

Report:

MURA – DRAVA – DANUBE

5-country Biosphere Reserve Conference

5 – 8 September 2021

Gornja Radgona, Bad Radkersburg



The Mura, Drava and Danube form one of the most valuable river corridors in the Danube Basin, a lifeline for people, species and habitats. Flowing more than 700 kilometers and connecting an area of 930,000 hectares stretching across Austria, Slovenia, Hungary, Croatia and Serbia, they connect a unique landscape of the **UNESCO 5-country Biosphere Reserve Mura-Drava-Danube** (TBR MDD). Designated on September 15th last year, the area has become **the largest riverine protected area in Europe**. However, connectivity within the corridor has been reduced due to human-made changes to rivers and their natural processes.

Support for the challenges of joint management and conservation of such an extensive river corridor of Mura-Drava-Danube in 2021 and 2022 is provided by the Danube Interreg project lifelineMDD or with the full name "Protecting and restoring ecological connectivity in the Mura-Drava-Danube river corridor through cross-sectoral cooperation". The project was a substantive continuation of the work done on the Interreg coopMDD project, in which good cooperation between the managers of the protected areas of all five countries had already been initiated and a cross-border management program of the planned TBR MDD had already been established. The lifelineMDD project is directly connected to these efforts and pursues the motto: "**Living Rivers, living sediments, living cooperation**".

The goal of the lifelineMDD project is to prepare an integrated cross-border strategy for the restoration of the river corridor of three rivers in five countries, which will be based on scientific research, pilot measures and cross-sectoral learning. A good basis for this is a project partnership consisting of a range of different organizations, from universities and nature conservation institutes to public authorities and local communities. The project activities were carried out by 12 project partners and involved 17 associated strategic partners from various sectors as well as non-governmental organizations and public institutions at international level.

The project includes studies of fish and bird populations and assessments of the hydro-morphological conditions of the Mura, Drava and Danube rivers. Until now, there have been no unified methods of conducting various species inventories in this large area, so the studies of fish and birds is considered as a high-quality basis for further scientific work. Moreover, further work will be done on the basis of the hydro-morphological assessments of the river conditions, which will include the approaches described in the River restoration toolbox, which was created as part of the project. This includes various types of measures that will largely help to improve the sediment condition in the three rivers. Pilot renaturation works were done in three areas along the TBR MDD, thoroughly on the Mura River in Austria in the area of Gosdorf and in Slovenia in the vicinity of Hrastja-Mota, in Serbia on the Lovrenac channel, a side channel of the Danube River. The project also aimed to establish a joint metadata base for biotic and abiotic data to encourage cooperation between all five countries.

The final conference marks the first anniversary of UNESCO's designation of the Mura-Drava-Danube river system as the world's first **'5-country biosphere reserve'** and serves as **'final conference of the lifelineMDD project.'** Over three very intensive days, between the 5-8th of September, the final conference of project lifelineMDD took place in the Austrian-Slovenian border area in Bad Radkersburg and Gornja Radgona, with the participation of over 100 registered guests. Participants consisted of Mayors from both municipalities, political representatives from Austria as well as Slovenia, high representatives from the organizing institutions (WWF AT & IRSNC), members of the TBR MDD Steering Committee, keynote speaker Hannes Knapp and many other experts from the TBR MDD region from different organizations and institutions. The conference schedule spread over three days, including **LIFE Proposal Mura-Drava-Danube: 2nd Exchange Workshop** and **TBR MDD Steering Committee Meeting** on Monday, following with Monday's Welcome dinner with live band Pravi Moment. Following day's participants were offered a varied programme with high-level speakers moderated by internationally recognized Steve Chaid, excursions to the TBR MDD area and opportunities for informal exchange.

Lifeline MDD – cross-sectoral partnership for ecological connectivity in the TBR MDD

Day#1 Final conference Monday, September 5th 2022

The first day of the conference was held in the Castle Gornja Radgona in Slovenia. On the first day there was a workshop for the proposal of a potential LIFE project which is based on elements of the findings from the lifelineMDD project. Additionally, there was a Steering committee meeting where the members of the SC could meet again in live and discuss urgent issues concerning the management of the TBR MDD, including valuable inputs from the lifelineMDD project. In the evening we had a welcome dinner with music as most of the participants already arrived. The welcome dinner was an opportunity for the celebration of the 1st anniversary of the Transboundary Biosphere Reserve Mura-Drava-Danube where representatives from all of the five countries were present. Not only was this first evening a good opportunity for participants of the conference to informally meet each other after a rather long period of online meetings, the joint celebration of the first anniversary of the TBR MDD also strengthened the cross-border and cross-sectoral cooperation and unity, which served as important basis for the upcoming conference days and inspired discussions.



Day#2 Final conference Tuesday, September 6th 2022

Welcome words to the conference by moderator Steve Chad

Karl Lautner - mayor of Bad Radkersburg; Stanislav Rojko - mayor of Gornja Radgona; Cornelia Schweiner & Julija Majcan - political representative of Styria; Gordana Beltram - MESP Slovenia, Gašper Hrastelj - Secretary General of the SNC for UNESCO; Arno Mohl - WWF Austria; Teo Hrvoje Oršanič - director IRSNC

Protecting and restoring ecological connectivity in the Mura-Drava-Danube river corridor through cross-sectoral cooperation

Kerstin Böck, WWF Austria

Five countries, three rivers, one vision -presentation of Common Workplan TBR

András Schmidt, Ministry of Agriculture, Hungary

Biosphere Region - Chance for sustainable future

Hans D. Knapp, Botanist and Landscape Ecologist

Process oriented restoration of river and riparian ecosystems

Egger Gregory, Researcher & Consultant

Cross-sectoral restoration of connectivity in the TBR MDD

Kerstin Böck, WWF Austria

Lonjsko Polje Nature Park – The Living Landscape and Floodplain Ecosystem of the Central Sava River Basin

Goran Gugić, Former Director of Lonjsko Polje Nature Park

Grassland Management Within Danube-Drava National Park (Hungary)

Tibor Parrag – László Fenyősi, Danube-Drava National Park Directorate

Geopark Karavanke: Nature's classroom

Lenka Stermeckí, IRSNC

Local awareness for living rivers in the TBR MDD

Kerstin Böck, Tijana Pavlović and Alice Thinschmidt, WWF Austria

Restoration of wetland habitats along the Mura – NATURA MURA

Aleksander Koren, IRSNC

Excursion with boats on Mura river from Petanci to Krog & Excurison to castle of madness Trate

Speakers of Day #2

Karl Lautner was born in Bad Radkersburg in 1956 and has been mayor of it for 2 years and therefore has a close connection to the Mur. He is also the mayor's representative for the other municipalities in the Austrian part of the Biosphere Reserve.

Stanislav Rojko is mayor of the Municipality Gornja Radgona since 2014. He is good connoisseur of the forests on both sides of the Mura in TBR MDD, as he is a forester by profession and has been employed in forestry for more than 20 years. He was involved in the LIFE Bio Mura project - the first renaturation project on the Mura River in Slovenia.

Cornelia Schweiner is a member of the Styrian Parliament. Her concerns in the state parliament are the strengthening of the regional labor market, the establishment of a regional education plan, the expansion of the rail network and the promotion of social cohesion. She wants to campaign for the expansion of the Bad Radkersburg railroad.

Julia Majcan is a member of the Styrian Parliament. Spokesperson for youth, labor and disabled persons for her parliament club. In the region, she takes care of a wide range of regional development issues such as the biosphere reserve.

Dr. Gordana Beltram is the Slovenian Coordinator of the TBR MDD Steering Committee at the Ministry of the Environment and Spatial Planning. Among many other tasks, she coordinates the Ramsar Convention on Wetlands in Slovenia, responsible for the preparation of the proposal for listing of the Mura Biosphere Reserve to the UNESCO World Network of Biosphere Reserves of the Man and Biosphere Program (MAB) and actively participated in the preparation of the nomination of the 5-country TBR MDD.

Gašper Hrastelj is the Director of the UNESCO Office in Slovenia and the Secretary General of the Slovenian National Commission for UNESCO. In recent years, he led negotiations and coordination at the national and international level for the establishment of the first International Research Center for Artificial Intelligence under the auspices of UNESCO = IRCAI.

Arno Mohl is a landscape architect and conservation expert who founded and leads the "Mura-Drava-Danube" programme at WWF Austria and has been successfully fighting for the protection of the "Amazon of Europe" for over 30 years now.

Teo Hrvoje Oršanič holds a Master of Science in natural heritage protection and is a university graduate forester. He has been the director of the IRSNC since 2018. Prior to that, he was seven years the director of the protected area Kozjanski Park. He was involved in the creation of the Natura 2000 network in Slovenia. Outside of work, his life is strongly connected to nature and nature protection, especially in the lower Sava River. He is also an engaged nature photographer and has received several awards for his photos.

Kerstin Böck is a river management expert, conservationist within WWF Austria's Mura-Drava-Danube programme and the project manager of project lifeline MDD.

András Schmidt is Head of Natura 2000 Unit within the Department for Nature Conservation, Ministry of Agriculture, Hungary. Main responsibilities: co-ordination of Natura 2000 network operation, and in general the implementation of the EU Habitats Directive and Birds Directive in Hungary; bird conservation issues; implementation of the Ramsar Convention in Hungary. Member and presently chair of the Steering Committee of the UNESCO MAB Five-country Biosphere Reserve Mura-Drava-Danube.

Prof. Dr. Hans Dieter Knapp is a Botanist and Landscape Ecologist, former Director of the International Academy for Nature Conservation Isle of Vilm of the German Federal Agency for Nature Conservation. Deputy Chair of the Board of the Michael Succow Foundation, Board member of EuroNature Foundation.

Gregory Egger has been working in the research field of riparian ecosystems since 1988. His focus is on analyzing interactions between floodplain vegetation and hydrogeomorphology. He investigated vegetation ecology of natural river systems. In addition to his work as a researcher, he is also engaged in consulting with his own office 'Naturraumplanung Egger e.U.' in Austria. His field of activity are expert assessments on environmental and nature conservation projects and landscape management.

Goran Gugić was born in Germany and graduated from the Forestry Faculty of Ludwig-Maximilians University in Munich. He also specialised in the Forestry Faculty of Zagreb University, Croatia, and did further training in Glacier National Park, USA, and at the International Course on Wetland Management in Lelystad, Kingdom of the Netherlands. He had headed Lonjsko Polje Nature Park Public Service as director from 1998 to 2015. He is the chairperson of the national committee for the UNESCO programme Man and the Biosphere, and was a member of the Standing Committee of the Ramsar Convention from 2010 until 2013. He received the EuroNatur Award 2011 for his achievements in protecting European natural heritage, particularly the riverine landscapes along the Sava and Drava river. He is currently deployed in Montenegro to set up a management structure for Ulcinj Saline Nature Park.

Tibor Parrag is Head of the Nature Conservation department at the Danube-Drava National Park. He is working for Danube-Drava National Park Directorate for 20 years. Now he works at the "Department of Nature Conservation". He is conservation biologist, who worked on numerous restoration projects. The main topics are planning and developing habitat restoration, participating in EU projects. He is also responsible for Transboundary Biosphere Reserve Mura-Drava-Danube issues.

Lenka Stermecki is a nature conservation consultant at the Institute of the Republic of Slovenia for nature conservation. She is a professor of geography and graduate translator of German. Her primary interests are education and interpretation of nature, specifically geology and water. For more than ten years, she and her colleague, geologist Mojca Bedjanič, have been working intensively in the education and also interpretation infrastructure in the UNESCO Geopark Karawanks and are the co-authors of many didactic materials. From 2015 to 2020, she coordinated a big educational and awareness-raising event "24 hours with the Mura River" in TBR MDD in Slovenia. Additionally, she co-authored a brochure for public about the Mura River called "Mystic River – Mistična reka".

Tijana Pavlović is a pedagogue with experience in education practices at all school and preschool education levels exploring best practices for combining multiple academic subjects. As an Educational expert, she worked on the lifelineMDD Training Handbook, developed didactic materials, and conducted the Train the Trainer seminar with colleague Alice Thinschmidt.

Alice Thinschmidt is environmental education caught her 30 years ago when she started to work in the Natural History Museum in Vienna. Although still working there her most memorable experiences she had in outdoor learning in the national park Neusiedlersee, which she does now since more than 20 years, first for WWF Austria, now with her own association. Their education projects with WWF Adria in the last years in all balcan countries brought her to MDD.



Summary of Day #2

Day #2 of Final conference took place in the conference center Zehnerhaus in Bad Radkersburg in Austria with an introduction by Steve Chaid, who is international event moderator followed by both mayors, political representatives from Styrian parliament and Slovenian Ministry and representatives from the WWF AT and IRSNC.

Moderator introduces Kerstin Böck as following speaker, who introduced us with Amazon of Europe and few other EU projects that have taken places in this area. She continued with project lifeline MDD, which started on 1. 7. 2022, with strong bases from coopMDD project. Project lifeline MDD has a diverse partnership from different institutions and fields (12 partners in the 5 countries). Among other activities like restoration pilot sites in Austria, Serbia and Slovenia, platform for sustainable cooperation (Metadatabase) and planning tool for water management River Restoration Toolbox, Synthesis report for living water, living rivers and living sediments is being prepared. One of the highlights of the project was two study visits to the TBR MDD area. One of the most important parts of the project was to build awareness with international trainings.

András Schmidt, as representative of the TBR MDD steering committee, talked about the joint mission of the TBR MDD to focus on conservation, restoration and wise use of the MDD River and its ecosystems. 4 long-term goals were implemented in the common work plan of TBR MDD: Ecological conservation and Ecosystem services, socio-economic sustainable development and livelihood, logistic support and capacity building and transboundary management and cooperation. All this long term goals are divided into operational goals.

A Keynote on the biosphere region as a chance for a sustainable future was presented by Hannes Knapp. In his vision, biosphere reserves are more than protected areas. It is a surviving region within our threatened area and it is a very thin skin around our globe. It is resistant and resilient, water is a base of life and its quality depends on land use. In it the land use must be our main focus. Rivers are the lifelines of a landscape.

In the frame of the two-day conference the main pillars of the biosphere concept served as inspiration for 6 sessions on the following topics: Restoration, Conservation, Education, Research, Regional Development & Governance. In each session, an inspiring example, mostly from outside TBR MDD and an example from the TBR MDD was presented. Positive experiences and crucial points from the speakers' perspectives were collected and possible solutions discussed in the frame of panel discussions. To allow for questions from the audience to be taken up in the frame of the panel discussions, a template for questions was provided in the conference bags – people were asked to fill these templates, which were collected during lunch break.

Session #1: River restoration started with Gregory Egger, who informed us about principles for process-oriented restoration: enabling dynamic processes, giving space and time to the rivers and trying to reconnect the river and floodplains with river as the builder.

With the second presentation Kerstin Böck gave an overview of river restoration in the TBR MDD, based on the results gained in the frame of the lifelineMDD project. A study visit in two parts was carried out and with three pilot measures habitat connectivity and morphodynamics was improved. The moderator introduced all people involved in the work carried out during the project be presented: Tanja Schriebl from Styrian government represents the concerns of Styrian water management and led the Workpackage on Cross-sectoral restoration lifelineMDD. Next one was Sasa Sobocan from VGP Pomgrad and Marko Tucakov from Institute for Nature Conservation of Vojvodina Province.

At the coffee break the **press conference** in a separate room at Zenerhouse took place, which was moderated by Martina Barkič (WWF Adria). Involved people were: Kerstin Böck, Arno Mohl, Teo Hrvoje Oršanič, Monika Podgorelec, Gordana Beltram and András Schmidt.

Session #2: Conservation & Sustainable land use. First speaker was Goran Gugić, who talked about Lonjsko Polje Nature Park, its flooding and adaptation to flooding. Various forms of pasturing is still present in Lonjsko Polje and it is still completely in the hands of local breeders. As a manager you must breakdown the complexity of a biosphere reserve and try to integrate wetlands into river basin management.

An informative presentation on the grassland management within Danube-Drava National Park was given by Tibor Parrag. He addressed the production problem of hay, as other regions faces starvation of animals, because of lack of hay. To maintain the grass habitats they need permanent management like in the form of contracts with local farmers to manage the grasslands. Other challenges are how to maintain the management, regulation changes, increasing the costs, lack of physical workers on the field, and the question of how nature parks can earn the money to cover the costs (selling the cattle – grey cattle less expensive as other not traditional species).

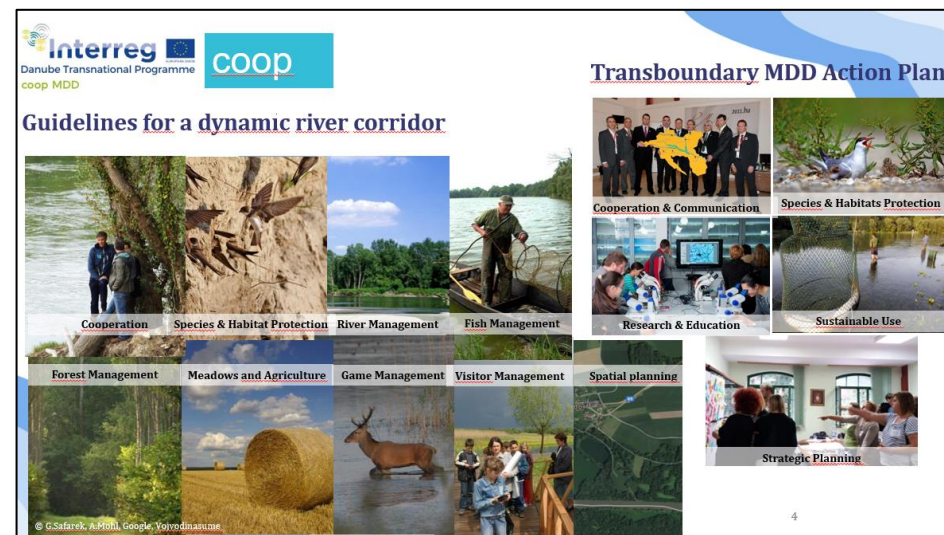
The #3 session: Education started with IRSNC nature conservation consultant Lenka Stermecki and her overview of effective approaches for educating and interpreting nature. She talked about the idea to present UNESCO Geopark to a wider public while other sites in the park are hidden from the public. School curriculums were studied in order to fit in the environmental programs: 12 themes and learning tools have been developed.

Moderator introduces Kerstin Böck, Tijana Pavlović and Alice Thinschmidt as second speakers for session #3 to give an overview of education activities in the TBR MDD, based on the results gained in the frame of the lifelineMDD project. They introduced the translated Handbook, Rivers' schools, Train the trainers' seminar and Nature Academy in Slovenia.

Before the last presentation, the Panel discussion (Reaching the Vision on Restoration, Conservation and Education in the TBR MDD) with all the presenters was carried out. The presenters discussed about branding for the TBR MDD and how the most important thing is to be proactive and to be one step ahead, to find enthusiastic persons to preserve the Biosphere reserve and envision sustainable management. Small steps are important, but on the other hand we need big vision. Networking within the educational institutions within the area is necessary.

Last presentation was from **Aleksander Koren**, who talked about **Natura Mura project** as introduction to the following excursions on the one hand and as complementary approach to the topics presented in the morning during session #1. Floodplain forests, river branches, oxbow lakes and a diverse cultural landscape are the habitat of many rare and endangered plant and animal species, which is why the area has multiple conservation statuses by several national and international nature conservation conventions. These include protection as a Natura 2000 site and since 2018, as the UNESCO Mura Biosphere Reserve. Due to past interventions and inappropriate management the habitats with its species at the Mura river are today in poor conservation status, which will decrease even more without appropriate actions. The Natura Mura project is addressing some of the key problems to improve the situation of river dynamics and key habitats and habitat species: ensuring and maintaining good ecological status of waters, increasing the retention capacity of high waters (improving flood safety), reducing the deepening of the river bed, restoration of the structure and function of floodplain forests, establishing a quality interpretation for experiencing nature, improving the quality of the living environment of local people and providing them with a new jobs in the region. These goals will be achieved with maintenance and restoration of wet grasslands, restoration of river dynamics and aquatic habitats, land purchases, etc.

In the afternoon the participants had a chance to participate on two different **excursions to the TBR MDD in Slovenia**. One group visited the Museum of Madness which is in the Castle Trate in Cmurek. The history of the castle was presented as in the past, where it was a mental health care facility. The castle is now being updated with new topics which are also closely related to the Mura River. For example the fight against hydropower plants on the Mura River in Slovenia or the presentation of the fish population in Mura. The other group went to a boat ride on the Mura River from Gornja Radgona to Krog. The group had a chance to see the Slovenian pilot site in Hrastje-Mota and a restoration site from a previous project in Sieldorf on the Austrian site. We finished the day with a dinner in Austria at a restaurant, which is part of the "GlaMUR"-Network, another example of cross-border cooperation in a biosphere reserve Region focusing on locally produced products.



Interreg Danube Transnational Programme coop MDD

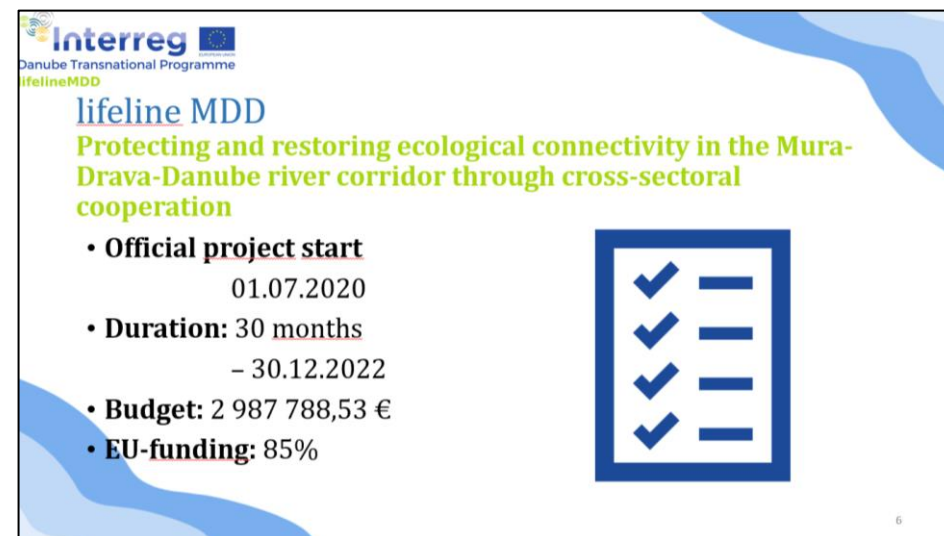
Guidelines for a dynamic river corridor

Transboundary MDD Action Plan

The slide features a grid of 12 images illustrating various management and planning aspects:

- Cooperation
- Species & Habitat Protection
- River Management
- Fish Management
- Cooperation & Communication
- Species & Habitats Protection
- Research & Education
- Sustainable Use
- Forest Management
- Meadows and Agriculture
- Game Management
- Visitor Management
- Spatial planning
- Strategic Planning

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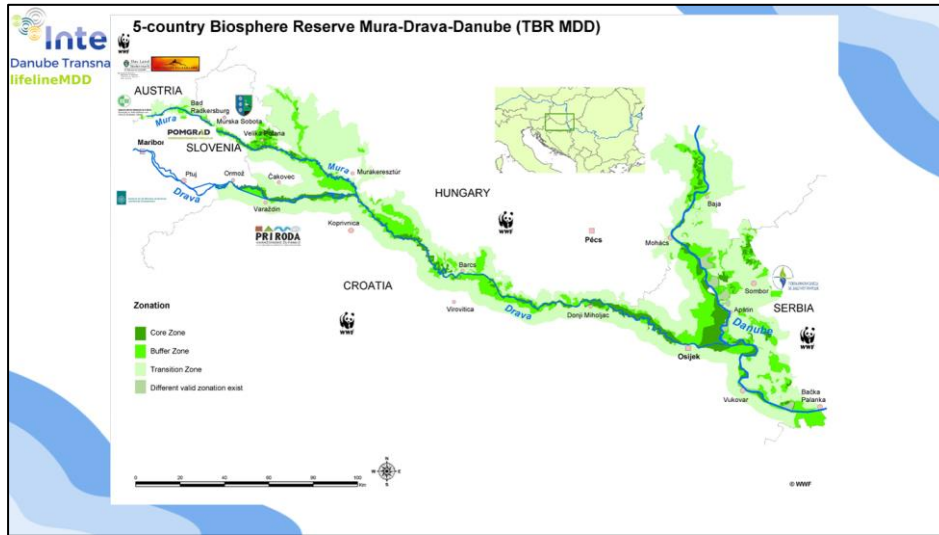
Interreg Danube Transnational Programme lifelineMDD

lifeline MDD

Protecting and restoring ecological connectivity in the Mura-Drava-Danube river corridor through cross-sectoral cooperation

- Official project start**
 01.07.2020
- Duration: 30 months**
 - 30.12.2022
- Budget: 2 987 788,53 €**
- EU-funding: 85%**





Biosphere reserves – World wide network

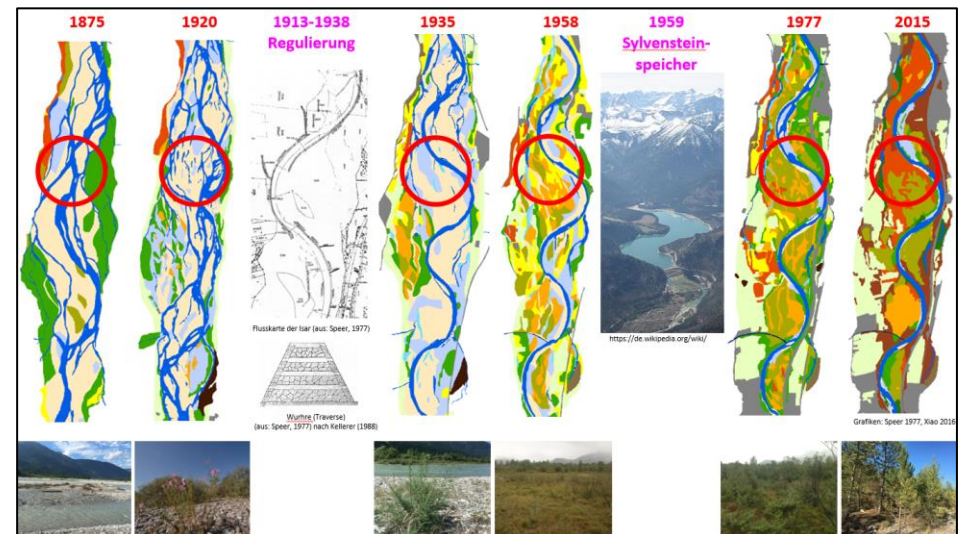
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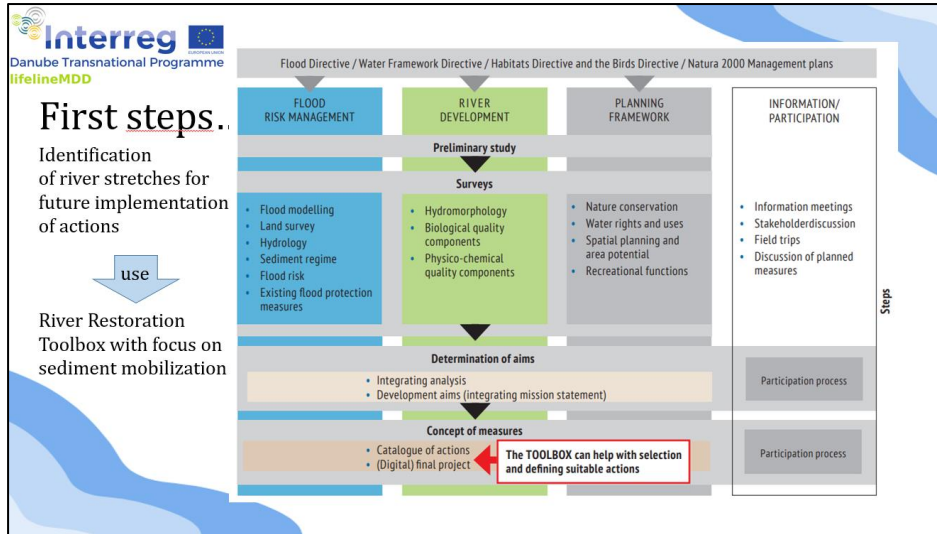
- 1 – **Protection** of natural and cultural values
- 2 – **Development** of models for sustainability
- 3 – **Logistic function:** research, education, public awareness



Operational goals

JOINT VISION & MISSION <i>Connecting rivers, nature and people</i>	
Long-term goals	Operational goals
1. Ecological Conservation & ecosystem services	1.1. Conserve and restore ecosystems, habitats and species
	1.2. Preserve and restore natural water regimes and processes
	1.3. Advocate harmonised zonation and protected area management
2. Socio-economic development & livelihood	2.1. Enhance regional identity and protection of cultural heritage
	2.2. Strengthen sustainable agriculture and forestry, hunting and fishing
	2.3. Support spatial development and sustainable tourism
3. Logistic support & capacity building	3.1. Implement scientific research and monitoring
	3.2. Promote environmental interpretation, education and public awareness
	3.3. Secure information exchange and participation
4. Transboundary management & cooperation	4.1. Foster transboundary management and structural development

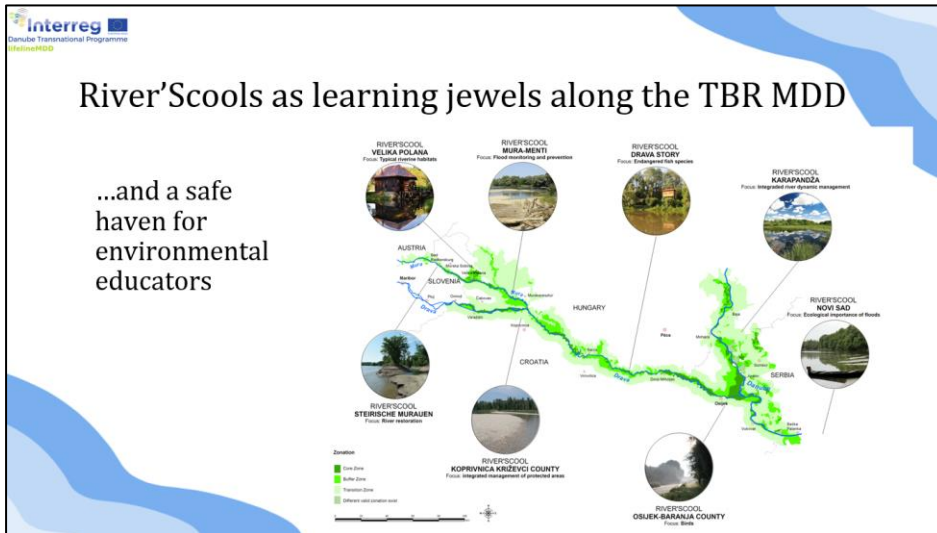




Handbook

- Trainings have the same flow as the Handbook
- In local language and in English
- Supplementary materials: maps, worksheets, bird and fish cards ...
- Theoretical part: basic information to understand the context and do the activities
- Practical part: our main focus!
- Rainbow flow: playful, hands-on, all senses, broad, flexible, clear
- Barrier free paragraph - Inclusion and obstacles in outdoor learning environment

The big picture: We are international!



Restoration of river dynamics and aquatic habitats

➤ **River bed widenings**

- Petanjci (750m, 6,6ha)
- Mota II (300m, 3,4ha)
- Konjišče (950m, 13,1ha)
- Dokležovje (650m, 5,6ha)

natura MURA

ZAVOD REPUBLIKE SLOVENIJE ZA VARSTVO NARAVE

EVROPSKA UNIJA
 EVROPSKI SKLAD ZA REGIONALNI RAZVOJ
 NALOŽBA V VAŠO PRIHODNOST

Day#3 Final conference Wednesday,
September 7th 2022

Welcome words to the conference by moderator Steve Chad and Kerstin Böck

How to raise stakeholder engagement in a biosphere reserve – experiences from Elbe-river UNESCO biosphere reserve

Johannes Prüter, Elbe Biosphere Reserve

Roadmap for proactive participation of stakeholders in the TBR MDD

Lisa Wolf, E.C.O., and Urška Dolinar, Iskriva

How Responsible Tourism & Nature Conservation can team up for a Sustainable Future

Rudi Trinko, Trail Angels

Amazon of Europe Bike Trail and destination for tourism development of the TBR MDD

Urška Dolinar, Iskriva

Needed dimensions for a more sustainable river restoration

Helmut Habersack, BOKU University Vienna

Establishing the scientific knowledge base in the TBR MDD

Mario Klösch, BOKU University Vienna

Speakers of Day #3

Johannes Prüter was head of the Lower Saxony Elbe Valley Biosphere Reserve between 2005-2021, he is retired. Studied Biology, Geography and Education Science at Hannover University PhD on Biology/Seabird ecology in 1986 1988-2005 Deputy director of North German Academy for Nature Conservation (responsible for organizing seminars and research work esp.in cultural landscapes and nature conservation management) 2005-2021 Director of the Elbe River Biosphere Administration (Niedersachsen part) Honorary Professorship at Lüneburg University since 2007.

Lisa Wolf is head of the sustainability team at ECO Institute for Ecology, Klagenfurt. Geographer with a focus on participatory conservation area planning; Diploma in tourism. Lisa is responsible for tourism analysis, geographical planning and the implementation of participatory online tools. Specialty: Innovative participatory concepts and protected areas. Together with Daniel Zollner she also led the coordination of the 5-country nomination form for the TBR MDD.

Rudi Trinko is a Senior Project Manager of Trail Angels and licensed Mountain Hiking Guide. Trail Angels combines the assets of a development agency and an efficient travel agency to create a unique model for responsible tourism. Since 2015, the Trail Angels have been developing 43 responsible tourism projects in 14 countries. These are managed by the Trail Angels with their own info & booking center. Currently, 627 regional service partners benefit from the Trail Angels business management model.

Urška Dolinar is the director of Iskriva, Institute for Development of Local Potentials in Slovenia, a regional development and tourism expert, and the project manager of applied projects in the TBR MDD: Amazon of Europe Bike Trail and Amazing Amazon of Europe which have been developing the tourism part of the TBR MDD with flagship tourism products.

Helmut Habersack holds an UNESCO Chair on "Integrated River Research and Management", coordinates the UNESCO IHP "World's Large Rivers Initiative", and is a full Professor of Hydraulic Engineering and Modelling at the University of Natural Resources and Life Sciences, Vienna. He has more than 30 years of experience in sediment transport, river engineering/morphology/restoration, flood risk management, hydropower, ecohydraulics and navigation.

Mario Klösch is a postdoctoral researcher at the Institute of Hydraulic Engineering and River Research at the University of Natural Resources and Life Sciences, Vienna. His key research areas are river morphology and sediment transport in the context of river restoration; his methods are field monitoring, development of computer models, and laboratory modelling. His work profits from a frequent exchange and collaboration with practitioners. In the project lifelineMDD he was the head of work package T1 - "Establishing the scientific knowledge base."

Summary of Day #3

On the third day in the morning we started in Zehnerhaus with movie on Amazon of Europe, that has been initially prepared for the UNESCO designation of the TBR MDD, Moderator made a short recap of day #2, continued with presentations by keynote speakers and sessions about governance, regional development and research.

First speaker for **session #4: Governance – Reflection workshop on Roadmap for proactive cooperation of stakeholders in the TBR MDD prepared in the frame of lifelineMDD** was Johannes Prüter who talked about conflict management with extreme flooding, areas of responsibility, nature conservation requirements, flood protection requirements and cooperative floodplain management in small groups. His strongest opinion is, that we have to learn from each other, as managing a biosphere reserve is more a psychological challenge than biological challenge (to inspire local stakeholders with other examples, broadening their horizon, looking for inspiration).

Lisa Wolf and Urška Dolinar presented roadmap and plans for proactive participation of stakeholders in the TBR MDD. Involved stakeholders - of which there are many under the umbrella of the TBR MDD - should be shown possibilities to network in a coordinated way in the future. This can be done in projects, in a regional context, on an international, bilateral, personal and virtual level. The total number of collected and identified stakeholders is 2579 and when it comes to involving them in the development of biosphere reserves, UNESCO has very clear guidelines. Participatory involvement in what is happening and, if possible, in a broad range of all activities in a biosphere reserve. Chances of collectively connecting a broad variety of TBR MDD stakeholders have been taken within the course of this conference via the workshop on stakeholder involvement within Session #4.

Session #5: Regional development started with Rudi Trinkos thoughts how travelling should be part of our life in future. This should happen, by acting responsible, minimizing our ecological footprint and partnering nature conservation, social inclusion and sustainable tourism. The beginnings in tourism are very hard, time and money consuming but with good storytelling, good trail designs, good criteria for mobility and accommodation we can achieve the planned.

Urška Dolinar introduced Iskriva and took us on Amazon of Europe bike trail – a sustainable tourism model, which is designed to effectively engage all levels of stakeholders from 5 countries, connect cycling, natural and cultural activities. Amazon of Europe in their eyes is a leading sustainable cross-border tourism destination, preserving the natural and cultural heritage and inviting its explorers to slow down along the mighty rivers, reconnect with nature and recharge their batteries through amazing green local stories.


Session #6: Research was with keynotes from Helmut Habersack. Call for action is really necessary in case of riverbed deepening, sedimentation during a flooding, hydropower development and larger river restorations sites are needed. Current state rivers with straight stream don't have a chance to form structures due to the lack of sediment. Channelized rivers need a sediment supply, channel widening and more curvilinear course which reduce the annual bedload requirement. In the long term the aim is to improve the upstream river continuity.

The last presentation was about scientific knowledge base from Mario Klösch. Most of 700 km long river corridor is channelized, but the rivers also have structures - bank protection that prohibit dynamics and we have problem with connectivity, transversal structures upstream and unclear effect on climate change. That is why 6 different studies have been carried out, biotic and abiotic: assessment of fish population status, river birds breeding study, river training structures mapping, sediment mobilization study, sediment balance and transport study and climate change study. Sediment downstream is decreasing with every hydropower plant made. Riverbed is approaching the tertiary level and because of the change of heat wave duration (longer heat waves because of the climate change). Due to reduced availability of snow in winter, forestry and agriculture will need more water. This unique river system needs to be preserved to be restored.

Last panel discussion for reaching the Vision on Governance, Regional development and Research in the TBR MDD with all the presenters was about a common goal – science and conservation must work closely in cooperation, because we need long term cooperation instead of a small term projects. Meaning that all issues must be addressed in equal way. Biosphere reserve needs to be brought to the locals, people who live in Biosphere reserve. To show what are the benefits and good practice examples. Many people have fear of the unknown. People are often afraid that the big tourism will be brought to the region which will affect their way of life.




After the presentations in Zehnerhause we had a joint walk to the castle Gornja Radona, where the conference continued with last panel discussion - Call for action for reaching river landscape Mura – Drava – Danube and informal signing of the Call for action. First Monika, Kerstin and Steve prepared conference conclusions (for "Call for Action") and final statements. Moderator welcomes the Music school from Gornja Radgona who will play for us in the lunch time. After lunch the panel discussion with speakers Call for action for a living river landscape Mura-Drava-Danube followed.



 Danube Transnational Programme


 lifelineMDD

Areas of Responsibility in a partly incongruent legal Situation




Nature conservation requirements

- Conservation and protection: Natura 2000 special areas of conservation, in particular alluvial forest – code 91E0*.



Flood protection requirements

- At bottlenecks: Permanent removal of vegetation that impedes drainage



Agricultural constraints

- Restriction in the preservation of the cultural landscape due to dioxin contamination => special animals outside the food chain

Practitioners ↔ Authorities ↔ Politics



 Danube Transnational Programme

 Amazing Amazon of Europe

Amazon of Europe Bike Trail Fact File

www.aeobiketrial.com

Total length: over 1,250 km

 Two routes with 27 daily stages

 - 11 stages on the North Route

 - 16 stages on the South Route

UNESCO 5-country Biosphere Reserve: Austria, Slovenia, Hungary, Croatia and Serbia


Co-funded by the EU, INTERREG Danube Transnational Programme

 15 project partners

 1.6.2018 – 31.10.2021 (40 month)



Amazon of Europe Bike Trail within UNESCO 5-country Biosphere Reserve Mura-Drava-Danube



 Danube Transnational Programme

 lifelineMDD

Timetable (2022-2032)

- 10 year TBR Periodic Review
- Coordinated Joint Management
- CWP
- TBR MDD Celebrations
- Youth Involvement
- Task Group(s)
- Stakeholder Conference(s) and Dialog Forum/Market Place

2022

- Establishment of a Joint Management Corporation
- Stakeholder Conference (Interreg lifelineMDD)
- TBR MDD Day Celebrations (Regional Festivities)

2023

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting

2024

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting

2025

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting
- Dialogue Forum/Market Place

2026

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting

2027

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting

2028

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting

2029


- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Permanent Task Group(s) Meeting

2030

- BR Management Conference
- Stakeholder Conference
- TBR MDD Day Celebrations (Regional Festivities)
- Dialogue Forum/Market Place

2031

- Periodic Review of the TBR MDD

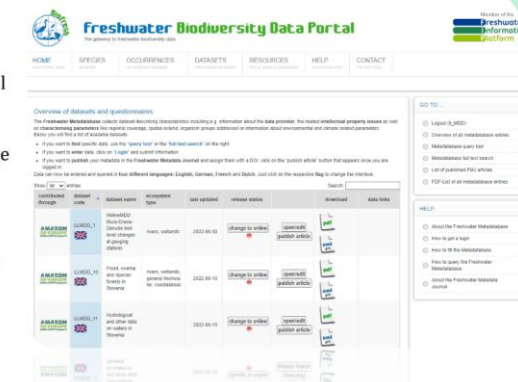


 Danube Transnational Programme

 lifelineMDD

Data exchange tool for biotic and abiotic data – a metadatabase

- First shared metadatabase is being established by IRSNC & BOKU, as a pilot tool for intensified data exchange
- It will serve as a central scientific knowledge base for a specific kind of data
- Smooth partners cooperation
- To avoid loss of resources and double work



ZAVOD REPUBLIKE SLOVENIJE ZA VARSTVO NARAVE

Speaker and moderator of Day#3 panel discussion: Call for action for a living river landscape Mura-Drava-Danube

András Schmidt is head of Natura 2000 Unit within the Department for Nature Conservation, Ministry of Agriculture, Hungary. Main responsibilities: co-ordination of Natura 2000 network operation, and in general the implementation of the EU Habitats Directive and Birds Directive in Hungary; bird conservation issues; implementation of the Ramsar Convention in Hungary (international convention on the protection of wetlands). Member and presently chair of the Steering Committee of the UNESCO MAB Five-country Biosphere Reserve Mura-Drava-Danube.

Edith Hödl works at the International Commission for the Protection of the Danube River (ICPDR) works to ensure the sustainable and equitable use of waters in the Danube River Basin. The work of the ICPDR is based on the Danube River Protection Convention (DRPC), the major legal instrument for cooperation and transboundary water management in the Danube River Basin. Edith Hödl is a Technical Expert in River Basin Management at ICPDR, she studied law and her dissertation is about the European Water Framework Directive and Water legislation. Also due to her former working experience as a Policy officer on Water Legislation and Water Management at the Austrian Umweltbundesamt she developed a strong expertise in the coordination of EU projects related to the Water Framework Directive and other EU directives related to water management.

Tobias Salathé is a senior adviser at the Secretariat of the Convention on Wetland who is supporting European countries and global processes in relation to river basin management, peatlands, blue carbon, Biosphere Reserves, World Heritage Properties, and others. Originally trained as a biologist and wetland ecologist, having worked in this capacity as a freelance consultant, as well as for the European Commission, BirdLife International and the Tour du Valat research institute for Mediterranean wetlands, before joining the Ramsar Convention Secretariat.

Arno Mohl is a landscape architect and conservation expert who founded and leads the "Mura-Drava-Danube" programme at WWF Austria and has been successfully fighting for the protection of the "Amazon of Europe" for over 30 years now.

Kathrin Succow has more than 30 years of professional experience in the worlds of public welfare, foundations & associations, sustainability & natural reserve, business & entrepreneurship. In 1997 her father was awarded the Alternative Nobel Prize for his activities in establishing nature reserves in the former eastern Germany. 2 years later she established the Michael Succow Foundation (MSF) which mainly focuses on nature and climate protection. Since 2021 Chairwoman of the Board of Trustees of MSF succeeding her father.

Panel Discussion Call for action for a living river landscape Mura-Drava-Danube took off with everybody agreeing that it started with the much focused nature conservation of the wetlands and now Danube is the most transboundary river with very valuable river corridor. Joining 5-countries made the picture much bigger and it is not just about the nature conservation, but now we have much more. The international partnerships needs to be made, projects needs to connect, regular monitoring needs to be carried out, a collective brand needs to be established, the focus must be on sustainable development. The rivers should be given their role back, as their role for biodiversity, living waters, etc. and much more had been discussed during the discussion with every speaker sharing their thoughts.

Everything concluded with the informal signing of the Call for action where some future steps and possibilities were included:

- Use projects as starting points for large-scale restoration actions
- Integrate stakeholder platforms for ecological sustainability, for sustainable tourism and regional development, for education and youth involvement in the TBR MDD management
- Recognize sustainable tourism, implemented with wide stakeholder involvement as an effective tool for regional development
- Address synergies between multiple aims in integrated river management based on a strategic integrated approach based on restoration strategy and toolbox
- Build on the regular school system to raise awareness for nature conservation from early on through the regular curricula
- Build on a strong cooperation with national, regional and local stakeholders & local citizens



The conference was finished with a reception.