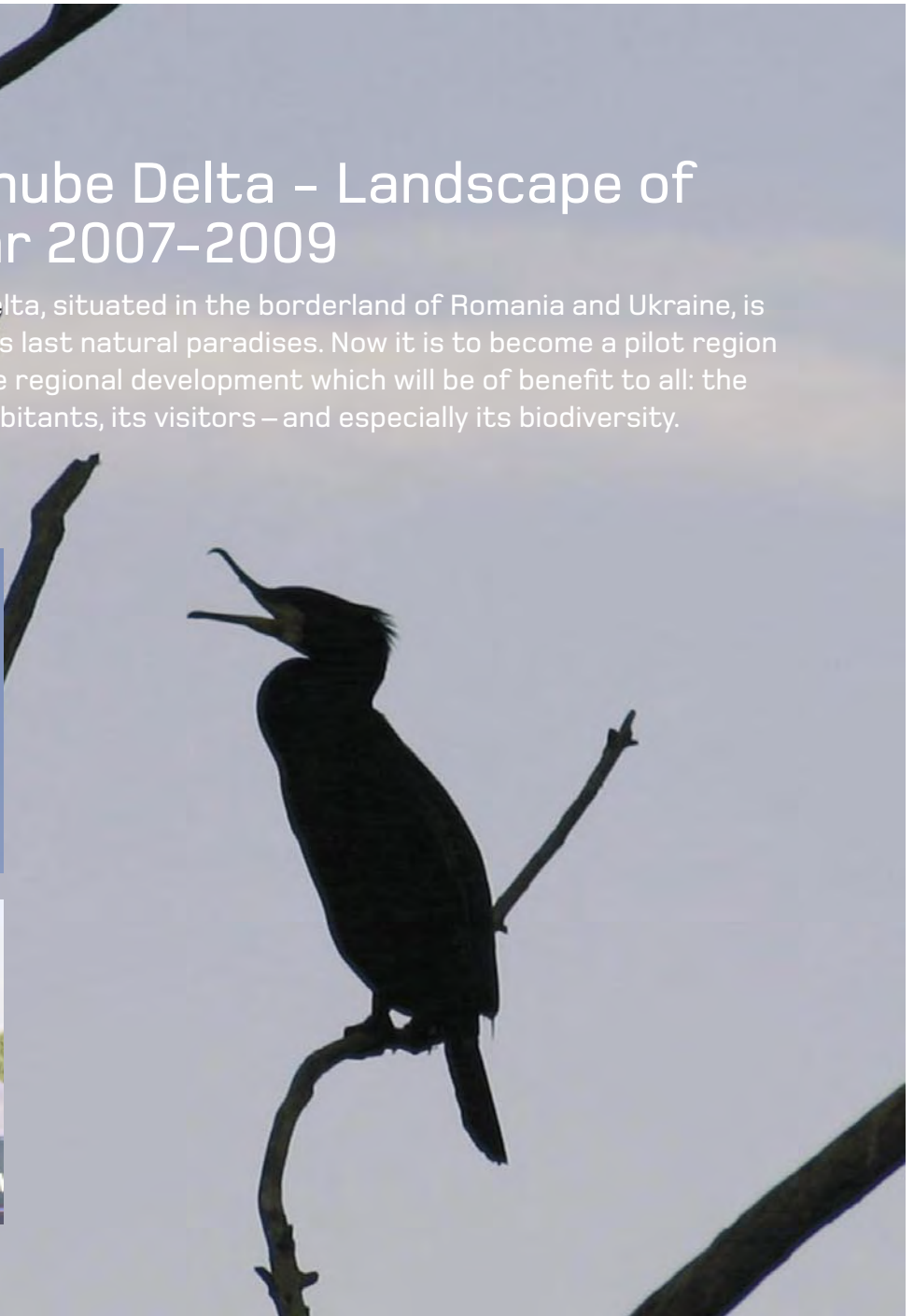
WOLFGANG STALZER, THE FIRST ICPDR PRESIDENT, RETIRES

As first president of the ICPDR (1998-1999) and Head of the Austrian Delegation, Wolfgang Stalzer has been a driving force behind the work of the ICPDR. He played a leading role in building the cooperation that led to the signing of the Danube River Protection Convention and in setting up the ICPDR. The position as Head of Delegation has been taken over by Richard Stadler, Senior Official in the Ministry of Agriculture, Forestry, Environment and Water Management. The ICPDR would like to express thanks to Wolfgang for all his efforts and wish him all the best for the future.



The Danube Delta – Landscape of the Year 2007–2009

The Danube Delta, situated in the borderland of Romania and Ukraine, is one of Europe's last natural paradises. Now it is to become a pilot region for sustainable regional development which will be of benefit to all: the region, its inhabitants, its visitors – and especially its biodiversity.



The Danube Delta is one of the most remarkable resting and breeding places on earth. Sustainable eco-tourism, like bird watching, can bring small groups close to nature and create local income – but needs monitoring and guidance.
Credit: Baumgartner

The Danube Delta is rich in superlatives. With an area covering more than 5500 square kilometres, it is the largest wetland in Europe and provides a habitat for over 5000 animal and plant species. Its wealth of fish is legendary and the largest reed surface worldwide provides resting and breeding places for numerous kinds of birds – such as pelicans, spoonbills, red neck geese and many others.

However the delta stands not only for ecological diversity, but also for cultural diversity. Due to its location on river and sea, it has always been a place of settlement, passage and refuge for the most divergent

peoples. Today Romanians, Lipovans (Russians), Haholens (Ukrainians), Turks, Greeks and Aromunens live here, to mention but a few, many even retaining their old customs.

It is therefore not surprising that the delta was declared a biosphere reservation as well as a UNESCO world nature and cultural heritage site. Here, humans and nature have forged close bonds, formed by living at the waterside in an extreme climate.

Highlighting treasures and identifying needs. Of course life has changed in the delta, too. Fishing

and agriculture alone is often not enough to support a family anymore, and most young people have to look elsewhere for career opportunities. Increasing environmental pollution and intervention in the landscape – road construction, uncontrolled tourism or the danger of a planned oil harbour nearby – are threatening the ecological balance. “Human activities within the delta, but even more often effects coming from outside, endanger the ecological balance,” says Sulfina Barbu, Romanian Minister of Environment and Waters Management. “It needs urgent measures for the protection, the renaturalisation and the local and regional cooperation for sustainable development.”

That is where the project ‘Danube Delta – Landscape of the Year 2007-2009’ plans to make a difference. Through the project, the International Friends of Nature (IFN) and its executing partner, the Friends of Nature of Romania (Prietenii Naturii Romania, PNRO), aim to trigger development that conserves this unique habitat and creates new sources of income.

Since the 1990s, the IFN – the umbrella organisation of the Friends of Nature movement with more than 500,000 members worldwide – has supported sustainable development in peripheral, cross border regions of Europe by granting the Landscape of the Year distinction. Landscape of the Year is more than an award; it is the starting point for sustainable regional development that brings together authorities, regional stakeholders and the local population.

Building tourism models that last. Tourism today faces huge interest from foreign and non-regional investment, with the danger of overuse and destruction for quick profit. The tourism in the Danube Delta lacks a concrete sustainability strategy and the means to implement the relevant tourism parts of the Biosphere Reserve Master Plan. Through the Landscape of the Year project, a tourism monitoring scheme – developed with the universities for applied life science in Vienna and discussed with the network of protected areas along the Danube – should bring knowledge about tourism flows and enable authorities to establish a guiding system.

“In the Danube Delta – which is really an El Dorado of birdwatchers and nature lovers – eco-tourism could offer a big potential for saving the biodiversity,” says Tiberius Tioc, president of PNRO and tour operator in the delta. “This miracle world of the delta with its bird colonies can only be explored by canoe, rowing or small motorboat, on narrow canals through reed and pasture woods. Without guides, strangers are lost in this labyrinth. Our problem is that local expert guides speaking foreign languages are hard to find,” says Tioc. One of the first concrete measures of the Landscape of the Year project will be to establish training courses for

local nature guides and hosts on the basis of certified quality standards.

Sustainability through cooperation. The Landscape of the Year project also aims at the development – along with the local population, authorities and regional interest groups – of overall concepts for sustainable development. Measures are based on cooperation and synergy effects like setting up a regional marketing structure, coordinated visitor information, developing new facilities (like a cycle track along the Black Sea) or reviving old handicraft techniques and traditional architecture (such as the once typical reed roof) in combination with innovative technologies (like solar energy).

This involves cooperation with Ukraine, because while the delta represents an ecological and cultural unity, cross-border thinking and acting is one of the main ideas of every Landscape of the Year project. “For the protection of such fragile ecosystems,” says Herbert Brückner, president of IFN, “it needs the close cooperation across any border, be it political, ideological or cultural.” For this, the European Union neighbourhood programme opens up common options that will be taken advantage of.

The Landscape of the Year is a complex project which will lead to long-term effects, made possible through IFN’s close cooperation with regional, national and international partners (see box). With this broad backing, the Landscape of the Year 2007–2009 project has good chances to become a pioneer for sustainable tourism strategies in Romania.

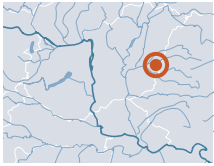
The opening ceremony of the project will be celebrated on June 2–3, 2007, in Tulcea, with a large festival at the harbour. For further information, please visit: www.nfi.at and www.landscapeoftheyear.net

PARTNERS

Partners in the Landscape of the Year 2007-2009 Danube Delta are the Biosphere Reserve Authority (ARBDD) and the Danube Delta Institute (INCDDD) in Tulcea, the City of Tulcea, the County Council, the Romanian Ministries of Environment and Tourism and the International Commission for the Protection of the Danube River (ICPDR). Other co-operation partners so far are the Romanian Eco-tourism Association (AER), Greenways Romania and the Danube Carpathians Programme of the World Wide Fund for Nature (WWF), as well as GTZ Romania and USAID.

Stefanie Röder is project coordinator for the Landscape of the Year project.

Christian Baumgartner is General Secretary of International Friends of Nature.



Success through cooperation and partnership in the Danube River Basin

Alcoa Foundation is helping the ICPDR to improve transboundary water management in Romania and Hungary and to raise awareness of sustainable development within the Danube community.

The right equipment and the right information are vital to environmental protection. For the last six years, the ICPDR and Alcoa Foundation have worked together to provide organisations in the Danube River Basin with the tools they need to improve transboundary water management in the basin and to keep the Danube clean.

“Alcoa Foundation has supported a number of specific activities that have helped improve our ability to monitor and manage water resources,” says Philip Weller, ICPDR Executive Secretary. “Only if we know what is in the water, can we develop strategies to remove these pollutants.”

In 2003, Alcoa Foundation donated a Total Organic Carbon/Total Nitrogen Analyser for the National Institute for Marine Research and Development in

Alcoa Foundation awarded a \$262,000 grant in 2004 for a two-year project to purchase equipment and produce a new best practices handbook in the transboundary area of Romania and Hungary. “This equipment serves an important role in improving monitoring at the level of Mures River Basin and also at the national level,” says Monica Gheorghe of the Mures River Branch Water Directorate at the National Administration Apele Romane. “The water quality data is used in the communication process with national and international stakeholders based in Mures River Basin or in Danube District.”

Work is currently under way with a \$75,000 grant provided in 2006 for the second Joint Danube Survey (JDS 2) to assess the implementation of the EU Water Framework Directive, and to improve the quality of comparable and reliable information on water quality for the whole of the length of the Danube River including its major tributaries. The transboundary cooperation on river basin management in Hungary and Romania continues to be enhanced with Alcoa Foundation’s funding for ICPDR’s water quality management projects

Tools for community action. Raising awareness has been an important part of Alcoa Foundation’s support in the Danube region. Previous Alcoa Foundation cooperation in Romania helped launch an ecological awareness campaign in the Black Cris River Basin aimed at identifying the best approaches to engage and educate the public about pollution control, and to enforce communication.

Ecological campaigns will also be an important part of JDS 2, which will be supported by an Alcoa Foundation grant awarded November 2006. Work on the survey will take place in July and August of this year.

“Alcoa Foundation’s support reinforces awareness of the necessity to preserve and improve the quality of the Danube River and strengthens transboundary cooperation,” says Gheorghe.

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



The equipment provided through Alcoa Foundation funding has helped to reinforce the capabilities and cooperation of the Romanian and Hungarian team working in the Cris River Basin. *Credit: Romanian Water National Administration/Dem*

Constanta, Romania. A year later, the ICPDR received a \$100,000 grant from Alcoa Foundation to purchase technical equipment for water research institutions to support transboundary water management on the Crisuri River in Romania and Hungary. In both cases, the equipment has been fully integrated into the Transnational Monitoring Network and helps reinforce the monitoring capacities of the ICPDR.



Danube Art Masters in Vienna

Twenty-six young artists chosen as national art masters from around the Danube River Basin descended on Vienna on December 11 to award the 2006 International Danube Art Masters prize to four seventeen-year-olds from Romania.

“We had so much fun when making the art. And at the same time we felt connected with the other pupils all along the Danube and its tributaries!” said co-winner **Simona Oana Udrea**. **Simona, together with Andreea Tanase, Simona Anghel and George Boghici from Galati, Romania, won the ‘Danube Art Master 2006’ international competition with their piece entitled ‘The Danube Flows Through Us’.**

ranged from complex arrangements of fish from Slovenia, a ‘Danube carpet’ from Germany more than five square metres large, and ornamental filigree works made from stones, grasses and blooms from the shores of the Tisza, Hungary.

The winning entry elegantly expressed the solidarity of humans with the Danube by using several forms of mediums: body painting and natural materials united to create an impressive work.

The award ceremony was the highlight of a three-day trip to Vienna for all national winners. Among other activities, the programme included an adventure through the Danube Floodplain National Park, a visit to Schönbrunn Castle, as well as a tour through the city centre of Vienna. The trip was supported by Coca-Cola HBC, The Coca-Cola Company, and was organised by Global Water Partnership Hungary.

Inspiring future generations. “This competition energises children, to get involved with the Danube and its tributaries,” said ICPDR Executive Secretary Philip Weller. “In addition, the artistic work of the children is an important mental impetus for the political representatives of the Danube countries. We carry a common responsibility for the Danube – today and for the future generations,” said Weller.

This international competition for youth from all over the Danube River Basin will be organised again in 2007 as part of the celebrations for Danube Day on June 29. Get involved and help secure a positive future for the Danube, as well as win great prizes in this Danube-wide competition!

For more information, please visit: www.danubeday.org

Jasmine Bachmann works on public participation in the ICPDR Secretariat, and is the Executive Editor of Danube Watch.



Simona Oana Udrea and George Boghici (representatives of the winning team) receive awards for their winning piece from Petruta Moisi of DEF; Lucia Ana Varga, ICPDR Head of Delegation, Romania, and Ulrike Gehmacher of Coca-Cola HBC. Credit: CCHBC

The International Master is selected from the winners of the national ‘Danube Art Master’ competitions which are held in all 13 Danube Basin countries. Some 3500 applications from schools in these countries were submitted as part of the competition. The competition was organised by the ICPDR in cooperation with the Danube Environmental Forum and the ministries responsible for water management from the ICPDR Contracting Parties.

Participants were challenged to visit their local rivers and to contemplate what the river means to them. The results of this reflection were then visualised by materials which the children found at and in the river, including reeds, stones or driftwood – even rubbish.

Turning the river into art. The artworks submitted



ICPDR Presidency 2007: Romania

In its continuing series, Danube Watch presents portraits of the leaders whose passion and commitment help determine the future of our river basin. In this issue we speak to ICPDR President for 2007, Lucia Ana Varga.

Lucia Ana Varga, State Secretary in the Ministry of Environment and Water Management of Romania.
Credit: ICPDR/Stögmüller



“The Danube represents one of the important symbols of our natural landscape, which defines Romanian cultural and spiritual values.”

In the presence of the diplomatic representation from all Danube Basin countries, Constantin Mihailescu, Minister of Environment and Natural Resources of Moldova, presented a bottle of Danube Water to Lucia Ana Varga, State Secretary in the Ministry of Environment and Water Management of Romania, on January 22. With this symbolic gesture, the ICPDR Presidency 2007 has been taken over by Romania.

Danube Watch: What are your goals for the presidency?

Lucia Ana Varga: The presidency of the ICPDR represents a real challenge in keeping the regional cooperation among the Contracting Parties, for coherent coordination of the activities for protection and improvement of the Danube and its tributaries, to meet the hopes of the population and the needs of nature.

One of our priorities is to successfully complete the *Joint Danube Survey 2*. The purpose of this expedition is to evaluate the status of the Danube water quality, as well as the quality of the aquatic environment. We

are at a critical moment to develop the Joint Program of Measures. In this respect, the results of the *Joint Danube Survey 2* will be a starting point in our assessment related to the necessary measures.

Another goal is to design common flood risk maps for all the Danube River courses. As the person responsible for flood management in Romania, I am aware of the difficulties in meeting the hopes of the people for safety and the need to protect and restore flood plains. In recent years we have faced major floods within the Danube River Basin and it is the right time to increase our cooperation on flood management.

Romania is particularly interested in continuing this process, as part of the implementation of the EU Water Framework Directive (WFD) – the most important water management issue right now. For this, we shall encourage the active involvement of the stakeholders, especially in the elaboration, revision and in keeping current the Basin Management Plans.

In my opinion, we also need to continue the education and awareness of stakeholders for sustainable protection of the Danube, its tributaries and the Black Sea ecosystems. In order to be involved, citizens and the business sector need to be informed of their rights, obligations and, of course, the measures that we as a governmental structure take in the framework of WFD implementation.

Danube Watch: How can cooperation between the Danube and Black Sea be improved?

Lucia Ana Varga: Protection of the Black Sea environment is one of the goals of the Danube Convention. However, this goal won't be reached without coordination between the Danube and Black Sea countries.

The High Level Ministerial Conference of the Danube River Basin and the Black Sea region, organised by the Romanian Ministry of Environment and Water Management in February, was an important step in the cooperation process. This meeting intensified regional cooperation among Danube states and Black Sea riparian countries, as well as among these states, the European Commission and international financial institutions.

LUCIA ANA VARGA

State Secretary

Ministry of Environment and Water Management, Romania

Member of the Liberal National Party

Education:

1986–1991 Technical University of Timisoara – Faculty of Mechanics

2001–Present Technical University of Timisoara – Faculty of Mechanics – mechanical engineering candidate for a doctor's degree

Employment and Professional Experience:

2007 President of the Bureau of the Meeting of the Parties on the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes

2005–Present Secretary of State, Ministry of Environment and Water Management

2004–2005 Chief Commissioner – Bihor County Commissariat of the National Environmental Guard

1998–2004 Inspector – Environment Protection Agency – Bihor County

1997–1998 Teacher – Bihor County Schools Inspectorate

1991–1997 Teacher – “Mihai Bravu” secondary school – Oradea

Danube Watch: As the UNDP/GEF Danube Regional Project comes to an end, are the Danube countries ready take over?

Lucia Ana Varga: The UNDP/GEF Danube Regional Project has successfully reached its overall objective: the improvement of the environment of the Danube River Basin, by protecting its waters and managing its natural resources for the benefit of nature and people. Romania, along with the other Danube Basin countries, has learnt a lot from this experience during these 15 years.

Thanks to all our efforts, the quality of the water in the Danube and the Black Sea has improved, but fertilisers in agriculture and toxic pollutants still represent a threat to aquatic ecosystems. That is why, as a follow up to this tremendous work undertaken by the Danube countries within this project, we need to concentrate on finding other financial resources for future activity that will give rise to a balance between environment and human activities.

Investments in water infrastructure cost a lot of money, but they are absolutely necessary. Human agglomerations, especially big cities, generate a huge volume of waste waters, which, if they are not treated, have a significant negative impact on the environment.

Within the strategic approach of water infrastructure projects it is essential to keep a long term perspective. The development of financial efforts allows a sustainable advance of the projects,

which takes into consideration the acceptance both of the population and involved institutions.

Innovative financial mechanisms are also significant – using the financial instruments of the European Union such as ISPA, SAPARD or PHARE, of multilateral funds or grants, of credits and governmental warranties by stimulating the private capital participation and private-public partnerships. Furthermore, international financial institutions have valuable experience in investment activities for water and waste water infrastructure.

Danube Watch: Romania is a real Danube country, with 97% part of the Danube River Basin, including two-thirds of the Danube Delta. What does the Danube mean to you personally?

Lucia Ana Varga: The great Romanian scientist Grigore Antipa once said that the Danube “is the greatest natural treasure of our country”.

Along with the Carpathian Mountains and the Black Sea, the Danube represents one of the important symbols of our natural landscape, which defines Romanian cultural and spiritual values. Historical vestiges, such as the former Roman camp Dierna, from Orsova, the ruins of the bridge built by the Apolodor from Damascus, situated in Drobeta Turnu Severin, the Roman-Byzantine castle Nicopolea Mica from Turnu Magurele, the ruins of the castle built by voivode Mircea the Elder, define what the Danube river meant for Romanian civilisation, which has been connected to this ‘river of life’.

Danube Watch: Thank you and all the best for your presidency!

Jasmine Bachmann works on public participation in the ICPDR Secretariat, and is the Executive Editor of Danube Watch

“I am aware of the difficulties in meeting the hopes of the people for safety and the need to protect and restore flood plains.”



Working to meet the requirements of the EU Water Framework Directive

Nearly two years ago the Danube River Protection Convention went into force for Bosnia and Herzegovina. Since then, the country has faced the challenges of integrated river basin management as an equal member in the ICPDR family.

Along with the Danube River Protection Convention, the EU Water Framework Directive (WFD) has become the driving force in water management for Danube countries. While not legally obligated to fulfil WFD requirements, Bosnia and Herzegovina has also committed to following the approach of integrated river basin management as requested by this directive.



Although the Danube doesn't flow through Bosnia and Herzegovina, over 75% of the country is part of the Sava River Sub-basin, which is the second largest in the Danube Basin. *Credit: Euronatur/Schneider-Jacoby*

However, the political and governmental structure in Bosnia and Herzegovina remains a challenge. The country's national water management administration is located in the Ministry of Foreign Trade and Economic Relations (MoFTER) that has international cooperation and coordination between entities as major responsibilities. But the activities regarding implementation of the entity water laws are under the responsibility of the respective entities and the associated institutions, which complicates coordination and slows down implementation.

Targeted support can make a difference. To support Bosnia and Herzegovina, the UNDP-GEF Danube Regional Project (DRP) and the ICPDR has provided a full-time adviser/consultant to the MoFTER since last autumn. The goals of this expert are to facilitate cooperation between the various entities, MoFTER and institutions in the wider Danube Basin, and to encourage knowledge-sharing on integrated water management, supporting all steps towards the implementation of the WFD.

“This initiative clearly shows how effective targeted support can be,” says Reuf Hadzibegic, Assistant Minister of MoFTER. “During the last months Bosnia and Herzegovina has revised its water laws and has even developed the National Analysis Report for catchments larger than 4000km².”

The National Analysis Report is a cornerstone for WFD implementation. While the WFD deadline for EU member countries is not legally binding for Bosnia and Herzegovina, the country is committed to actively participate in ICPDR, Sava Commission and other international activities. According to the entity water laws, Bosnia and Herzegovina is obliged to finalise its River Basin Management Plans by 2012, just three years after EU countries.

“We hope that this support enables Bosnia and Herzegovina to progress,” says Philip Weller, Executive Secretary of the ICPDR. “Integrated river basin management can only work if all countries work together and no one is left behind.”

Major investments still needed. Bosnia and Herzegovina still has many problems to solve. About 50% of the 4 million people living in the Sava Basin are linked to public water supply, and less than 45% to the public sewage system. Major investments of around of €145 million will be needed in municipal wastewater treatment in the coming years, as only 2.5% of the population is currently linked to proper wastewater treatment facilities.

Extra effort and support must be invested in a monitoring system as requested by the WFD, capacity building and institutional strengthening and integration of the existing IT systems. The coming years will likely see more investment by authorities, strategies for public consultation and information exchange and the active involvement of stakeholders in planning procedures.

For more information, please contact Aleksandra Ploco, asucur@bih.net.ba.

Jasmine Bachmann works on public participation in the ICPDR Permanent Secretariat, and is the Executive Editor of Danube Watch.



A strong partnership for sustainable water management

The 16 countries of the Danube Basin and Black Sea Region have adopted a new Declaration on the Enhancement of Cooperation during their first-ever High-Level Meeting in Bucharest, Romania, on February 23.



Romanian President Traian Băsescu joined participants of the High-level Ministerial Meeting in underlining the political will to protect and secure the ecological value of the Danube River Basin and the Black Sea Region. Credit: Ministry of Environment and Water Management, Romania

“On 1 January, the Black Sea became a European Union sea,” said Sulfina Barbu, Romanian Minister of Environment and Water Management. “On this date, my country joined the European Union and took over the ICPDR Presidency. As both a Danube and Black Sea country, Romania is proud to host this important meeting that is needed to increase cooperation among our countries.” Each of the 16 countries involved – Austria, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Georgia, Germany, Hungary, Moldova, Romania, the Russian Federation, Serbia, Slovakia, Slovenia, Turkey and Ukraine – is a party to one or both of the protection conventions already in existence, the Danube River Protection Convention and Black Sea Protection Convention.

“Taking into consideration the international water statutes, both of the Danube and the Black Sea, we can’t solve these problems without closed international cooperation among the riparian states situated in their basins,” says Calin Popescu – Tariceanu, Prime Minister of Romania.

The Declaration on the Enhancement of Cooperation calls for greater cooperation and efforts to protect the region, while recognising its environmental importance, the historical damage that it has suffered and recent signs of environmental recovery due to cooperative actions.

Working together to address challenges. The Declaration aims to help meet the requirements of the EU Water Framework Directive by 2015. “The Declaration clearly states that Danube countries

are aware of the huge financial resources needed to meet this EU directive through the implementation of a joint programme of measures,” said ICPDR Executive Secretary Philip Weller. “Increased coordination between all countries will be crucial to reducing costs.”

One focal point of the Declaration is the need to reduce nutrient pollution in the Black Sea. “We have been working for over 15 years to better understand the problem [of nutrient pollution],” said Ivan Zavadzky, UNDP/GEF Danube/Black Sea Regional Programme Director. “Now is the time for concerted action for basin-wide measures such as municipal wastewater treatment upgrades and introducing phosphate-free laundry detergents.” Peter Gammeltoft,

Head of the Water and Marine Unit of the EU’s Directorate-General Environment, agrees that action must be taken. “The entire Danube Basin is a ‘sensitive area’ under the EU Urban Wastewater Treatment Directive. This means that EU Member States must use advanced urban wastewater treatment to reduce the nutrient pollution in the Black Sea,” said Gammeltoft.

Taking action against floods. The Declaration also includes a commitment to implement the ICPDR’s Action Programme for Sustainable Flood Protection in the Danube River Basin. The need for these efforts is evident, says Romanian President Traian Băsescu, who took part in the meeting. “The water tells us that we made big mistakes. In Romania, we have had snow for thousands of years ... it has always meant good crops to us and so did the rain. But today rain often means flooding and causes widespread damage,” says Băsescu.

“Now that the Black Sea is a European Union sea, we are convinced that many of the successful projects carried out in the Danube Basin will be repeated through the concerted efforts of the Black Sea countries, Black Sea Commission, EU and UNDP/GEF,” said Ahmet Kideys, Executive Director of the Black Sea Commission.

Jasmine Bachmann works on public participation in the ICPDR Permanent Secretariat, and is the Executive Editor of Danube Watch.

Water and climate change: time to adapt

Climate change impacts on global water resources will affect our lives and economies. Successfully adapting water management to these impacts is absolutely necessary to mitigate the adverse effects of this development.

The symposium brought together 250 participants from 24 EU Member States, including Francisco Nunes Correia, Minister for the Environment, Spatial Planning and Regional Development of Portugal; Sigmar Gabriel, Federal Environment Minister of Germany and Peter Mogens Carl, Director-General Environment. *Credit: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety*



“There is no longer need for debating whether or not climate change is happening. The challenge is in slowing our contribution to that change – mitigation – and ensuring adaptation where we can.” – Sigmar Gabriel, German Federal Minister for the Environment, Nature Conservation and Nuclear Safety.

With these words, the Environment Minister opened the symposium, ‘Time to Adapt – Climate Change and the European Water Dimension’, organised jointly by the German Environment Ministry and the EU Commission’s Directorate-General Environment as a conference within the framework of the German EU Presidency. Over 250 participants from EU Member States (including Danube countries Austria, the Czech Republic, Germany, Romania and Slovenia) gathered in Berlin in early February to discuss the impact of climate change on the water regime.

Europe’s changing climate. During the last century, temperatures have shown a relatively uniform increase of 0.95 °C across Europe (EEA Report, 2004). Mean annual precipitation levels have exhibited distinct regional differences, however – increasing in northern Europe by 10-40%, and decreasing in some areas of central Europe and the Mediterranean region by up to 20%.

According to most model predictions, countries in the Danube Basin will see more changes in the region’s distribution of water in the future. Northern or upstream countries will experience more precipitation, with particular emphasis on winter precipitation. Southern or downstream countries would experience less precipitation, but more extreme events.

Taking the first steps. Adapting water management to the impacts of climate change is a top priority, and

a fundamental aim of the symposium was to draw up comprehensive recommendations for designing an adaptation process for water management in Europe. Existing rules and regulations on the European level provide a solid basis for developing water-related adaptation measures. A common, integrated approach with an extensive exchange between countries, stakeholders and the public is necessary for successful adaptation.

Where the ICPDR can play a role is in finding a mechanism to analyse climate change models on the basin-wide level to determine what the changes will mean to the Danube. “The ICPDR alone cannot stop climate change”, says Philip Weller, Executive Secretary of the ICPDR. “Our job is to recognise what it may mean for water management and to develop strategies and be prepared to respond.” The ICPDR’s Flood Expert Group is one place where scenarios can be developed and discussed to allow countries to adapt to climate change.

A framework for change. The EU Water Framework Directive (WFD) provides a valuable structure for introducing climate change impacts into water resources management and river basin planning. It offers the opportunity to better assess impacts on the water regime and can coordinate not only the demand for water in various sectors but also their capacity for supporting water management adaptation.

The impacts on climate change should be taken into consideration for WFD implementation as an extra pressure on water resources. The necessary additional measures should be incorporated gradually into the programmes of measures – possibly during the first planning cycle in 2009. Only by adapting activities to climate change now can measures be selected which will also be sustainable, effective and cost-efficient under changing conditions.

The implications of climate change for the ICPDR and for Danube countries are significant. “The overall work of the ICPDR need not be completely overhauled,” says Fritz Holzwarth, Deputy Director General of the German Federal Minister for the Environment, Nature Conservation and Nuclear Safety and Head of the Ger-

man Delegation to the ICPDR, “but all the actions we undertake as part of the programme of measures must be done with acknowledgement and consideration of climate change”.

Bringing ideas together. The results of the symposium „Time to Adapt – Climate Change and the European Water Dimension“ were presented at the Environment Council on 20 February 2007. They will be incorporated into many measures both on the national and the European level (e.g. the Green Paper on adap-



“The overall work of the ICPDR need not be completely overhauled, but all the actions we undertake as part of the programme of measures must be done with acknowledgement and consideration of climate change.” Fritz Holzwarth, Deputy Director General of the German Federal Minister for the Environment, Nature Conservation and Nuclear Safety

tation to climate change and the Communication on water scarcity and drought). It is expected that important impetus will be given for research activities under the Seventh Research Framework Programme with climate change as one of the key topics.

All documents of the symposium, including the soon to be published symposium report, are available at <http://www.climate-water-adaptation-berlin2007.org/>.

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Can ecology and waterway transport coexist?

Representatives from the navigation and transport sector, environmental organisations and the water management and transport ministries of countries all over the basin are working together to find the answer.

Inland waterway transport on the Danube and its tributaries has the potential to relieve pressure on existing transport routes and increase the volume of products shipped to the consumer. Stakeholders across the basin are working to ensure that this can be done without jeopardising the goals of the EU Water Framework Directive. *Credit: DRP/Mello*



Countries throughout Eastern Europe are seeing significant increases in GDP, often based on the increased production of commodities that are shipped around the world. The increase in the volume of transported goods, however, puts more pressure on existing transport routes. To improve cross-country transportation, the European Commission has developed Trans-European Transport Networks (TEN-T) with guidelines and financing for Pan-European road, rail, air and waterway transportation corridors.

Current climate change discussions place even higher hopes on inland waterways. “The increase in goods transport and the related CO₂ emissions are strong arguments for a better use of the potential of the Danube as an environmentally-friendly transport mode,” says Manfred Seitz, managing director of via donau, the Austrian waterway authority.

However, inland waterway transport can also have significant negative influence on river ecosystems, jeopardising the goals of the EU Water Framework

Directive (WFD), which aim for ‘good ecological status of all waters’ by 2015. Maintaining existing waterways and constructing new ones can lead to degradation of habitats, disturbance of aquatic species and to the loss of ecological functions – such as flood retention capacity. “Despite the experience of the past, navigation infrastructure does not necessarily have to have negative ecological, economic or social impacts. Now is the time to start an open dialogue to support innovative integrated solutions to improve shipping on the Danube without destroying more of our natural wealth and ecosystem services,” highlights Christine Bratrach, Head of Danube/Freshwater at WWF Danube-Carpathian Programme. “Now the challenge is for us all to find solutions that consider global emissions, multiple benefits for local people and the mitigation of local impacts on river ecosystems equally.”

Bringing stakeholders together. To address this potential conflict, the ICPDR, in cooperation with the Danube Commission and the International Commission for the Protection of the River Sava, has initiated an intense, cross-sectoral discussion process, which

**INTEGRATED RIVER ENGINEERING –
a win-win situation for inland navigation and
nature protection**

The free-flowing section of the Danube between Vienna and the Austrian–Slovak border is the site for a unique project to both improve fairway conditions for shipping and to improve the ecological condition of the Danube and the floodplain landscape. Launched by the Austrian Ministry for Transport, Innovation and Technology and via donau, the **“Integrated River Engineering Project on the Danube to the East of Vienna”** will address one of the current weak spots for inland navigation and reverse the deterioration of the ecological balance of the Danube Floodplain National Park.

The project will stabilise the bed of the Danube, **preventing the water level from falling further**, improving the navigability of the river. River engineering measures such as groynes will raise the level of the Danube during low water periods, which will also have a positive impact on the groundwater level in the area.

The Integrated River Engineering Project will also **restore much of the Danube’s original character**. The planned waterway integration will reconnect many of the side arms that were cut off from the Danube, preventing them from drying out. In areas where bank reinforcements are no longer necessary and the bank can be renaturalised, the river will once again be able to fashion its own banks.

The “Integrated River Engineering Project on the Danube to the East of Vienna” serves as a model for addressing the growing volumes of traffic along the Danube corridor in an environmentally friendly manner.

should lead to a ‘Joint Statement on Inland Navigation and Environmental Sustainability in the Danube River Basin’ by the end of 2007.

According to Birgit Vogel, Expert for River Basin Management of the ICPDR, the Joint Statement should summarise guidelines for environmentally sustainable

inland navigation on the Danube and its tributaries. “By doing so we can make an important step towards the Joint Programme of Measures as requested by the WFD by 2009,” says Vogel.



Finding balance through cooperation. The ICPDR has invited 40 representatives of the navigation and transport sector, environmental organisations and water management and transport ministries from all Danube countries to be part of this cross-sectoral discussion process. Three workshops will be organised until the end of the year to share knowledge on the current status of inland waterway transport, impacts caused by it and to define the principles for an environmentally sustainable inland navigation. The Kick-off Meeting will be held at the end of April and will also discuss the Integrated River Engineering Project on the Danube to the East of Vienna – a project which shows that a common perspective of nature and navigation is possible. “It is our hope that through this cooperative process all involved partners would endorse and implement the final Joint Statement,” says Philip Weller, Executive Secretary of the ICPDR.

Jasmine Bachmann works on public participation in the ICPDR Secretariat, and is the Executive Editor of Danube Watch.

The steady erosion of the riverbed east of Vienna has resulted in a bed almost one metre deeper than it was 50 years ago, restricting the reliability and competitiveness of inland navigation in the area and damaging the ecological balance of the Danube Floodplain National Park. *Credit: via-donau/Kovacs*



A new chemical formula for environment protection

A new EU legislation on chemicals, launching this summer, will replace over 40 directives and regulations for the manufacturing, marketing, import and use of chemical substances.

REACH will enable information sharing on the risks of chemicals, and by making this knowledge available it can serve as a source of data for the work being done under the EU Water Framework Directive. *Credit: DRP/Mello*



On June 1st, the EU launches a new regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). REACH will protect human health and the environment while encouraging competitiveness and innovation of the EU chemicals industry.

Under REACH, the hazards of chemicals will be more systematically identified, allowing for better risk management measures. "The first big benefit for Europe and also for the Danube Basin is that information will be generated on chemicals," says Bjorn Hansen, Deputy Head of the Chemicals Unit of the EC's Water, Chemicals and Cohesion Directorate. "We will actually be in a position to say what concentration in the water body is acceptable and what is not, for any of the substances being produced."

REACH will give greater responsibility to industry to manage the risks from chemicals and to provide safety information on substances. Furthermore, downstream users – companies that use these chemicals in their own production processes – will share responsibility, and will have access to shared safety information from manufacturers and importers.

Encouraging innovation and environmental protection. REACH will also encourage the development of new substances as a result of less burdensome requirements for registration of new chemicals and better

incentives for research and development. "By putting new substances at an equal level with existing substances, there will be no market advantage in just continuing with old, less innovative, and potentially more dangerous substances," says Hansen.

"REACH can reduce the threat of chemical contaminants," says ICPDR Executive Secretary, Philip Weller. "Users will be encouraged to substitute hazardous chemicals with safer alternatives, and that of course will be reflected by an improvement of the situation in the basin."

REACH will begin on June 1, 2007, and the new European Chemicals Agency in Helsinki will be fully operational 12 months later. For more information on REACH, please visit: http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm

HOW WILL REACH WORK?

Registration: Under REACH, producers and importers of chemicals in volumes of 1 tonne or more must register them with the new EU Chemicals Agency and submit information on properties, uses and safe ways of handling substances.

Evaluation: Public authorities will examine each registration and decide on proposals for further testing, restriction or authorisation procedures.

Authorisation: Use-specific authorisation will be required for chemicals that cause cancer, mutations or problems with reproduction, or that accumulate in our bodies and the environment.

Restriction: Through clearer decision-making processes, substances found to pose unacceptable risks to health or the environment may be subject to restrictions.

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



Danube Day 2007: celebrating Danube cultures

The Danube is more than water – for centuries the river has shaped the culture and lives of the people living in the basin. Danube Day 2007 celebrations will showcase the variety of cultures in the Danube River Basin.

Danube Day is a powerful tool for developing the 'Danubian identity' of the people living in the basin by reminding them that the region is not only rich in ecological treasures, but also in cultural ones. And that gives us all the shared responsibility to protect a precious resource – the Danube rivers.

Culture and history – shaped by Danube water. The Danube is an important European river, forming borders and natural links for nature and cultures. The basin hosts diverse customs, dialects and economies. The footprints of the Habsburg and Turkish empires can still be found today and deep-rooted traditions are still very much alive. For 500 years, the Danube was the border between the Noricum province of the Roman Empire and the territory of the Germanic 'barbarians' tribes. Important historic events are also connected to the river, such as the epic Song of the Nibelungs from around 1200 AD or the military battle between the Habsburg emperors and Napoleon in 1809 near the Danube floodplains east of Vienna.

Organisations from civil society and governments will participate to make Danube Day a day to remember, through water-related games, exhibitions, field trips, round tables, workshops and educational and public awareness-raising activities.

Today, tens of thousands of tourists travel along the Danube on bicycle or cruise ship to visit its chain of natural and cultural pearls, such as monasteries, castles, floodplain forests and the Danube Delta. A variety of cultural events take place on the Danube, such as the Donauinselfest in Vienna and the Sziget festival in Budapest, while in old riparian villages local artists exhibit their handicrafts. This river-related culture also exists on the large tributaries – such as the Tisza, linking the Carpathian Mountain and the Pannonian cultures, and the Sava which serves as the gateway to the Balkan region.

Time to celebrate the diversity – get involved! Danube Day 2007 will pay tribute to this diversity and focus on culture when celebrating the Danube and its tributaries. The day strengthens 'Danubian identity'

and the knowledge that we all depend on each other. Nothing can be achieved without respect and cooperation, and it takes people from all walks of life across the basin to make a real difference. Get involved and take action to raise awareness on the Danube and its tributaries!

The Danube Art Masters Competition will be an important element of Danube Day again this year, organised jointly by the ICPDR, national ministries of water management and the Danube Environmental Forum. National contests will be carried out within each country and the national winners will be invited to a 'Danube capital', where the international winner will be crowned.

For more information on Danube Day 2007 or how to participate, visit www.danubeday.org or contact your national Danube Day contact person.

Jasmine Bachmann works on public participation in the ICPDR Secretariat, and is the Executive Editor of Danube Watch.



For the fourth time, Danube Day will connect old and young residents of all the countries of the Danube Basin to celebrate the shared treasures of the region. Share your support of the Danube with friends and family with these Danube Day postcards, available from the ICPDR at www.danubeday.org



The Danube–Black Sea clean-up story

What's needed to reduce pollution in the most international river basin in the world and the Black Sea into which it empties? Working in farms, wetlands, wastewater treatment plants, schools, boats and office boardrooms, the UNDP/GEF Danube Regional Project, ending soon, had many of the best answers.



We Danube lovers begin our tour in the village of Neuzin in the county of Vojvodina, north Serbia. The family-run farm managed by Dragan Dzenopoljac raised 40 cows for milk production. They had a problem. Their cows produced a lot of manure that they couldn't store properly. The manure ended up as a large unsightly pile on one of the farm's fields. Yellow liquid literally floated away.

Many of the surrounding farms, run by families or large companies, had the same problem. They typically raised livestock such as pigs, cows and chickens, and produced crops such as maize, sunflower and barley. One Vojvodina factory in the village of Zitiste employed 3000 people and daily slaughtered 30,000 chickens (12 million yearly).

The result was an agricultural landscape dotted with large mounds leaching pollution. Some farmers used water hoses to flush manure out from their livestock sheds – a particularly 'bad agricultural practice' which makes manure management difficult and costly. Around Zitiste and neighbouring villages, a lot of manure was entering the local Begej River, the Danube-Tisza-Danube Canal and eventually the Danube River itself. Everyone from residents to mayors was gravely concerned.

BAPs to the rescue. Besides its awful sight and odour, manure in water causes another problem that is far less known – nutrient pollution. Manure contains nutrients, especially nitrogen and phosphorus, which contribute to 'eutrophication'. Through this process, oxygen in the water is reduced, plant and animal species suffocate and water quality worsens. A sure sign is large green, black or brown algal blooms. Certain types of bacteria can also develop making drinking water unsafe. So nutrients are not always 'nutritious'.

The Vojvodina farms had other 'bad practices' that contributed to nutrient pollution. One was the poor application of nitrogen-based fertilisers on crops – for example, spreading too much or at the wrong time of year.

In 2006, the Dzenopoljacs were approached by the company Carl Bro requesting that their farm serve as a demonstration site for a larger project. Soon they agreed to the building of a facility which would store about 180 m³ of manure for six months. Carl Bro would supervise construction while Dragan would pay 10% of the costs.

The Dzenopoljac's farm was one of eight that Carl Bro eventually worked with in the area. And building the manure storage was one of 15 'best agricultural practices' (BAPs) that Carl Bro trained the farmers in using. Others included the preparation of fertiliser

plans and spreading manure fertiliser on fields between 15 October and 1 March. Some of the BAPs also reduce toxic pollution.

In the end, the project found that implementation of the 15 BAPs by the eight farms could annually save the environment from about 14,000 kg of nitrogen, 2000 kg of phosphorus and 250 kg of pesticides.

The Carl Bro project was funded by the Danube Regional Project (DRP), begun in 2001, recently ending in June 2007, managed by the UNDP and funded by the Washington D.C.-based Global Environmental Facility (GEF). Managed from the Danube city of Vienna, the DRP's main goal was to reduce nutrient and toxic pollution to Danube Basin waters. Its main beneficiaries were the 13 Danubian countries that signed the Danube River Protection Convention and are cooperating under the ICPDR.



CLEANING THE PRUT

Falesti District
of Moldova

About 650 km to the northeast of Vojvodina is the Falesti District of Moldova. Here, the NGO Cutezătorul of Falesti was also working to reduce nutrient and toxic runoff from farms. Pollution entered the Prut River which then entered the Danube River. The NGO's DRP-supported initiative involved nine NGOs, 90 farmers, national and international experts and local governments. Organisers established four chemical-free demonstration gardens and their 'green phone hotline' advised 138 callers about earth-friendly farming.

Community-wide efforts included brochures, 16 radio broadcasts and four TV programmes about organic farming. Action campaigns encouraged

Nutrient pollution is a serious problem throughout the Danube River Basin and can put areas at risk of not meeting the objectives of the EU Water Framework Directive. *Credit: DRP/Mello*

residents to clean up pollution hotspots. A contest to identify the cleanest, greenest area of the Prut River Basin drew the participation of 24 municipalities and resulted in the removal of 15 illegal dumps, the planting of 17,000 trees and the tidying up of 12 springs. The NGO even successfully convinced 70% of the farmers that they trained to use fewer chemical fertilisers and herbicides on their farms.

Maluk
Preslavez
Bulgaria

From my farm to three countries. Some 600 km to the east of Vojvodina is the village of Maluk Preslavez, next to the Danube, in the Silistra area of Bulgaria's Dobrudzha region. In July 2005, testing from a spring found groundwater to be three times over the national limit for nitrates, a type of nutrient. "We didn't think it was that bad," says local farmer Ancho Angelov. "We stopped using the fountain years ago but didn't realise there was still such a problem and that the pollution was coming from our cows."



One source of pollution is the over-production and poor handling of solid manure and liquid waste from raising livestock. Credit: Earth Friends, Romania

The spring was close to a demonstration farm field that had been divided in two. On one side, good agricultural practices had been used to apply nitrogen and phosphorus fertilisers to the soil. On the other, bad practices common to the area were used. The experiment was part of the Eco-accents: Plant Growing in Dobrudzha project managed by the Black Sea NGO Network and funded by the DRP. "We chose this region because it's the most productive farming area in all of Bulgaria," says project manager Emma Gileva.

Some 120 local farmers visited the demonstration sites and participated in trainings. It was their first chance

to hear about the country's new Code of Good Agricultural Practice. Adopted in August 2005, the Code was the result of Bulgaria harmonising the EU Nitrates Directive, a pre-condition to its later entering the EU in January 2007. "They also learned that the entire Danubian part of Bulgaria is a 'vulnerable area' according to Bulgarian and EU legislation, meaning that it is threatened by nitrate pollution," says Gileva.

A few months later, the same field in Maluk Preslavez had some new visitors. Fifteen farmers from Romania and three from Moldova came to see the benefits of soil conservation, water protection and 'best agricultural practices (BAPs)'. For 11 Romanian farmers, it was the first time they had travelled outside their country. "For the farmers from Moldova, the BAP concept was almost completely new," says Gileva.

The international visit was part of the larger DRP-funded 'Best agricultural practice' in my farm project implemented by the Black Sea NGO Network with NGO partners Earth Friends from Romania and the

Eco Counselling Center Cahul from Moldova. The goal was to get farmers more involved in BAPs through visits, trainings and published materials in six rural municipalities in three countries. Farmers learned about how to receive support payments or to be involved in agri-environment schemes if their practices exceeded minimum BAP standards. 500 copies of a new BAP booklet were also distributed in each country.

Two trainings were held for farmers in each country, bringing in 221 farmers total - 40% more than expected. In Bulgaria, BAPs were newly applied onto 70,000 ha of farmland, 94 ha were converted to organic farming and 120 farmers improved their chemical use reporting.

In Romania, where the information was relatively new, some 80 small farmers, most with lands under 4 ha in area, became more aware about and encouraged to use

BAP. In the village of Brusturoasa, two farmers built new manure composts based on BAP standards. And in the village of Piscu, two farmers who participated in the training later wrote proposals with their local Agricultural Advisory Service to improve the chemical management of their cereal crop cultivation - and successfully received grants through the EU. "Farmers and advisory services became more aware of the need to comply with the Romanian Code of Good Agricultural Practice to access EU funds for farms," says Camelia Zamfir from Earth Friends. "We are confident that more farmers will change their practices."

The project also worked on getting farmers and others more involved in using ‘voluntary charters’. One charter, signed by 24 Bulgarian farmers, had them declare that “every farmer can do simple things to protect the environment and water. Let us not turn farming into a mechanism of pollution that ruins nature and our future.” The charter then presented obligations to protect the environment such as checking soil conditions before using fertilisers. “Every time I go to the fields, I will try to observe the state of nature and decide how my farming activities have affected it.”

NUTRIENTS, LAWS AND RISKS

By 2004, Danube countries had successfully met the first step of the WFD process – producing the Danube River Basin Analysis. By 2009, informed by this Analysis, they need to develop a ‘joint programme of measures’ as part of a ‘Danube River Basin Management Plan’ to ensure that all Danube waters meet ‘good ecological status’ requirements by 2015. The WFD also requires the complete phase-out of the EU’s 33 priority hazardous substances within 20 years.

The Danube Analysis further included an assessment of whether Danube water bodies risked failing to meet the WFD. This was done in relation to four ‘risk categories’, two of which were nutrients and hazardous substances. It found 55% of the entire basin ‘at risk’ or ‘possibly at risk’ from nutrient pollution and 73% from hazardous substances.

The Nitrates Directive is another important EU tool, designed to protect EU waters against nitrate pollution from agriculture, especially those caused by bad practices such as poor manure storage. If areas have pollution levels that are or could be high, states must designate them as ‘nitrate vulnerable zones’ and apply agricultural ‘action programme measures’, as is the case for Danubian Bulgaria. Every country also needs to make its own Code of Good Agricultural Practices (similar to BAPs) harmonised with this directive, and is encouraged to apply them to reduce nitrate levels.

AGRICULTURE – A DECADES-OLD PROBLEM

According to the Danube River Basin Analysis 2004, agriculture is now the biggest source of nitrogen in the Danube Basin with a 39% share. It is also the second biggest source for phosphorus emissions in the basin with a 32% share.

The Danube Analysis found “alarming concentrations” of pesticides in the lower Danube and in some

tributaries. The Danube Basin is home to 29 of the EU’s list of 33 ‘hazardous priority substances’. Many are used in producing cereals, rapeseed, sunflower, maize, orchard fruits and grapes. A shocking seven are not authorised in any country. The Analysis also found Danube groundwater at a high risk of pollution from agricultural fertilisers and chemicals. That’s a big problem because, overall, 48 million people in the basin depend on groundwater sources for drinking water.



“The problem accumulated over many decades,” says DRP Environmental Specialist Peter Whalley. “During communism, environmental management wasn’t properly considered by the large state farms. Back then, a ‘good farm’ was a big farm with lots of livestock, and where lots of fertilisers and pesticides were used to boost production.”

After communism ended, many farms were hard hit by lost markets, downsizing or even outright bankruptcy. Pesticide use declined by 40% and livestock numbers dropped 50%. But now that many economies are reviving in post-communist Europe, livestock and manure numbers could rise. That could mean more pollution, especially because environmental management is still low on the priority lists of most farmers.

“We see the same problem in many places in the region,” says Whalley. “Many small farmers are new to farming, having lost their jobs in other sectors that collapsed. Or they lack the required information, education and training support needed to farm wisely, or the resources to begin the process of investing in cost- and environment-saving measures. It’s easy for them to fall into the short-term fertiliser-pesticide trap.”

The end of communism meant competition with powerful western agro-companies and their cheaper products.
Credit: Ekotim, Bosnia and Herzegovina

More farmers, less nutrients. Through a Small Grants Programme run by the DRP, 53 NGO-managed projects focusing on agriculture across 11 countries in the Danube Basin were funded. From Vojvodina to Silistra to Moldova and beyond, the DRP successfully assisted NGOs in raising the awareness of residents, farmers, the media and authorities about agricultural pollution and EU water protection directives. Hundreds if not thousands of farmers were trained in how to apply BAPs. Many made the switch. More are on their way.

The Carl Bro project also delivered. “If the final results from the Vojvodina sites were extended to farmers throughout the Lower Danube River Basin, especially in Bosnia and Herzegovina, Bulgaria, Croatia, Moldova, Montenegro, Romania, Serbia and Ukraine, then the introduction of the 12 BAPs dealing with livestock manure management would save the environment over 500,000 tonnes of nitrogen and 90,000 tonnes of phosphorus annually,” says Carl Bro Project Manager Jesper Ansbaeck “Given the expected increases in livestock production in the next few years, this could increase to 1.1 million tonnes of nitrogen and 160,000 tonnes of phosphorus.”

Many farmers aren't aware of the environmental problems they cause, let alone how to solve them.
Credit: DRP/Mello

The environment and food chain in all seven countries could also be saved from 23,000 tonnes of pesticides under current consumption and 50,000 tonnes under



expected future conditions. Farmers would further benefit economically from BAPs through reduced expenditures on fertilisers and pesticides, more cost-effective farming practices and improved product quality.

ENTER THE BLACK SEA



The Danube Analysis also found the [Black Sea's](#) coastal waters, into which the Danube River flows, 'at risk' from nutrient pollution and 'possibly at risk' from hazardous substances. With over half of the Sea's waters originating from the Danube, the Danube's waters are bound to have considerable impact. To many, this was no big surprise given decades-long awareness that the Black Sea was in jeopardy.

In the 1970s and 1980s, excessive nutrient pollution led to a severe ecological imbalance in, and the large-scale eutrophication of tens of thousands of square kilometres of, waters in the western Black Sea, as the depletion of oxygen decreased biodiversity and worsened water quality. This was actually one of the main reasons why the GEF became involved in Danube and Black Sea efforts in the first place. In 1992, the Danube Basin was site of the first 'international waters regional programme' ever funded by the GEF. By 2001, GEF activities had evolved to become the DRP.

The DRP is part of the larger USD 95 million 'GEF Strategic Partnership for Nutrient Reduction in the Danube/Black Sea Basin' approved in 2001.

It targets assistance in Danube and Black Sea countries to address trans-boundary concerns from nutrient pollution. One of GEF's largest and perhaps most ambitious water-related projects in the world, its long-term objective is for countries to take measures to reduce nutrient pollution and hazardous substances to levels necessary to permit Black Sea ecosystems to recover to 1960s conditions.

The Partnership includes three components. The first is the DRP. The second is the 'Black Sea Ecosystem Recovery Regional Project' for the six Black Sea littoral countries. The third is the 'Investment Fund for Nutrient Reduction' implemented by the World Bank, geared to supporting single-country investment projects for nutrient reduction as well as wetland and floodplain restoration.

One of the key achievements of the DRP was to strengthen cooperation between Danube and Black Sea decision-makers, for example through producing the first report on the impacts of the Danube on the Black Sea.

No time to waste for wastewater. Polluted wastewater discharged by Vienna to the Danube is minimal. That's generally the case in the Upper Danube countries of Germany and Austria, in part because they were able to pay for the high costs of advanced wastewater treatment. By doing so, they also met the EU Urban Wastewater Treatment Directive (UWWT), designed to protect the environment from the adverse effects of wastewater from cities and the agro-food industry.

In the countries downstream, however, wastewater treatment was often neglected during communism. As a result, the messy municipal brews of residential and industrial waste are another major source of Danube nutrient pollution. "The UWWT is expected to be the most expensive EU water quality requirement to implement for the new Member States," says ICPDR Technical Expert Mihaela Popovici. "In Romania, it could account for over 45% of the total costs for complying with EU environmental regulations."

One UWWT requirement is that wastewater treatment should be 'more stringent' in 'sensitive areas' where water bodies are eutrophic. That could mean introducing 'tertiary treatment' to remove nutrients. And loans and grants to improve treatment are available through the EU and international financing institutions such as the World Bank and EBRD.

TREATMENT WITHOUT ELECTRICITY IN RURAL SLOVAKIA

Kosice
Slovakia

At a small settlement of houses near the Hnilec River, 75 km outside [Kosice, Slovakia](#), residents found it hard to get external funding to clean their wastewater. "Our system filled the gap," says Robert Zvara, project manager of the NGO Creative. "It's inexpensive, environmentally friendly and low maintenance, so it's helpful for distant communities in Slovakia and throughout the Danube Basin." The DRP-supported system sends household sewage through pipes funded by the local municipality to improved settling tanks and a newly constructed reedbed that removes nutrients – without using electricity. "The quality of output water released to the creek doubles national standards and helps maintain the quality of the nearby protected EU Natura 2000 meadow lands."

CLEAN CLOTHING, DIRTY RIVER

Many residents of cities in the central and lower Danube Basin use cleaning detergents with phosphates – another big contribution to nutrient pol-

lution. At the same time, alternatives are already widely used by many consumers, companies and countries in the Danube Basin and beyond. In some Danube countries such as Austria, Germany and the Czech Republic, complete or near complete switches have already been made.



A DRP-commissioned project found that the Danube countries most requiring reductions in phosphate-based detergents are Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Moldova, Montenegro, Romania, Serbia, Slovakia and Ukraine, representing about three quarters of the basin population. Romania was seen as a priority given its lack of wastewater treatment infrastructure and gains to be made through Black Sea tourism.

While improved urban wastewater treatment and BAPs are necessary complementary actions, the project clearly showed that there is ample scope for contributing to solving eutrophication by switching to phosphate-free detergents. The main adverse effect is expected to be on the phosphate industry, not on the detergent industry. Nonetheless, large multinational detergent manufacturers were not convinced. The study thus found that EU legislation to ban or reduce phosphates in detergents would be more effective in dealing with the problem than voluntary agreements with producers.

Sarajevo
Bosnia and
Herzegovina

In [Sarajevo, Bosnia and Herzegovina](#), a DRP-funded project by the NGO Ekotim, raised awareness among consumers about the links between their detergent use and water pollution from phosphates. Communication activities proved highly successful, reaching some 200,000 Sarajevo citizens.

On many farms, nearly half of all livestock waste becomes pollution. *Credit: Earth Friends, Romania*

Over 20,000 leaflets were distributed in a wide range of places from shopping centres to street actions to bars. A radio jingle was played 10 times a day for 11 months, along with 20 radio shows, reaching the ears of over 150,000 people. Other actions included the distribution of 9000 postcards throughout the city, workshops in schools, advertising billboards placed in public toilets and stories in national newspapers.

Post-campaign testing of city wastewater proved that the campaign reduced total phosphorus discharge to the river from 310 to 245 kg per day. “The phosphate detergent industry, mainly Proctor & Gamble and a detergent factory from Croatia, opposed us with their own TV commercials,” said Rijad Tikvesa from Ekotim. “But the Bosnian company ‘Dita’ from Tuzla ended up developing a new line of phosphate-free detergents. So we think we’ve had a very positive effect.”

Karlovac
Croatia

Paying the price for clean water. The 60,000 residents of Karlovac, Croatia, had never been happy about their untreated wastewater entering the local Mrežnica and Kupa rivers. They never liked how it affected the city’s drinking water or local swimming, fishing and boating. With Croatia in the process of joining the EU, the city is also expected to be declared a ‘vulnerable area’ under the Nitrates Directive.

Municipal wastewater can cause excessive organic pollution, a key issue identified by the ICPDR’s ‘Danube River Basin Analysis’. *Credit: DRP/Mello*



“This is why Karlovac agreed to build a new wastewater treatment plant with tertiary treatment – the first

time in this country,” says Kresimir Veble, a manager at Karlovac’s water supply and wastewater treatment utility. “And the sewer network will be extended to more households.”

To pay for the investments, the utility received a total of EUR 36 million in grants and loans from the EC, EBRD and Government of Croatia. Now it has to determine how to best spend the money, how to cover its own operating costs and what price to charge customers. Not long ago, those decisions were made by the state. Now it’s the responsibility of Kresimir and his colleagues who, while good engineers, were never really trained in finance.

“The first step is for utility managers to take an honest look at their true current costs and where they might be losing money now,” says András Kis, a Budapest-based consultant working on the DRP sub-project. “Reforms such as reducing leakage from old pipes free up money for new investments.”

Seeing that people like Kresimir and his colleagues lacked the necessary financial tools to assess these complex considerations, Karlovac was selected as a demonstration site for the DRP project. Pitesti in Romania was another. “Once Karlovac selects its reforms, then these can be fed into our new decision-making tool called ASTEC,” says Kis. “This will then give a range of various prices they can charge consumers for future services.” ASTEC tests the impacts of a range of simultaneous considerations on pricing. “With ASTEC, we discovered that many customers weren’t paying their bills including 20% of the utility’s own employees – a problem we fixed in one week,” says Veble.

THE NEED IS THERE

One lesson learned was the clear need for help, and that the tools are available. Fact sheets, translated and distributed to hundreds of targeted utility managers in 10 countries, were complimented by workshops where feasible. A presentation to the Romanian Water Association’s utility managers also attracted lots of interest. “But the process needs to continue to guide the right people to use the tools,” says Kis. Experience showed that small investments in training bring positive benefits. Building on the foundations laid by DRP, the process should now be “nationalised” with support from governments, the ICPDR and external donors.

“Donors want informed customers,” says the World Bank’s Ron Hoffer. “We’d love to give countries more support for soft services like training. But countries need to ask for it.”



Furthermore, many utility managers don't see pollution reduction as their main priority, says UNDP/GEF Danube/Black Sea Regional Programme Director Ivan Zavadsky. "Many are just trying to prevent bankruptcy. But these tools can still help them do that. And having been trained to use them, they'll be much better prepared to make investment decisions for improving pollution reduction later on."

Zitava Valley
Slovakia

Turning farmland into nutrient-removing hay. Some 400 km northeast of Karlovac is the Zitava Valley, part of Slovakia's Vah River Basin. The Vah enters the Danube about 100 km east of Bratislava. In the Zitava, some 80 ha of wet grasslands in a Natura 2000-rated area were subject to annual spring floods, making it unattractive for farming. At the same time, soil erosion in the surrounding arable fields was a major problem for the local Vah River management agency.

In 2005, the NGO SOS/BirdLife Slovakia implemented a DRP-funded project to apply BAPs to control agricultural pollution. As one result, farmers converted and restored 15 ha of regularly flooded arable soil into grassland through two steps. One, seeds collected from intact meadows were dispersed onto the soil. Two, small cut pieces of intact grassland were transferred to the restoration area. The new grass was then periodically mowed to prevent it being overgrown with forest. As a result, the mowed grass served as a natural nutrient 'sink', retaining some 3.9 tonnes of nitrogen from the Zitava River yearly.

A second action restored wetland habitat in the adjacent Zitavsky luh, a Special Protection Area under the EU Habitats Directive. Here, 10 ha of grassland will now be cut yearly to renew plant communities and improve habitat for wetland birds. "This helped me to clean up my overgrown wet meadows and increase the hay that I can mow," said František Varsanyi, a partici-

Over the last 150 years, Danube aquatic ecosystems, biodiversity and water quality and quantity have been significantly impacted by human activities. *Credit: DRP/Mello*

pating farmer. The harvested hay will then be sold to local farmers, including the nutrients retained – about 15 tonnes of nitrogen yearly.

Actions were communicated via the media, schools and meetings with municipal authorities and farmers. 5000 information leaflets were also distributed. “This project really helped us to present the countryside around our village as one of the last places where the Zitava River still creates valuable wetlands,” says Ludovit Sládeček, mayor of Kmet’ovo village.

ents and thereby can help reduce nutrient pollution. Through an analysis of current and past wetlands projects in the basin, it also found a serious gap – wetland and river basin managers tend to find little importance in using wetlands for nutrient removal, if for anything at all. “I learned as an engineer that we should drain the marshes,” says Gheorghe Constantin, Head of the Romanian Delegation to the ICPDR, adding that DRP efforts helped him to realise the multiple beneficial functions of wetlands.

Where wetland projects do exist, they focus on local biodiversity conservation. Some projects also use wetlands to help with flood mitigation, and this trend is growing. Overall, however, wetland work tends to be isolated to the local level without connections to wider regional or river basin management (RBM) efforts.

A DRP study shows that wetlands can definitely retain nutrients and help reduce nutrient pollution.
Credit: DRP/Mello



Taking wetlands more seriously. Going some 150 km back to Vienna, another DRP project completed a review of scientific literature that found that wetlands definitely can retain nutri-



Some 60 km next door in Slovakia, the Vienna findings were confirmed through a DRP-funded project managed by the NGO Daphne. Early on, Daphne found that most Slovak managers saw their main goals as ensuring good water quality and quantity, protecting property and making water resources available for industrial water users. “This is important but it’s not enough,” says Daphne’s Milan Janak. “Managers need to pay more attention to wetlands and their responsibility to protect them.”

Some Slovak managers are restoring wetlands. For example, in the Morava floodplains, a project helped recharge an old disconnected wetland with water, restoring habitat for birds and beavers. “This is a good start,” says Janak. “But now we want more wetland projects to help solve other problems like floods and soil erosion.”

In workshops held across the country for about 150 water managers, Daphne raised awareness of the importance of restoring wetlands and floodplains. “There has been an increasing realisation that managers need more guidance and push,” says Thomas Hein, manager of a DRP wetlands project. “For that reason, the DRP developed a ‘guidance document’ that helps define why and how managers can beneficially incorporate wetlands into their routine RBM efforts, and how to monitor them. We hope that the ICPDR and NGOs take a lead in making sure the document gets used.”

THE DEF AND WETLANDS

Baja
Hungary

Some 280 km southeast of Vienna is [Baja, Hungary](#) – home to some of the Danube Basin’s most fantastic and protected floodplain forests and species, and the Danube Environmental Forum (DEF). “Wetlands work is one of the cornerstones of our activities so we will continue to encourage Danube managers to take wetlands more seriously and to use the DRP’s guidance document,” says the DEF’s Johannes Wolf.

The DEF is an umbrella organisation of NGOs in the Danube River Basin. Today, it has 174 member organisations from 13 Danube countries, thanks in large part to UNDP/GEF support over the last 10 years. DRP helped DEF to strengthen its network, establish a Regional Secretariat to coordinate its multi-country activities and to raise the capacities of its members to resolve Danube pollution issues.

Many DEF NGO members, such as Daphne in Slovakia, contributed to DRP wetland protection and pollution reduction efforts through DRP support.

On Croatia’s Drava River, an NGO created a long-term process for stakeholder dialogue and sustainable development planning. In Serbia, the DEF NGO launched a local campaign to tackle problems in the wetlands-rich Zasavica Special Nature Reserve. And in Slovenia, a project increased public participation in protecting the Vrbje Pond near the Savinja River, a tributary of the Sava River and a proposed Natura 2000 site rich in biodiversity.

Managing the basin. Reducing nutrient and toxic pollution from agriculture and municipal wastewater. Phasing out phosphate-based cleaning detergents. Encouraging managers to take wetlands more seriously. Building a basin-wide network of concerned NGOs.



Besides being DRP efforts geared to meeting the DRP’s own goals, they are also parts which can be fused together into a larger whole – namely, for integrated river basin management (IRBM) of the Danube Basin. IRBM has gained acceptance as essential for meeting the Danube River Protection Convention and EU Water Framework Directive (WFD). Looking at it this way, the DRP was therefore also able to significantly assist the Danube countries, ICPDR and the EU in meeting their own main goals.

Wetlands are well known for their importance as habitats for water birds, as well as their role in supporting fish populations.
Credit: DRP/Mello

For the WFD, the key first step for the Danube Basin was the development of the Danube River Basin Analysis. Here, the DRP made significant contributions such as drafting chapters, facilitating country reporting, developing a new harmonised typology for rivers in the basin and preparing maps and translations. Most of the DRP's efforts can also be incorporated into the Danube River Basin Management Plan being developed by the ICPDR and Danube countries for 2009. "Without the DRP, I doubt that we would have a Danube Analysis with such a high standard," says Fritz Holzwarth, Head of the German Delegation to the ICPDR.

In total, the DRP commissioned 177 contracts and held 69 workshops for over 1600 participants. Most likely, many thousands more Danube stakeholders were communicated to in one way or another through sub- and NGO projects. Additional support went to the ICPDR's first Danube Stakeholder Workshop and International Danube Day, and the list goes on...

THE POWER OF STORIES

The story about how IRBM was built up in the Danube Basin over 15 years was told by the DRP, with ICPDR support, through its publication '15 Years of Managing the Danube River Basin: 1991–2006'. It explains how the efforts and cooperation of UNDP/GEF, ICPDR, EU and the Danube countries led to new programmes, institutions and legal agreements, as well as concrete environmental progress. Lessons learned in applying IRBM are also presented, as is the Danube outlook for the next 15 years.

The DRP often depended on the power of stories to explain what it was trying to do and did. First there were the reports, fact sheets, photographs, website and this and other stories for Danube Watch. Countless other media told DRP stories – from magazines specialised in European water management at the international level to the thousands of leaflets, brochures, press releases and radio and TV broadcasts produced or targeted by nearly 100 NGOs working across the basin at the local level.

"We used communications to make targeted audiences more aware about problems and how to contribute to solutions," says DRP Public Participation Manager Kari Eik. "Sometimes, we first strengthened the communications capacities of the people who we were encouraging to convince others, from managers of our sub-projects to NGOs."

Another DRP project helped improve public access to water-related information and public participation in water management decision-making in five Danube countries. Outputs included reports, manuals for government employees, information databases, training, study tours, information dissemination and public participation tools and information brochures for citizens and NGOs.



Raising awareness and encouraging public participation in environmental decisions have been key features of IRBM. *Credit: Earth Friends, Romania*

DRP efforts supported implementation of the WFD at the Danube 'sub-basin' level, especially for the Sava, Tisza and Prut river basins, under the umbrella of the ICPDR. For example, four national governments were assisted in reaching agreement on the structure of their first Sava River Basin Management Plan, related Road Map and steps for public participation developing under the coordination of the Sava River Basin Commission.

In the Danube Basin, technologies were continuously enhanced by the DRP to provide the best information possible for IRBM. This includes strengthening the Trans-National Monitoring Network through a design that meets the WFD's strong requirements for monitoring water pollution loads. Support also went to sampling, with a research vessel, bottom sediment trapped behind Romania and Serbia's 'Iron Gates' dam and testing it for pollution such as heavy metals.



All eyes are on the Danube as water managers apply lessons to managing their own water bodies. *Credit: Green Balkans, Bulgaria*

Fertiliser for the future. One sure sign of environmental progress is Black Sea recovery. “We are now witnessing the first reversal of a dead zone of oxygen depletion ever achieved on earth,” says the UNDP’s Andy Hudson. Earlier reductions in wastewater pollution from the upstream countries and the economic slowdown in the former communist countries were major contributors. But having cooperated in numerous joint efforts, the UNDP/GEF, ICPDR, EC and Danube countries should also take credit.

Danube countries are also on track in meeting their EU WFD requirements. This includes developing the Danube River Basin Management Plan by 2009, with the hope that by 2015, Danube waters meet WFD requirements including good ecological status.

“The DRP was an important fertiliser for our future work,” says Fritz Holzwarth. “It generated a common spirit to work together. But not everything is settled yet.” For example, national economic improvements could lead to increased fertiliser and pesticide use by farmers and thus more water pollution. “The ecosystem is still on a knife-edge and could revert back to its old problems,” says Marine Specialist Bill Parr.

“Making farmers more aware of BAPs will be a key measure in the Danube River Basin Management

Plan, as will improving wastewater treatment and working to phase out phosphates in cleaning detergents,” says Philip Weller, Executive Secretary of the ICPDR. “We will therefore build on the important work already done by the DRP in these areas.”

The good news is that the ICPDR continues to be in an excellent position to take up the challenge. With contributions from UNDP/GEF and others, the ICPDR became a mature regional institution that is fully capable and skilled in guiding the Danube countries toward meeting their regional obligations through cooperative efforts.

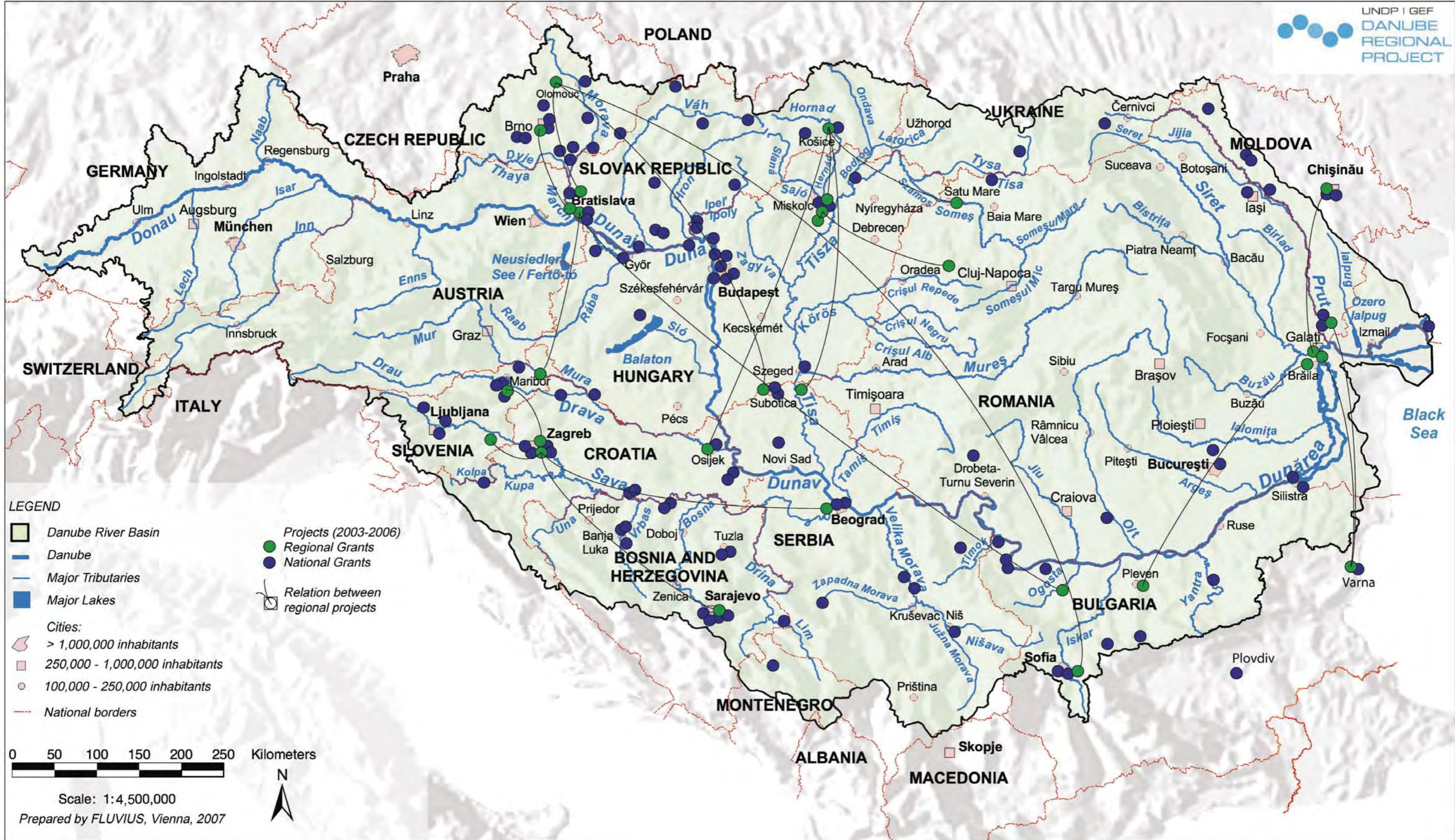
The other good news is that UNDP/GEF will not totally disappear from the Danube with the end of the DRP. “Future GEF steps include continued support for the Tisza sub-basin and Dnieper Basin, the second largest contributor to the Black Sea after the Danube,” says Hudson. “We’ll also be actively replicating our experiences from the Danube globally to other river basins where we work. The world has much to learn from the Danube.”

For more information, please visit: www.undp-drp.org

By *Paul Csagoly*, with contributions about NGO projects from Alexander Zinke.

← The DRP’s Small Grants Programme was the DRP’s main vehicle for engaging local stakeholders. Fold out to see the DRP Small Grants Programme map.

DRP NGO Small Grants Programme: Granted Regional and National Projects (2004–2006)



ICPDR MEETINGS

For final dates, please consult the ICPDR calendar, available at www.icpdr.org

25-26/4/2007

ORTH AN DER DONAU, AUSTRIA

**NAVIGATION/ ECOLOGY PROCESS:
KICK-OFF MEETING AND WORKSHOP 1**

25-26/4/2007

ROMANIA, EXACT LOCATION TO BE DETERMINED

NAVIGATION/ ECOLOGY PROCESS: WORKSHOP 2

8/5/2007

ISTANBUL, TURKEY

DANUBE - BLACK SEA JOINT TECHNICAL WORKING GROUP

16/5/2007

VIENNA, AUSTRIA

DANUBE REGIONAL PROJECT: NUTRIENT WORKSHOP

24-25/5/2007

MUNICH, GERMANY

MONITORING AND ASSESSMENT EXPERT GROUP

24-25/5/2007

UZHOROD, UKRAINE

TISZA GROUP

14-16/6/2007

ROMANIA, EXACT LOCATION TO BE DETERMINED

STANDING WORKING GROUP**DW 02/07****UPCOMING ISSUE****Joint Danube Survey 2****Wetlands Management in the Danube River Basin**