



# International Seminar

## From Barriers to Bridges: Strategies for Reconnecting the Danube River Basin

September 26-27, 2024  
Ljubljana, Slovenia



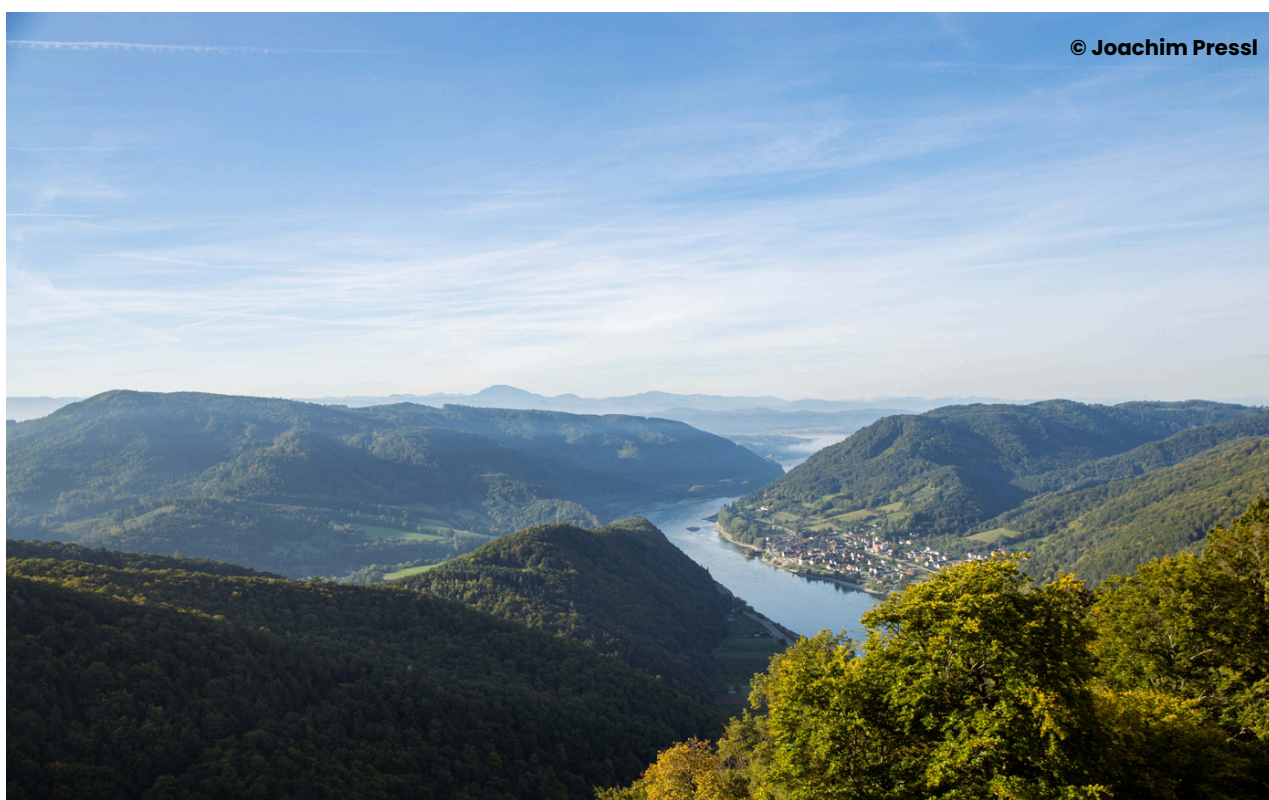
DANUBE4all is funded by the European Union's Horizon Europe programme under Grant Agreement No. 101093985



The ecological situation of freshwater ecosystems in Southeastern Europe is shaped by various factors. In the last centuries, river basins have been altered through damming and waterway modification, affecting natural river flow and sediment transport. There is an urgent need to put more effort into protecting and restoring habitats to conserve species diversity and prevent further loss and reduce the impact of climate change effects on people.

This event is integrated in a comprehensive program of activities aimed at bringing attention to the importance of free-flowing rivers and offering a unique opportunity to engage with leading experts in the field of river restoration, gain insights into the latest research and strategies, and participate in discussions that could shape the future of freshwater ecosystems in the Danube River Basin.

The international seminar, co-hosted by the World Fish Migration Foundation and Revivo, under the DANUBE4All project, is followed by a screening of the #Dambusters documentary in the evening of September 26, and a field trip in the following day.



[Register here](#)

# Keynote speakers



**Laura Wildman, Vice President of Ecological Restoration, Save the Sound**

Laura Wildman is a professional fisheries and water resources engineer with a passion for restoring ecosystems and reestablishing natural function and aquatic connectivity. She has over 3 decades of experience in engineering, river science, construction, community outreach, and environmental advocacy on hundreds of ecological restoration projects. Laura oversees the Ecological Restoration Program at Save the Sound, focusing on implementation of on-the-ground nature-based solutions including aquatic connectivity, green infrastructure, and coastal resilience project work throughout the Long island Sound watershed in Connecticut and New York. Laura is a leading and internationally recognized expert in the removal of barriers and enjoys traveling abroad to share her experience with others, in hopes that we leave this world a better place for future generations.



**Marija Smederevac-Lalić, PhD in environmental sciences Research Associate Professor, Department of biology and inland waters protection, University of Belgrade - Institute for Multidisciplinary Research**

I have experience working in the NGO, Ministry for the Environment Protection of the Republic of Serbia, and in the Institute for Multidisciplinary Research, University of Belgrade. Five most important publications in the research field: Smederevac-Lalic et al. (2011) <https://doi.org/10.1111/j.1439-0426.2011.01859.x>; Smederevac-Lalić et al. (2012) <https://pubmed.ncbi.nlm.nih.gov/21674225/>; DOI: 10.1007/s10661-011-2140-5; Smederevac-Lalic et al. (2017) DOI: 10.1016/j.scitotenv.2017.07.177 (from the PhD thesis); Smederevac-Lalić et al. (2018) DOI: 10.22092/IJFS.2018.116611; Smederevac-Lalic et al. (2020) <https://doi.org/10.1007/978-3-030-20249-1>. I participate(ed) in 15 international projects and COST actions.  
Research field: Ichthyology, hydrobiology, ecology, sustainable utilization of natural resources, invasive alien species of fish.



**Sandra de Vries, Citizen Science specialist and Founder, Pulaqua**

Sandra de Vries has a Civil Engineering background, specialized in water management. She is founder of the company Pulaqua, and guest researcher at the Water Management Department of the TU Delft. She developed her own consulting company Pulaqua to assist organizations in developing citizen science initiatives, and gives workshops and courses in applying citizen science. Prior to starting her company, she helped develop the TU Delft citizen science platform WaterLab, with whom she still cooperates closely. Pulaqua nowadays is a team of 4 highly skilled professionals, applying citizen science practices to water-related issues. Pulaqua leads the citizen science and engagement work package of the Danube4all project.



**Petra Repnik, Slovenian Water Agency, Ministry of Natural Resources and Spatial Planning**

Petra Repnik is a Slovene expert in river engineering, hydromorphology, and river basin management. She has extensive experience in leading projects related to water management, including impact assessments, flood protection, and sustainable river engineering. Currently working at the Slovenian Water Agency, she represents Slovenia in international working groups such as the ICPDR and ECOSTAT, focusing on water status and ecological issues. Petra holds a B.Sc. in Water Management and is pursuing a Ph.D. at the University of Ljubljana. She has contributed to several EU projects and published research on hydromorphological classification.

# Keynote speakers



**assoc. prof. Simon Rusjan, PhD, Chair of Hydrology and Hydraulic Engineering, Faculty of Civil and Geodetic Engineering, University of Ljubljana**

Dr. Simon Rusjan works as an associate professor at the Faculty of Civil and Geodetic Engineering, University of Ljubljana. His research focuses on interactions between the hydrological, hydraulic and erosion process which control the transport of sediments and nutrients from catchments. More specifically, he studies the characteristics of open channel flow by field measurements and numerical modelling and investigates how water flow characteristics control water erosion and hydromorphologic processes along the river channels. Special emphasis of his current research projects is on continuous monitoring of suspended sediment concentrations and transport/deposition dynamics during contrasting discharge conditions and further, to study the influence of erosion processes on flood and fluvial erosion hazard.



**Polona Pengal, Scientific Director, Institute REVIVO**

Polona is a co-founder of Institute REVIVO and the brains behind our projects. She worked for 6 years at the Fisheries Research Institute of Slovenia as an expert on marine fisheries management. In REVIVO, she is developing, applying and coordinating the work of REVIVO in numerous projects. Ranging from Horizon 2020, Interreg and LIFE programmes to different national and local funding sources, the projects cover a range of research topics: flood and drought risk management through NBS, telemetry, monitoring of WWTP, removal of invasive species, sturgeon conservation, inclusive governance etc... Her expertise includes ichthyology, freshwater ecology, river restoration and NBS.



**Pao Fernández Garrido, Dam Removal Expert, Open Rivers Programme**

This event gives you the opportunity to meet in-person people from many countries with big experience dealing with river connectivity issues, learning from their real case studies and increasing your network of experts who could collaborate (or give support) in your future projects.

# Full Programme

**Date:** September 26, 2024, 9:00 – 16:45 (local time)

**Venue:** Faculty of Civil and Geodetic Engineering (UL-FGG) (Hajdrihova ulica 28, 1000 Ljubljana, Slovenia)

Moderated by Julia Martinet

Time		
8:40 – 9:00	Arrival & Registration	
9:00 – 9:20	Welcome word by dr. Lidija Globevnik & dr. Helmut Habersack	
9:20 – 9:50	<b>Simon Rusjan</b> , Faculty of Civil and Geodetic Engineering, University of Ljubljana, Slovenia	Assessment of the Impact of Weir Reconstruction/Removal on Hydraulic Conditions and Hydromorphologic Processes
9:50 – 10:20	<b>Marija Smederevac-Lalić</b> , Institute for Multidisciplinary Research, University of Belgrade, Serbia	Fish as bioindicators of the multifunctionality of ecosystems of the Danube River Basin
10:20 – 10:50	<b>Sandra de Vries</b> , Pulsacqua, The Netherlands	Citizen engagement and science in the Danube Basin
10:50 – 11:10	Coffee break	
11:10 – 11:40	<b>Valentina Bastino</b> , European Commission, Brussels	Barrier removal and Article 9 of the Nature Restoration Law (online)
11:40 – 12:10	<b>Petra Repnik</b> , Slovenian Water Agency, Slovenia	Linkages between hydromorphological and flood protection measures in Slovenia
12:10 – 12:40	<b>Pao Fernandez Garrido</b> , Open Rivers Programme, Spain	10 years of Barrier removal in Europe
12:40 – 13:10	<b>Polona Pengal</b> , Institute REVIVO, Slovenia	The first ORP funded projects in Slovenia: “Reka River barrier inventory through citizen science” and “Scoping studies on Nadiža, Težka voda and Sava”
13:10 – 14:10	Lunch break	
14:10 – 14:40	<b>Laura Wildman</b> , Save the Sound, US	The Art of Dam removal
14:40 – 15:10	<b>Teresa Morales</b> , Forest Service, US	Sediment in rivers - keeping dynamic equilibrium
15:10 – 15:25	Coffee break	
15:25 – 16:15	Panel discussion	
16:15 – 16:30	Conclusions	
18:30 – 20:30	Dambusters documentary screening at Academy of Theatre, Radio, Film and Television (Aškerčeva cesta 5, 1000 Ljubljana)	

# Dambusters screening

Dambusters is a documentary which follows the journey around the world of Spanish engineer, Pao Fernández Garrido, across five European countries to learn why barriers are being removed and who are the river heroes behind it.

The film will be screening in the evening of September 26 at the Academy of Theatre, Radio, Film and Television (Aškerčeva cesta 5, 1000 Ljubljana).

Don't forget to book your seat by [registering on the form](#).



## Field trip: River restoration potential on Kamniška Bistrica

**Date:** September 27, 2024

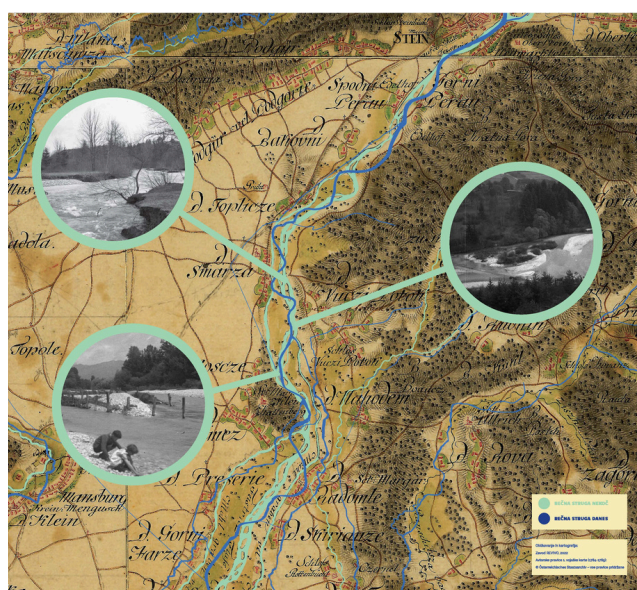
**Meeting point:** bus stop in front of Institute Josef Stefan, Jamova cesta 39, 1000 Ljubljana.

**Departure:** 9:00

**Return:** latest at 15:00 (same location)

Required is suitable footwear for gravel roads, we will walk approximately 4 km. In case of rain, waterproof shoes, and rain jacket. Packed lunch is provided.

The Kamniška Bistrica is an Alpine river in northern Slovenia, a left tributary of the Sava River. It springs from the Kamnik Alps (part of the Southern Limestone Alps) near the border with Austria. It is 33 km long. The Kamniška Bistrica flows through the town of Kamnik, where it is fed by the Nevljica River. It flows into the Sava south of Videm, about 10 km east of Ljubljana. Upper part of the river course is in a deep valley, and when it exits the valley onto the plain north of Ljubljana it runs interchanging through farmland and densely populated areas. The floods of August 2023 erased many of the regulations along the entire length of the river and washed away or damaged 3 of the main bridges. The river restored some of its former corridor and thus indicated hotspots for restoration.



**Picture:** Presentation of the old riverbed (light blue) and the current riverbed (dark blue) of the Kamniška Bistrica River.

## Stop 1: Kamniška Bistrica River near Homški hrib

This presentation focuses on a location along the Kamniška Bistrica River, which was heavily affected by major flooding in August 2023. Post-flood recovery efforts were carried out, largely replicating previous infrastructure measures.

Presenters:

- Urša Koce, PhD, Birdlife Slovenia
- Petra Repnik, Slovenian Water Agency

Urša Koce, PhD will present the potential use of alternative nature-based solutions in comparison to the current grey infrastructure interventions. Petra Repnik will discuss the initial recovery plans for the affected area and the compromise that was ultimately selected and implemented.



## Stop 2: Domžale – Kamnik Central Wastewater Treatment Plant at Kamniška Bistrica

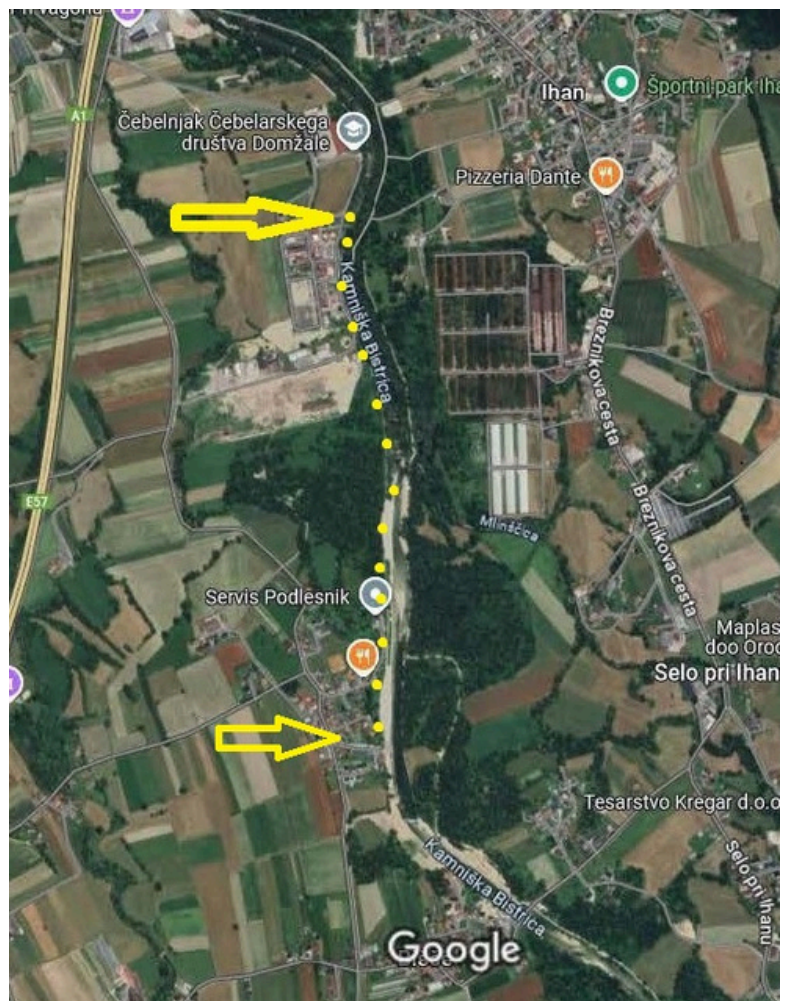
During the 2 km walk along the gravel road by the Kamniška Bistrica River, we will observe some of the old river regulations and the consequences of the major flooding events in August 2023, where the river eroded the artificial regulations and formed new natural riverbanks.

Presenter:

- Polona Pengal, PhD, Institute REVIVO

Polona will present the outcomes of a long-term fish survey conducted by REVIVO every second year with the support of the Domžale-Kamnik Central Wastewater Treatment Plant. Additionally, Polona will show us some of the natural processes that reemerged after the flooding events.

Don't forget to secure your spot by [registering on the form.](#)





**This seminar is organised by the World Fish Migration Foundation & Revivo and made possible by the EU-funded DANUBE4all project & US Forest Service**

### Proudly sponsored by:

