

# DANUBE WATCH

THE MAGAZINE OF THE DANUBE RIVER / WWW.ICPDR.ORG 2 / 2007



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for the Protection  
of the Danube River

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Kommission  
zum Schutz  
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Credit: ICPDR/Stögmüller

# Dear readers,

In the summer of 2007 the ICPDR will begin one of the most ambitious undertakings to date – the Joint Danube Survey 2, or ‘JDS2’.

This important scientific survey will provide information about the Danube and the state of Danube water quality. It will also further strengthen our basis for developing the Joint Programme of Measures as requested by the EU Water Framework Directive. This is especially true because this endeavour, while building on the work done in the first JDS, will expand the examination of biological elements, including fish.

Although JDS2 is first and foremost a scientific survey, it is also a vehicle with which to raise awareness about the status of the Danube, and about the cooperation among Danube countries and the necessity of joint efforts to address problems.

What is significant about how the JDS2 is being carried is the remarkable international cooperation that has gone into the funding, preparation and organisation. A multi-country funding effort has enabled this flotilla to travel the Danube. This has involved financial contributions of varying amounts from Danube countries as well as a variety of in kind contributions, including ships from Serbia and Hungary. The survey is also being supported by the Alcoa Foundation, Coca-Cola Hellenic Bottling Company and the Dexia Kommunalkredit Bank.

I would like to thank all those who have helped us get JDS2 organised and to wish everyone involved a successful survey.

In addition to the story on the Joint Danube Survey, this issue of Danube Watch has a special focus on wetlands – an issue where considerable progress has been made through the UNDP/GEF Danube Regional Project in developing the understanding of the important role that wetlands play. It is also positive to learn that a group of dedicated managers of protected areas along the Danube have joined forces and are currently working to strengthen their cooperation. I would like to wish their efforts success, as the development and the implementation of the Joint Programme of Measures needs to build upon such efforts and networks to achieve ‘good ecological status’ in the Danube River Basin.

As a final note, I regret that not all the news in this issue of Danube Watch is good news. Unfortunately we must report the loss of two long-standing members of the ICPDR family. I would like to offer my condolences to the family and colleagues of Florian Stadiu and Petru Serban, both of whom passed away in recent months. Let us all be active to work on in their spirit – for the Danube River Basin and its people!

*Philip Weller, ICPDR Executive Secretary*



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Credit: Coca-Cola/Fallander

## EU COURT RULES THAT LEAKED SEWAGE IS WASTE

The European Court of Justice has ruled that sewage that has escaped from sewers should be classified as waste under the terms of the EU Waste Framework Directive. The ruling responds to criminal charges against Thames Water for illegal deposits of waste in relation to leaks from pipes which had seeped into the soil. The judgment confirms that escaped sewage must clearly be classified as waste, therefore triggering rules in EU waste law.

For more information, please visit: <http://curia.europa.eu/en/actu/activites/index.htm>



Credit: Christl

## HUBERT VON GOISERN'S MUSICAL VOYAGE TO THE BLACK SEA

Austrian pop star Hubert von Goisern set off in June on a journey to mark his role as the musical ambassador for the 2009 European City of Culture, Linz, Austria. The convoy of ships, including a barge converted into a travelling stage, heads east to the Black Sea this year; in 2008 it will travel west to the North Sea. At each stop he will perform with local musicians from 10 Danube countries. In 2009 the artists will be reunited in Linz for a final festival to celebrate the voyage.

For more information, please visit: [www.linz09.at](http://www.linz09.at)



Credit: Coca-Cola/Fallander

## DANUBE DECLARATION SIGNED

The Third Ministerial Conference of the Danube Cooperation Process (DCP) met in Belgrade on April 18 of this year. The DCP participants signed the Declaration, drawn up at the Pan European Conference on inland waterway transport in Bucharest in 2006, which will support the development of the European inland waterways network where the Danube will play an increasing role.

For more information, please visit: [www.danubecooperation.org](http://www.danubecooperation.org)



Credit: Mello

## NEW STAFF MEMBERS JOIN BLACK SEA COMMISSION

The Permanent Secretariat of the Black Sea Commission, in Istanbul, Turkey, has welcomed two new staff members. Ahmed Kideys, from Turkey, takes on the role of Executive Director of the Secretariat and has worked previously for the Turkish Ministry. Violeta Velikova, from Bulgaria, steps into the position of Pollution and Monitoring Assessment Officer, and was previously at the Institute of Fisheries and Aquaculture in Varna, Bulgaria.

For more information, please visit: [www.blacksea-commission.org](http://www.blacksea-commission.org)

31/7/2007–3/8/2007

CAPE TOWN, SOUTH AFRICA

#### **FOURTH BIENNIAL INTERNATIONAL WATERS CONFERENCE**

More than 350 participants from over 100 countries will come together at the conference, hosted by the Global Environment Facility (GEF) and its implementing agencies (UNDP, UNEP and the World Bank). The goals of the conference are to share experiences and innovative practices. The Danube is seen as a flagship of the GEF International Water Programme and the outcomes of 15 years of GEF involvement in the Danube Basin will be shared with others.

**For more information, please visit: [www.getf.org/iwc4/](http://www.getf.org/iwc4/)**

12–18/8/2007

STOCKHOLM, SWEDEN

#### **WORLD WATER WEEK**

The World Water Week is the leading annual global meeting place for capacity-building, partnership-building and follow-up on the implementation of international processes and programmes in water and development. This year, ICPDR's experiences will be shared in the workshop 'Development of Sustainable Water and Wastewater Solutions in the Baltic Sea, Danube River, Lake Victoria and Mekong River'. In addition, the Danube Box will be presented as a model of how to bring integrated river basin management to schools.

**For more information, please visit: [www.worldwaterweek.org](http://www.worldwaterweek.org)**

10–12/10/2007

BELGRADE, SERBIA

#### **SIXTH MINISTERIAL CONFERENCE 'ENVIRONMENT FOR EUROPE'**

Environment ministers and high level government officials from 56 of the UN Economic Commission for Europe (UNECE) region, including Canada and USA, will participate in the conference. At this occasion the countries of the Tisza River Sub-basin, Hungary, Romania, Serbia, Slovakia and Ukraine will present the Tisza River Basin Analysis Report in the frame of a side event. This report is the outcome of a collective effort – coordinated by the ICPDR.

**For more information, please visit: [www.unece.org/env/efe/welcome.html](http://www.unece.org/env/efe/welcome.html)**

7–12/9/2008

VIENNA, AUSTRIA

#### **IWA WORLD WATER CONGRESS AND EXHIBITION**

The conference, organised by the International Water Association, brings together 3,000 leading water professionals to exchange ideas and debate the key issues underlying the science and practice of water. The global event will also focus on cross-cutting themes like climate change, sustainable development and watersheds management, using the Danube as an example. The deadline to submit presentations is September 15, 2007.

**For more information, please visit: [www.iwa2008vienna.org](http://www.iwa2008vienna.org)**



Wetlands have much to offer, such as flood protection, groundwater recharge, pollution reduction and nutrient retention. But it is the wide variety of plant and animal life that make them such a treasure.  
*Credit: Naturfreunde*

## A functioning river system: incorporating wetlands into river basin management

Imagine being able to improve flood protection, reduce pollution, recharge groundwater and boost the diversity of plant and animal life all at the same time... Riverine wetlands can make it possible.

**“Wetlands are the most important part of an aquatic ecosystem”, says Christine Bratrach, head of WWF’s Danube/Freshwater Programme. Wetlands serve as a link between the land and the water, and provide a range of services that benefit all aspects of river activities.**

Wetlands act as a sponge and aid in flood protection and groundwater recharge, by absorbing water during the wet season and slowly releasing it during the dry season. Wetlands also help keep the river clean, by acting as a filtration system, trapping nutrients, like phosphorus and nitrogen, as well as sediments.

Finally, wetlands are bursting with life and provide a variety of different habitats, especially as they serve as spawning grounds for fish and nesting grounds for migratory birds.

In the last 150 years, however, the need to create farmland, generate electricity and make water transport easier has changed the dynamics of the river. Today, more than 80% of the historical flood plain areas in the Danube River Basin has been lost, according to the ICPDR's Danube Basin Analysis. The loss of wetlands means the loss of the functions they perform. "We disconnected most of the wetlands or converted them to agricultural land", says Thomas Hein, who leads a working group at the Wasser Cluster Lunz and served as Assistant Professor at the Institute of Hydrobiology and Aquatic Ecosystem Management at the University for Natural Resources in Vienna, Austria. "It means that the landscape hasn't the possibility to buffer, to retain water, to retain nutrients, transport processes are dominating."

**A vision of reconnection.** The EU Water Framework Directive (WFD) is a driving force in water management, and all countries within the Danube River Basin have committed to it, whether they are legally required to or not. While the WFD does not explicitly mention wetlands, they can help achieve the goals of reaching the 'good ecological status' of all waters by 2015 based on the principles of integrated river basin management. "If we talk about integrated river basin management and we forget about wetlands then the whole thing would fail in a way", says Bratrich.

The ICPDR's vision is to reconnect and restore approximately 330,000 hectares of wetlands in 17 sites along the Danube and its tributaries by 2015. As a first step, the ICPDR will ask Danube countries to provide a list of national measures to reconnect and restore wetlands. The Danube River Basin Management Plan will include a list of national projects related to reconnecting former floodplains, breaching dikes or mitigating their effects, significantly changing the maintenance of dams or dikes and restoring respective habitats.

"This is definitely something where the ICPDR is playing a very good role. I hope the national governments of the contracting parties will follow", says Bratrich. "To set a vision and goals to reconnect wetland systems within the frame of the WFD, and to have the ICPDR and especially someone like Birgit Vogel [Technical Expert on River Basin Management] in there who understands the system, is really a benefit for the 80 million people living in the catchment", says Bratrich.

**Working on wetlands.** The ICPDR's vision was introduced at the Wetlands Workshop, held in Tulcea, Romania, in April 2007. The workshop was organised

by the UNDP/GEF Danube Regional Project (DRP) and co-hosted by the Danube Delta Institute. The workshop brought together people from varying backgrounds, and presented the challenges on the basin-wide level. "If you work with the Danube you should have a more or less complete view of the Danube as a whole", says Carl Manzano, Director of the Donau-Auen National Park in Austria.

## NETWORKING PROTECTED AREAS



The signatories of the Tulcea Declaration, from left: **Jan Kadlecik**, State Nature Conservancy, Slovakia; **Maria Dakova**, Srebrana Biosphere Reserve, Bulgaria; **Szabolcs Zavoczky**, Duna-Drava National Park, Hungary; **Andrey Matveyev**, Danube Biosphere Reserve, Ukraine; **Paul Cononov**, Danube Delta Biosphere Reserve, Romania; **Biljana Panjkovic**, Institute for Nature Conservation, Serbia; **Carl Manzano**, Donau-Auen National Park, Austria; **Thomas Schneider**, Auen Institute Neuburg, Germany

In recent years, the Donau-Auen National Park in Austria has built cooperation with partners of protected areas in Slovakia, Hungary, Croatia and Serbia. At the Wetlands Workshop in Tulcea, Romania, in April, there was strong agreement to strengthen this cooperation and create a network of the larger protected areas along the Danube and areas of the main tributaries. "We are all protected areas along a big river, a navigable river, a river where flood protection is of course a big topic, where preservation and restoration of riverine forests and meadows is a topic", says Manzano, Director of the Donau-Auen National Park in Austria.

The protected area partners developed the 'Tulcea Declaration', as an appeal for creating such a network. "Now it's an idea, an appeal, but it has to become reality", says Manzano.

The workshop identified problems from the past that create obstacles in reconnecting and restoring wetlands. It can sometimes be difficult to get local residents to accept wetlands; many locals only want protection from floods. Wetlands often have multiple managing authorities, causing problems in communication. Finally, there are frequently competing needs for water, such as for fishing or drinking water, which means there are competing management strategies.

The workshop participants also identified what is needed to reconnect and restore wetlands: inventories of wetlands, high level support backed up by legislation, better understanding of how wetlands work, clear objectives for wetlands management and success stories to promote the benefits of wetlands restoration.

**Tailoring guidance to individual wetlands.** Interest in using wetlands to retain nutrients was behind

**"We have to be a team. It is not possible to work alone on rivers."** Iulian Nichersu, Danube Delta Institute

preparation of the ‘Technical Guidance on Nutrient Retention Capacities of Wetlands’ published by the DRP. The document shows case studies emphasising the nutrient retention capability of wetlands and provides a guideline for implementing this function.

The document will help fill several knowledge gaps that exist pertaining to wetlands. “It should help – not to operate with general numbers and finally end up with a large deviation from the reality of your wet-

“Wetlands are very important for the ecosystem, but they also play quite an important role for us as human beings – who probably prefer to live with nature and not against it. Whatever we do against wetlands in terms of river management we are also doing to a certain extent against ourselves.”  
Christine Bratrach, head of WWF’s Danube/Freshwater Programme

lands”, says Hein, one of the document’s authors. “Wetlands are different but you can categorise them, you can evaluate the exchange and then you have a proper idea of the potential role your wetland can play.” The guidance document and the technical report can be found at [www.undp-drp.org/drp/themes\\_wetlands.html](http://www.undp-drp.org/drp/themes_wetlands.html).

**Bringing wetlands back into the picture.** The largest international and most ambitious wetlands restoration project takes place in the Lower Danube Wetlands. In 2000, environment ministers from Bulgaria, Romania, Moldova and Ukraine signed the Lower Danube Green Corridor Declaration, recognising the need and responsibility to protect and manage more than 1,000,000 hectares of protected areas including Ramsar sites, UNESCO Biosphere Reserves, a UN World Heritage Site and national and nature parks.

The restoration projects will form a green corridor that will stretch to the Black Sea.

**Understanding wetlands better.** The Danube Delta National Institute in Tulcea, Romania, was created in 1970 to carry out research for the Danube Delta Biosphere Reserve and wetlands of national and international importance for biodiversity conservation and sustainable development. The institute’s expertise and potential has been recognised at the European level and it was designated in 2000 a Centre of Excellence for Deltas and Wetlands within the European Commission’s Centres of Excellence Programme.

Currently, the Institute is undertaking the huge task of mapping the entire Danube floodplain. Using Light Detection and Ranging (LIDAR), a remote sensing

system, the institute is collecting topographic data which will be used to create flooding models. So far, 70% of the Danube floodplain has been covered. A socio-economic investigation accompanies the research to investigate the economic-environmental connection. “These two components must create one defence line for villages”, says Iulian Nichersu, of the Danube Delta Institute, “and to create a plan for the Environment Ministry”.

**Letting the river do the work.** At the Donau-Auen National Park in Austria, the dynamics of the flowing stream are still active. The Danube flows 36 km through the 9,300 hectare National Park, and its waters flood the area creating the extreme range of conditions needed for a diversity of habitats. “Though the Danube is an international waterway, in the National Park we think of the river as the heart of the park”, says Manzano. “The water discharges, changing water tables, the connection between groundwater and the river itself – all of this is very important.”

Since the creation of the national park, commercial activities have stopped and the area highlights natural as opposed to constructed wetlands. “Our experience from the National Park area is that the easier, the more uncontrolled these openings are – this exchange of water – the more efficient in the long run it could be, efficient in terms of sustainability”, says Hein.

#### RAMSAR CONVENTION ON WETLANDS

The Ramsar Convention on Wetlands came into force in 1975 and is an important tool for global wetland protection. It is the world’s oldest international conservation treaty, with the aim of sustainable use of wetlands for mankind without disturbing the natural properties of the ecosystem.

The Ramsar List of Wetlands of International Importance, commonly called Ramsar sites, not only recognise the world’s most important wetlands, but are also an effective tool to help countries meet their goals of sustainability. About 80 wetlands of the Danube River Basin are included in the list of Ramsar sites.

The Ramsar Convention also provides technical documents and guidelines on transboundary cooperation, groundwater management, the implementation of national wetland policies, public participation and river basin management.

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



## Cooperation blooms in the Tisza River Basin

Every year from late spring to early summer, the Tisza River is transformed through the natural spectacle of millions of mayflies, or Tisza Flowers, fluttering on the surface of the water. *Credit: Czes*



Tisza flowers, a type of mayfly, dance around the surface of the Tisza River every June and anyone who has ever seen the dance of the little insects will never forget the beauty of it. The Tisza flower is just one of the treasures found in the Tisza River Basin. To preserve this and other natural values, transboundary cooperation is needed, as the Tisza, the longest tributary of the Danube, flows through five countries: Ukraine, Romania, Hungary, Slovakia and Serbia.

One of the main sub-basins of the Tisza is the Körös/Crisuri shared by Hungary and Romania. To strengthen cooperation between Hungarian and Romanian organizations responsible for environment and water management, a pilot project called 'Transboundary River Basin Management of the Körös/Crisuri River' began in 2005 and will finish this year. The project – managed by French experts and supported by the French Fund for Global Environment – is based on EU Water Framework Directive regulations.

During the last three years, expert missions including seminars, study tours and training have been carried out within the framework of the project. As results of the trilateral cooperation several valuable outputs were achieved, which can be utilised as a basis for the implementation of the future Tisza River Basin management plan.

For more information, please visit: [http://danubis.icpdr.org/pls/danubis/danubis\\_db.dyn\\_navigator.show](http://danubis.icpdr.org/pls/danubis/danubis_db.dyn_navigator.show)

*Diana Heilmann* is a project staff member at the ICPDR Secretariat responsible for the ICPDR Tisza Group activities.

## Conference brings groundwater issues to the surface



The conference brought participants from over 20 countries to Belgrade to share their experiences of large river basins, including the Nile and the Mississippi Basins. *Credit: Institute Jaroslav Černi/Kovac*

The IWA Regional Conference on Groundwater Management was held in Belgrade in June. The conference was held under the auspices of the Serbian Government and the Serbian Academy of Sciences and Arts, with planning by the Jaroslav Černi Institute for the Development of Water Resources and the Belgrade Waterworks and Sewerage Company.

The conference highlighted current issues in groundwater management, including preparation of river basin management plans for the EU Water Framework Directive. More than 300 participants from over 20 countries took part in the conference. "When you gather so many experts in one place", says Milan Dimkic, Director General of the Jaroslav Černi Institute, "you raise the level of knowledge of your country and for all of the people in attendance".

As one outcome of the conference, the Programme and Scientific Committee will publish a book entitled 'Groundwater Management in Large River Basins'. The book will include experiences and selected conference materials as well as theoretical approaches. The book will target politicians and experts involved in groundwater management, as well as professors, engineers and students. "The book will be a very good overview of water management in large river basins, and may be a good basis for the water management plans to be developed soon", says Dimkic.

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

Three boats have been donated from different countries and institutions for use by the JDS2 Team: Serbia's *Argus* will serve as the main research vessel; Hungary's *Széchenyi* ice-breaker will carry cargo and supplies; and the EU's Joint Research Centre ship *Piscus* will assess fish species. Credit: Literatby





## Million-euro boat expedition to test Danube pollution

The Second Joint Danube Survey launches this summer to collect and analyse samples taken from the river to improve the validity and comparability of water quality data received from its regular monitoring programme, the Trans-National Monitoring Network.

The Joint Danube Survey 2, also known as 'JDS2', is the world's biggest river research expedition in 2007. Its main goal is to produce highly comparable and reliable information on water quality and pollution for the entire Danube River and many of its tributaries. The ICPDR coordinates the implementation of JDS2.

Launched on August 14, 2007, from Regensburg, Germany, the three boats of the JDS2 will travel 2,375 km along the Danube River, through 10 countries, down to the Danube Delta in Romania until late September.

Water pollution is a major problem in the Danube River Basin. Danube governments need to make sound decisions about what future measures they will take to reduce Danube pollution and improve ecological health. This will help them to meet their obligations to implement the 'Danube River Protection Convention' which they signed in 1998, as well as the EU Water Framework Directive (WFD) – possibly the world's strongest water legislation. Nutrient, organic and hazardous pollution are all factors that could result in governments failing to meet this EU law.

**The three boats of the JDS2 will travel 2,375 km along the Danube River, through 10 countries, down to the Danube Delta.**

As a basis for their sound decision-making, Danube countries need high quality and comparable data and information. The JDS2 follows up, and will compare results over time with the work done during the first Joint Danube Survey (JDS1) in 2001. JDS2 also expands on the JDS1 by adding new parameters and sampling locations, and key Danube tributaries will be tested for the first time. The collected information will



The full-time International Team travelling the entire length of the Danube will include 18 scientists from Germany, Austria, the Czech Republic, Slovakia, Hungary, Serbia, Romania and Denmark. Teams of national scientists will also help with sampling and testing on board the ships on river stretches within their countries.

*Credit: Literathy*

further enable the ICPDR to have some of the most progressive river databases anywhere in the world – for example, in presenting information on thousands of species dependent on the river.

**JDS2 partners and cooperation.** The expedition has attracted significant international cooperation from all 10 of the main Danube countries from Germany to Ukraine, including EU and non-EU members. The full-time International Team travelling the entire length of the Danube will include 18 scientists from Germany, Austria, the Czech Republic, Slovakia, Hungary, Serbia, Romania and Denmark. The Team will use three boats donated from different countries and institutions: Serbia’s Argus will serve as the main research vessel; Hungary’s Széchenyi ice-breaker will carry cargo and supplies; and the EU’s Joint Research Centre ship Piscius will assess fish species. Teams of national scientists will also help with sampling and testing on board the ships on river stretches within their countries.

“The level of excitement and commitment is incredible”, says Philip Weller, Executive Secretary of the ICPDR. “We even have support from scientific laboratories across Europe and the private sector. In more ways than one, the people involved prove that the Danube is truly the world’s most international river basin.

It’s also important to keep in mind that both the planning and implementation of the entire JDS2 are highly complex tasks, requiring inputs and agreement from

many stakeholders, logistic precision, administrative support and financing”, adds Weller. “Working and living conditions on the boats can and do become difficult over such a long period of time and in such a variety of locations, testing human perseverance. Cooperation and teamwork are therefore essential ingredients for the success of the expedition.”

Some of the actual scientific testing will take place en route, from analysing water samples at the Argus’s own laboratory to electro-fishing along the Danube’s banks. Other samples will be sent to laboratories throughout Europe for testing – all centres of excellence for particular water quality parameters. Significant support was provided by private sector companies operating in the Danube Basin including the



Alcoa Foundation, Dexia Kommunalkredit Bank and Coca-Cola Hellenic Bottling Company. Finally, local authorities and the media living near the Danube will help in raising awareness and concern about Danube pollution and the need for everyone to participate in making the Danube clean and healthy.

**Danube water monitoring through the ages.** The Danube has an extensive history of water quality monitoring. It began with the 1985 ‘Bucharest Declaration’ which led to a series of monitoring stations for the basin. In 1992, the development of the Trans-National Monitoring Network (TNMN) for the Danube River was launched. Coordinated by the ICPDR, it now comprises over 75 monitoring stations. Over the last 25 years, other expeditions have navigated the Danube including the Equipe Cousteau in 1992 and the Burgund Survey in 1998 – however, these only focused on certain stretches of the Danube or limited parameters.

In 2001, the JDS1 was the first expedition to test the entire length of the Danube River and produce comparable, quality results. Hundreds of samples were

collected from selected river cross-sections at 98 stations. Over 140 different parameters were tested including chemical pollutants, biological parameters, aquatic flora and fauna and bacteriological indicators.

“The first JDS1 in 2001 had a mix of positive and negative results”, says Lucia Ana Varga, ICPDR President 2007 and Romanian State Secretary in the Ministry of Environment and Water Management. “On the positive side, it found high levels of biodiversity and rare species, with over 1,000 aquatic species

### JDS2 ROUTE, STOPPING POINTS AND TESTS

On the Danube River, there will be 95 sampling stations covering all 10 countries. The following tributaries will also be tested: Morava, Drava, Tisa, Sava, Velika Morava, Arges, Olt, Iskar, Russenski Lom, Jantra and Prut. Sampling at JDS2 stations will include five different sampling types: water, sediment, biology, suspended solids, mussels and fish, each taken from different sampling points (i.e. left, middle and right) at the station cross-sections.

Nine cities will also be visited by the expedition. Planned visits include an official launch ceremony in Regensburg (Germany) on August 14 and public events in Vienna (Austria), Bratislava (Slovakia), Budapest (Hungary), Osijek (Croatia), Belgrade (Serbia), Turnu Severin (Romania), Ruse (Bulgaria), Vilkovo (Ukraine) and Tulcea (Romania).

The ICPDR website will have special pages devoted to the JDS2. They will include a number of detailed fact sheets, from the full JDS2 route to the scientific results from the JDS1. There will also be maps, photographs and short stories from people taking the cruise, presenting a travel blog of interesting and timely facts and experiences from on board the ships beamed electronically to the ICPDR webmaster in Vienna [see [www.icpdr.org/JDS](http://www.icpdr.org/JDS)].

and higher-level organisms. At the same time, results showed concern over organic and microbiological pollution, eutrophication, heavy metals, oil from ships, pesticides and chemicals. Many tributaries were found to be problematic for a number of parameters including organic and microbiological pollution and heavy metals, in some cases making them serious sources of contamination.”

The JDS1 also raised significant awareness about the Danube and the need for pollution reduction measures. Followed by journalists and TV crews, it usually made it into the headlines of major newspaper, radio

broadcast and TV news. At many locations where the boats stopped, public events were held with messages about recent national and local efforts made to reduce pollution. The scientists and crew were often heartily welcomed on entering a new country, be it with music groups, champagne, local foods or majorettes.



Much of the scientific testing, such as analysing water samples, will be done in the Argus's own laboratory while en route. Other samples will be sent to laboratories throughout Europe for testing. *Credit: Literathy*

There was also plenty of opportunity for them to create close contacts with country and local representatives, experts, media and the public, thereby creating a new forum for raising public awareness.

**Helping decision-makers.** The results from the JDS2, when they come out in summer 2008, will improve the ability of Danube country leaders to decide on what measures still need be taken to meet EU law by 2015. “People want to drink clean water, swim in clean lakes and eat clean fish. We want the JDS2 to help make that happen”, says Varga.

Besides testing water, the three ships and their crews will also stop at many cities and towns along the way. Here, in cooperation with local and national representatives, they will actively raise awareness about the Danube and the need to clean up pollution. “Our horns and our flags will be blowing as we enter Danube ports to spread our message”, says JDS2 Team Leader and Hungarian scientist Béla Csányi. “For those people who won't be able to see us cruise in, we encourage them to go to our website to see what we've seen and heard so far.”

*Paul Csagoly* is a communications specialist and a writer on European environmental issues since 1996.

**“People want to drink clean water, swim in clean lakes and eat clean fish. We want the JDS2 to help make that happen”, says Lucia Ana Varga, ICPDR President 2007 and Romanian State Secretary in the Ministry of Environment and Water Management.**



## Green issues show up on the red carpet

An international film festival organised in Bulgaria aims to raise the public's awareness of ongoing environmental activities by putting conservation issues in the spotlight.

Since its establishment in 2004, the European Environment Film Foundation has developed its 'Green Wave - 21st Century Festival' into a creative international event with activities ranging from film screenings to workshops involving film makers, children and environmental experts. The third annual festival was held this May and hosted 93 films from 24 countries, including the premiere of four WWF documentaries.



An international jury awards the Stork Nest Grand Prix to films and television programmes dedicated to ecology and environmental protection. *Credit: European Environment Festival Foundation*

### Lights, Camera, Environmental Action!

The festival brings together people from various backgrounds to stimulate the creation of film and media products aimed at raising the public's knowledge of conservation and the environment. "Our festival and its activities are a true testimony of the significance attached to today's vital environmental issues and it is

a signal given not only to the Bulgarian community but also to the European community that environment protection should be one of the priorities on the agenda of state and public organizations", said Tzvetan Tzvetanov, Chairman of the Board of the European Environment Festival Foundation.

The festival enjoys a successful cooperation with the community of Dolna Banya, a small spa town at the foot of the Rila Mountains south of Sofia. The city is famous for its mineral springs and white storks, and is one of Bulgaria's most ecologically-engaged communities.

The festival is organised under the patronage of the Bulgarian Vice President, Angel Martin, and financial support comes from the Dutch and Austrian embassies in Bulgaria. In 2006, the festival received a grant from the UNDP/GEF Danube Regional Project and was recognised as one of the best NGO projects in the basin.

**Winning messages.** An international jury of leading media professionals and experts in the field of ecology and environment awards six films, the 'Stork Nest Grand Prix', in the following categories: documentaries, scientific and educational films, television programmes, tourist films and productions about preserving cultural heritage and video spots. "The messages of these films remind us once again about the most important thing: to love nature and to keep it clear in the name of people's life and health", said Nevena Pramatarova, Manager of the European Environment Festival Foundation.

### WINNERS OF THE STORK NEST GRAND PRIX 2007

#### Documentary:

The Tiger and the Monk, ORF, Austria

#### Television Programme:

Other People: Gorillas and Pigmies, TVE, Spain

#### Scientific/Educational Film:

Budapest Wild, T.Z.S.M. Film Productions, Hungary

#### TV Spot:

Stop the Climate Change, Priroda na Zaem Association, Bulgaria

#### Travel and Cultural Heritage:

Santiago de Compostela, TVE, Spain

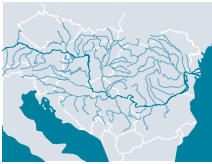
#### Balkan Film:

Your Fur Coat was once Alive, RTS-Serbian Broadcast Company, Serbia

"We are really pleased to know that festivals like 'Green Wave' are dedicated to ecology and the environment", said Mar Gómez Ferrera, Coordinator of Festivals TVE, Madrid, which won two awards. "We hope it will encourage media professionals to make TV documentaries and programmes in order to increase environmental sensibility."

For more information, please visit:  
[www.euroekofest.org](http://www.euroekofest.org).

*Alexander Zinke* is a management consultant for environment based in Vienna, and is involved in water management and nature protection projects in the Danube Basin. [www.zinke.at](http://www.zinke.at)



## Cleaning up detergents in the basin

With EU legislation on phosphates in detergents still years away, the European Commission is recommending countries in the Danube Basin tackle bans at the national level.

**The European Commission will propose restrictions on phosphate-containing detergents next year to combat eutrophication. In the meantime, however, the European Commission is encouraging Danube countries to put national efforts into place, reinforcing both the urgency and the need for action. “There won’t be EU legislation for some time”, says Philip Weller, ICPDR Secretary, “so the EU has said to the Danube countries: Go ahead and put into place national efforts.”**

The European Commission’s report to Council and the European Parliament on detergents and the use of phosphates recommended that Danube countries

be notified that the environmental consequences of excessive phosphates in the Danube River region were very severe, both for the Danube and for the Black Sea.

**Danube countries leading the way.** Within the Danube Basin, Germany and the Czech Republic have adopted legislation to ban phosphates in detergents, and Austria has eliminated phosphates from detergents through a voluntary agreement with industry. The overall need now is to expand this to the rest of the basin. The ICPDR Standing Working Group has recommended that countries with the highest population and high phosphate detergent use – Bulgaria, Croatia, Hungary, Romania, Serbia and Slovakia – should initiate a ban or a reduction of phosphates together with industry.

Phosphates are commonly used in domestic and industrial detergents to soften water and make washing more effective. However they can also lead to excess nutrients in the river, reducing biodiversity through eutrophication. Credit: Csagoly



ICPDR President Lucia Ana Varga has sent letters to Danube countries indicating the need to move ahead with these initiatives. “It is my belief that reduction of phosphates in detergents is needed across the Danube Basin”, says Varga. “As we have learned, the continued use of phosphates in detergents in the Danube River Basin could undermine the substantial investments in pollution control.”

**Addressing the problem together.** In October of this year, Romania will bring representatives of all Danube countries together with high level representatives from the business sector dealing with phosphates for a meeting in Bucharest to discuss a basin-wide action on phosphate reduction.

“proceed with national legislation and/or further voluntary agreements to replace phosphate-based detergents to protect the Danube and Black Sea from eutrophication while awaiting the outcome of the Commission’s evaluation of the need for measures at the EU level.”

This decision was based on meetings between the ICPDR and representatives from the DG Environment and the DG Industry where the ICPDR was able to present the EU with information that clearly identi-

While any ban on phosphates in detergents must be initiated at the national level, the ICPDR will coordinate this action basin-wide; countries must work together on a regional basis to initiate national actions. “Under the frame of the ICPDR”, says Varga, “we can all benefit from the exchange of experience and coordinate the progress in reducing the nutrients and other pollutants.”

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



# Transboundary cooperation brings the Sava Commission closer to its goals

The first meeting of the river basin commission puts four countries well on their path towards establishing sustainable water management and an international navigation regime on the Sava and its tributaries.

The first meeting of the parties to the FASRB was held in Zagreb to discuss coordination of transboundary cooperation in the Sava River Basin and to develop the Sava River Basin Management Plan. Credit: Secretariat of the Sava Commission

**The first meeting of the Sava River Basin Commission was held in Zagreb, Croatia on June 1, 2007. The International Sava River Basin Commission was established in 2005 to implement the Framework Agreement on the Sava River Basin (FASRB), signed by Bosnia and Herzegovina, Croatia, Serbia and Slovenia. The main goal of the commission is to coordinate transboundary cooperation in the Sava River Basin.**

ment in the Sava River Basin as the richest water area in the Danube Basin.”

The Sava Commission will meet at least once every two years to review the work and actions of the Sava Commission, make decisions based on proposals and recommendations of the Sava Commission, consider and adopt proposals of new protocols and amendments to the FASRB, and consider and undertake any additional

actions that may be required for fulfilment of purposes of the FASRB. This first meeting was, according to Kemal Karkin, Chairman of the Sava Commission, “a good incentive for the Sava Commission and the Parties to the FASRB in further realisation of goals of the FASRB”. The next meeting of the parties will be held in Belgrade in 2009.



At the meeting, the parties adopted the report on the work of the Sava Commission from 2004 to 2007, the Methodology of Permanent Monitoring of Implementation of the FASRB and the Declaration of the First Meeting of the Parties.

**Strategising for water management.** The Sava Commission is currently working on developing the Sava River Basin Management Plan as well as developing the strategy to implement the FASRB, establishing the Sava Information System, creating additional protocols to the FASRB and preparing a set of rules and other documents related to navigation. “The FASRB plays a significant role in implementation of the EU Water Framework Directive”, said Andrej Vizjak, Minister of Economy for Slovenia, “whilst planning the develop-

**Reaffirming commitment.** The Declaration of the First Meeting of the Parties, adopted at the meeting, stresses the liabilities of the Parties and the Sava Commission and provides directions for future work. Božo Ljubić, Minister of Communications and Transport for Bosnia and Herzegovina, expressed support for the declaration, saying that it “reaffirms the commitment of the Sava countries to the FASRB, and, hereby, the achievement of goals in the field of navigation”.

For more information, please visit:  
[www.savacommission.org](http://www.savacommission.org).

*Dejan Komatina* is the Secretary of the Sava Commission.  
*Ljiljana Pandžić* is the Expert Associate at the Sava Commission Secretariat



## MULTI-PURPOSE CANAL DANUBE-SAVA



The Spacva Forest in the Sava wetlands is one of the areas that will be affected by construction of the canal. *Credit: Euronatur/Schneider-Jacoby*

The Croatian Ministry of Environmental Protection, Physical Planning and Construction (MoE) published the Physical Plan for the Multi-Purpose Canal Danube-Sava in March 2007 and the public hearing was closed on June 11, 2007. Although construction of the canal is planned for 2010, there is a great lobby – including Bozidar Kalmeta, Minister of the Sea, Tourism, Transport and Development, which is responsible for the canal – pushing to begin construction measures in 2007 in order to use 100,000 m<sup>3</sup> of excavated material to build the traffic corridor.

Euronatur participated in the public hearing and sent written comments on the project's main problems to both responsible counties in Slavonski Brod and Vukovar, and a letter was addressed to all members of Parliament. The key problem concerning the protection of the Danube is the plan to drain the largest complex of oak forests, the Spacva-Bosut Depression, to improve agricultural use. Besides the central Sava Basin, the area is the largest retention area along the Sava and is shared by Croatia and Serbia.

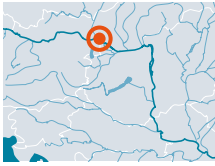
Although the physical plan was prepared for the overall canal, the maps and the assessments only show the 61-km-long corridor for navigation (10,600 ha). In all other documents on the canal, the size of the project area is at least 20 times

larger and includes three other functions – irrigation, enrichment of low discharges, surface drainage (173,000 ha) and drainage of arable land (62,000 ha). Therefore, the maps and the assessment prepared by the MoE do not show the entire extent of the project. Euronatur asked the MoE to include the planned drainage facilities, such as canals and sluices, in the physical plan as they are a part of the canal. Flood risk assessments, including current flood maps and a calculation of storage capacity, are also needed for the 3,642 km<sup>2</sup> transboundary Bosut-Bidj Basin, as the area proved important for flood control during peak floods in spring 2004.

Instead of the canal, what this unique transboundary area needs is an integrated floodplain development programme comparable to the Central Sava Basin. Construction of the canal will have negative ecological effects, but is also economically unreasonable. Transporting goods from Vukovar to Zagreb, Ploce and Rijeka will be much cheaper by train and will have less impact on the environment.

For more information, please visit: [www.euronatur.org/Save.save.0.htm](http://www.euronatur.org/Save.save.0.htm).

**Martin Schneider-Jacoby, Euronatur**



# Danger heading downstream: the Accident Emergency Warning System in action

An internet-based information system, integrated with the ICPDR's Danubis system, provides round-the-clock communication in the event of a major trans-boundary accident.



**A warning message flashed out from Slovakia at 11:19 a.m. on November 20, 2006. The message, alerting downstream users of pollution on the Morava, originated from Slovakia's Principle Alert Centre (PIAC) and was sent to PIAC 02 (Austria), PIAC 03 (Czech Republic), PIAC 05 (Hungary) and the ICPDR. The downstream countries all quickly confirmed receipt of the message and Slovakia's PIAC sent an End of Alert message later that day. The twist? The pollution spill didn't exist.**

Rather than wait for the signs of a major pollution incident, the AEWS alerts downstream countries early enough that mitigating measures can be taken well in advance. *Credit: Radosavljevic*

The message was part of a test of the Accident Emergency Warning System (AEWS). The AEWS is activated whenever there is a risk of transboundary water pollution, or threshold danger levels of hazardous substances are exceeded.

Measures on the Drava River are put into place to control pollution and eliminate fuel. Of the 61 accidents registered between 1997 and 2006, 35 incidents were caused by oil pollution. *Credit: Hanicar*

**Snapping into action.** "The AEWS is one of the key elements for good neighbourhood and solidarity inside the Danube Basin", says Richard Stadler, Head of the Austrian Delegation to the ICPDR. The system's warning messages to downstream countries help national authorities put environmental protection and public safety measures into action. The ICPDR Secretariat maintains the central communication system, which is integrated with the ICPDR information system Danubis.

The AEWS came into operation in April 1997 and between May 1997 and December 2006, the system registered 61 accidents. Of these, 35 incidents were caused by oil pollution. The system proved its strength in 2000 during the Baia Mare and Baia Borsa spill accidents on the Tisza River. The system effectively enabled timely activation of measures that prevented more extensive damage to people and ecosystems downstream.

**More support needed.** The results of the 2006 test showed that the AEWS provides a sufficient framework for immediate distribution of alarms. However, AEWS experts determined that PIACs need more attention and support from national governments to ensure appropriate system operation and to guarantee round-the-clock preparedness. The AEWS must be adequately linked with all relevant actors at the national level such as fire brigades, police and civil protection. "Most important is a detailed analysis of the national communication routes", says Stadler.

At present, two PIACs, Germany and Moldova, are being restructured, and several other PIACs need to strengthen their capacities. The current setup in Serbia and Bosnia and Herzegovina, for example, does not



enable round-the-clock preparedness as required, and the two alert centres in Ukraine have not adequately participated in AEWS operation during recent years. "We strive for a 24 hours a day and 7 days a week availability of all the persons who are a necessary part of the alert giving system in all 14 Danubian countries", says Stadler, "This is an ambitious goal but I am sure that we will achieve it now very soon."

For more information on the AEWS, or to see the full report, please visit: [www.icpdr.org](http://www.icpdr.org).

*Igor Liska* is the technical expert for water quality and water management at the ICPDR Secretariat and supports the operation of Danube AEWS.

# The Danube Box gets high marks in schools

Although water education materials exist in nearly all countries in the Danube, tools focusing on the concept of integrated river basin management have been missing until now. *Credit: Coca-Cola / Fallander*



The popularity of the Danube Box, introduced during last year's Danube Day celebrations, is spreading across the basin. The Danube Box, an education kit for teachers of children aged 9 to 12, helps students appreciate the Danube River and its challenges.

Hungary was the first to translate the Danube Box, and the Hungarian version will be launched as part of an international ecology camp at the beginning of the school year. A translation for the Serbian Danube Box is under way and teachers hope to have the supporting materials ready this autumn. "This is an extremely interesting programme and it will be great to implement it into many school subjects", says Budimka Reljin, from 'Kosta Trifkovic' elementary school, who participated in the teacher's workshop in Novi Sad.

In Romania, an integrated education and awareness-raising campaign was launched to promote the Danube Box and to encourage adding the Danube River as a school topic. The kick-off for the campaign, a training session for 30 teachers, was part of Danube Day 2007.

Planning is under way to implement the box in Germany, and discussions are in progress for its use in other Danube countries. The Danube Box is already in use in Austria. The Danube Box was developed as part of the Green Danube Partnership between Coca-Cola Hellenic Bottling Company, the Coca-Cola Company and the ICPDR.

For more information, please visit: [www.danubebox.org](http://www.danubebox.org).

*Doris Gfrerer* is an ICPDR consultant and works on the implementation of the Danube Box.

## In memoriam

In spring 2007, the ICPDR family lost two individuals who shaped the establishment and the current status of international cooperation in the Danube River Basin.

**PETRU SERBAN († 26 MAY 2007)**  
**Member of the Romanian Delegation to the ICPDR (2000–2007)**  
**Member of the ICPDR River Basin Management Expert Group (2002–2007)**

Petru Serban was the Director of Apele Romane, the agency responsible for water management in Romania. Petru contributed greatly to harmonising the Romanian water legislation with the requirements of the EU Water Framework Directive.

Through Petru's work and vision, Romania successfully succeeded in meeting its obligations to the EU.

Petru was especially gifted at bringing qualified experts together to identify common ground and forge new successes for his team and Romania as a whole.

**FLORIN STADIU († 9 JUNE 2007)**  
**Secretary of State, Water Department, Ministry of Environment, Romania,**  
**Head of Delegation of Romania to the ICPDR (2001–2005)**

Florin Stadiu was a founding member of the ICPDR. He understood the need to adapt to new philosophies and was extremely skilled in building bridges of understanding between all Danube players.

A tireless advocate of Romanian water sector prosperity, Florin was Secretary of State of the Water Department in Romania, and he created the Romanian Administration Apele Romane and the River Basin Committees.

Visionaries such as Florin are always crucial for international water cooperation.



# Recognising efforts to protect and restore rivers in the Danube Basin

The ICPDR's efforts to ensure the sustainable and equitable use of waters and freshwater move into the spotlight as the ICPDR is chosen as a finalist for the International Thies Riverprize.

Winners of the 2006 Thies Riverprize included Torbay Catchment Group and WA Department of Water for their catchment restoration project on the south coast of Western Australia, and the Sha River Restoration Project for their work on China's Sha River. Credit: Atmosphere Photography



The ICPDR has been chosen as one of four finalists for the Australian-based International Thies Riverprize. The world's largest prize in the field, the prize is a partnership between the International Riverfoundation, established to advocate the protection and restoration of the world's rivers and waterways for future generations, and Riverfestival.

"The fact that we're short-listed for this is clearly an acknowledgement of the significance of the work that the ICPDR has done", says Philip Weller, ICPDR Executive Secretary.

### Recognising ICPDR's efforts.

The ICPDR was selected based on its collaborative approach to improving water quality. Paul Greenfield, Chairperson of the Riversymposium, said the project exemplifies the spirit of the International Thies Riverprize. "Many countries are facing a water crisis and now more than ever it is important for the International Thies Riverprize to reward and promote best practice water management", says Greenfield. "All people involved in the ICPDR project should feel proud their efforts have been recognised in this way."

**"Many countries are facing a water crisis and now more than ever it is important for the International Thies Riverprize to reward and promote best practice water management," says Paul Greenfield, Chairperson of the Riversymposium.**

Three other government and community groups from China, New Zealand and Canada received recognition as finalists for the prize for their work in tackling pollution, water quality, erosion and flooding.

**Possibility for expanded activities.** Receiving the prize would mean recognition for the ICPDR's commitment to the river basin. Additionally, however, prize winners will receive AUD \$300,000 (€189,000). This would allow the ICPDR to expand its activities in the basin. "What we have indicated to the prize committee, is that

those resources would be used to further extend the public awareness and outreach activities and to allow us to have more intensive cooperation with other international river basins to share the knowledge that we have and to learn from the experience in other basins", says Weller.

Winners of the International Thies Riverprize will be announced at a special ceremony on September 4, 2007, during the 10th International Riversymposium and Environmental Flows Conference in Brisbane,

Australia. The symposium will focus on the emerging field of river management and environmental flows. The programme will feature presentations on innovative practices and case studies from all over the world and a wide range of perspectives on managing river flows for

people and ecosystem health. The Riversymposium is part of Riverfestival, a community and environmental festival celebrating waterways and culture.

For more information on the International Thies Riverprizes, please visit: [www.riversymposium.com](http://www.riversymposium.com).

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



# The ICPDR Joint Action Programme

The report on the Joint Action Programme summarises achievements realised through the work of the countries under the ICPDR. This analysis identifies the challenges that remain in order to implement the Joint Programme of Measures.

Most improvements in water quality are due to the impact of the investment programme of the water industry and pollution control measures, which have dealt with many point sources of pollution such as sewage systems, wastewater treatment plants, industrial sites and agricultural units. *Credit: Aquasystems*

In 2000, the ICPDR developed the first Joint Action Programme (JAP) for the period 2001–2005. The JAP focused on pollution from point and diffuse sources, wetland and floodplain restoration, reduction and control of priority substances, water quality standards, prevention of accidental pollution, flood control and river basin management. Attention was given to both structural investments and non-structural measures like policy reforms measures with the overall goal to enlarge nutrient reduction and to improve protection of transboundary waters and ecosystems.

**Introducing policies and legal instruments.** One conclusion that can be drawn from a review of the JAP is that commitment to EU directives is central to success and this commitment must be fostered throughout WFD implementation. Danube countries faced substantial challenges in establishing and strengthening the policy and institutional framework required for functioning market-based and democratic societies. Today, progress can be reported with all Danube countries in redesigning policies, programs and regulations, in establishing appropriate incentive structures,



redefining partnerships with stakeholders and strengthening financial sustainability of environmental services. Still, the key policy challenge Danube countries face is to identify the most effective ways of implementing EU environmental directives.

“The Joint Action Programme can be seen as the ICPDR’s first touchstone whether a joint formulation and agreement on measures inside a wide framework would be possible and whether these measures would be implemented in time”, says Richard Stadler, Head of the Austrian Delegation to the ICPDR.

**There are a total of 224 municipal wastewater sector projects serving a combined total of nearly 22 million inhabitants in 11 Danube Basin countries.**

**Improving institutional tools.** Several significant changes in the water sector, in the regional water management and its social and economic implications have considerably improved institutional and intergovernmental coordination in the Danube Basin. State control has been replaced with the distribution of responsibilities and greater levels of autonomy at regional and local levels. This has made it necessary to develop new and more complex networks of partnerships and has increased the numbers and variety of players involved in water management.

**Meeting challenges at the local level.** There is an increasing tendency of the local authorities in the Danube countries to take more responsibility in environmental and water management strategies, due to their increasing role in national policy. Additionally, local water policies will have to consider the transboundary nature of the border rivers and the need to take measures and decisions together with the neighbouring communities at different levels by implementing solutions at the local or regional level wherever possible.

Still, the role of environmental authorities in most of the Danube countries at the local level needs to be strengthened by integrating environmental considerations into economic development. There are areas where the absence of adequate policy instruments and institutional capacity to support the monitoring of water use leads to increased service costs and the eventual deterioration of the resource and supporting service infrastructure.

**Investment projects throughout the basin.** There has been a considerable improvement in water quality of the Danube Rivers since 1995. Annual reductions



Providing safe and clean water for people and nature is one of the goals of the ICPDR. *Credit: Coca-Cola/ Fallander*



Most Danube countries have functional institutional administrative structures at the central and regional or local level with clear responsibilities. Inter-ministerial structures exist at the national level, which assures coherence within sectors and complements the application of laws and regulations. Investigations show that there is a need for changes or amendments to make institutions in some of the Danube countries more efficient and to avoid duplication of mandates and responsibilities in relation to water management and pollution control.

of more than 290,000 tons of BOD, nearly 45,000 tons of total Nitrogen, and approximately 18,000 tons of total Phosphorus are estimated. Improvements in water quality since 1995 are largely attributable to the impact of the investment programme of the water industry and pollution control measures, which have dealt with many point sources of pollution such as sewage systems, wastewater treatment plants, industrial sites and agricultural units.

There are a total of 224 municipal wastewater sector projects serving a combined total of nearly 22 million inhabitants in 11 Danube Basin countries. Of the 224 projects, 86 are fully financed and have either been completed or are under implementation. The combined investment cost of the 84 fully financed projects is approx. 2,268 MEUR, which represents approximately half of the total.

**State control has been replaced with the distribution of responsibilities and greater levels of autonomy at regional and local levels, increasing the numbers and variety of players involved in water management.**

Most of the investment in the wastewater sector has been realised in the countries that joined the EU in 2004: the Czech Republic, Hungary, the

many of these projects, to help cover the co-financing requirements. The World Bank-GEF Investment Fund has also participated in municipal wastewater projects, in addition to agricultural reform and other nutrient reduction efforts.

Since 1992 the European Community (PHARE and TACIS programmes) and the UNDP/GEF (Danube Pollution Reduction Program 1997 to 1999) have supported the efforts of the Danube countries to develop the necessary mechanisms for effective implementation of the DRPC. Supporting the basin countries in the reduction of nutrient loads into the Black Sea is the objective of the Strategic Partnership and a priority. GEF will have invested \$97.5 million in the Danube Basin by 2006.

Success in the Danube Basin is a result of all countries working together. "The positive network created by all Danube states helps the single Danube state to overcome difficulties and constraints", says Richard Stadler, Head of the Austrian Delegation to the ICPDR. *Credit: Wackerhausen*



The presence of the European Union, as a contracting party to the Danube Convention and an observer to the Black Sea Convention, helps guarantee success by tying concrete environmental achievements directly to the benefits of EU membership. Large infrastructure investment requirements, in

Slovak Republic and Slovenia. A large proportion of project financing for these investments was realised from local and national sources. Significant progress has been made in Romania since the last DABLAS update in 2004, and Bulgaria and Croatia have increased project preparatory efforts but still lack financing. Limited development in the wastewater sector has been achieved in the downstream, non-EU countries, including Bosnia and Herzegovina, Serbia, Moldova and Ukraine.

particular in the water and sanitation, are essential if the countries are to meet EU standards. Overcoming these financial needs is a huge challenge for some lower Danube countries that have rather limited financial resources for investment expenditure as compared to upper and middle Danube countries.

"The far-reaching successes the Danube countries had achieved during the six years of its duration have proved that the ICPDR has become a strong carrier of achievements", says Stadler. "The positive network created by all Danube states helps the single Danube state to overcome difficulties and constraints."

International financing has been instrumental behind the development of the municipal wastewater sector in the Danube River Basin. EU grant financing has played a large role in funding several projects throughout the EU countries. The EBRD and EIB have extended loans to municipalities for

*Mihaela Popovici* is a Technical Expert for Water Management at the ICPDR and is responsible for the Joint Action Programme.

← 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 showcased the variety of cultures in the Danube River Basin. Fold out to see images from celebrations across the basin.

**ICPDR MEETINGS**

For final dates, please consult the ICPDR calendar, available at [www.icpdr.org](http://www.icpdr.org).

12-14/9/2007

BUDAPEST, HUNGARY

**FLOOD MAPPING WORKSHOP & FLOOD PROTECTION EXPERT GROUP**

17-18/9/2007

SZOLNOK, HUNGARY

**TISZA GROUP**

4-5/10/2007

ZAGREB, CROATIA

**NAVIGATION/ECOLOGY PROCESS: WORKSHOP III**

15-16/10/2007

AUSTRIA, EXACT LOCATION TO BE DETERMINED

**RIVER BASIN MANAGEMENT EXPERT GROUP**

3/12/2007

VIENNA, AUSTRIA

**CLIMATE CHANGE CONFERENCE**

4-5/12/2007

VIENNA, AUSTRIA

**ICPDR ORDINARY MEETING****DW 03/07****UPCOMING ISSUE****Danube Day Review****Tisza River Basin Analysis****Business and the Danube****The EU Flood Directive**



# Danube Day 2007

This is a first overview of some of the events which took place celebrating Danube Day 2007! There will be an article in the next Danube Watch and a review calendar is under preparation.

## DANUBE DAY

### GERMANY

Regensburg held a colourful and inspiring art extravaganza, where children of all ages produced works of art inspired by the Danube; 'wetter' activities took place in Sigmaringen-Laiz.



### AUSTRIA

Events in Vienna were organised around a giant puzzle of the Danube Basin; other events took place in Krems, Linz and on board a ship in the Wachau.



### CROATIA

Celebrations in Ilok and Vukovar focused on music and dance and gave visitors the chance to learn about the songs and customs of the Danube region.



### SLOVENIA

Danube Day combined stunning art with a serious focus on the issue of water conservation and linked Danube Day to International Sava River Day.



### BOSNIA AND HERZEGOVINA

Danube Day was celebrated in Bosnia and Herzegovina with local schools and NGOs getting involved in art and educational projects focused on the river.



### HUNGARY

Hungary hosted the 4th Danube Day Regional Meeting of Hungary, Serbia and Croatia at Baja, and the Waters Unite international canoe tour with a central event in Ezstergom.



### THE CZECH REPUBLIC

Danube Day celebrations throughout the Morava River Basin invited school children to participate in Danube Day art competitions and a film festival.



### SLOVAKIA

Children created Danube Greetings – messages of international solidarity – to send out, and the best were read out at the Bratislava festivities.



### ROMANIA

On Danube Day Romania launched a large campaign to raise awareness about the importance of clean water – one of the tools to be used: the Danube Box.



### UKRAINE

A convoy of cyclists and ships travelled from Odessa to the Danube delta handing out leaflets and posters to share information about the Danube.



### MOLDOVA

Cahul in the lower Prut River Basin held a vibrant and colourful folk festival, with singing, dancing and music from across the region.



### BULGARIA

The Danube River Basin Directorate organised a series of events along the Bulgarian Danube including workshops with experts and public events.



### SERBIA

As part of a national campaign, children were treated to the theatre production, "Danube Flowers in Songs and Plays", produced by the Cultural Centre of the City of Valjevo.

