

Interreg
Danube Region



Co-funded by
the European Union


RESTORIVER

RESTORIVER

*Climate resilient, natural water retention focused restoration
of riversides and riparian areas within the Danube region*

RESTORIVER aims to improve climate resilience of riversides by aligning higher-level water management, climate adaptation and flood protection policies with local actions, supporting complex transnational water and climate systems.

Human land use pressures and river regulation have led to the loss of natural river dynamics, the silting up of sidearms and the degradation of floodplain functions, severely reducing the landscape's ability to buffer floods, store water during droughts and support resilient ecosystems across the Danube Basin.

This project brings together key institutions to explore solutions that restore hydrological functions, strengthen ecological integrity and improve climate adaptation in riverine environments.

Urban and periurban green spaces face increasing pressure from intensive use, ageing infrastructure and fragmented water pathways.

Yet these parks, riverfronts and seminatural areas hold significant untapped potential to retain rainfall, slow runoff and improve local microclimates.

By introducing smallscale, visible naturebased solutions the project demonstrates how multifunctional urban landscapes can enhance water retention, support biodiversity and strengthen climate resilience while remaining accessible and attractive to the public.



Consortium: 15 Project Partners and 13 Associated Strategic Partners from 9 countries

Locations: 6 (+1) pilot sites in 7 countries (including 2 non-EU countries)

Discover more on the *RESTORIVER Storymap* or [website](#).

Side-arm restoration

Side-arms are vital for healthy river systems: they store water, support diverse habitats, and reduce flood and drought impacts. Across the Danube Region many have been cut off by sedimentation, altered flows, and long-term regulation. Their restoration boosts climate resilience and revives floodplain ecosystems.

Dondo side-arm | Sombor in Serbia

The Dondo side-arm is one of the most pristine rural areas near Sombor, but the side-arm gradually dried out and became disconnected from the Danube. Restoring the water connection through silt removal and nature-friendly water-level management revived hydromorphological processes, increased water retention, improved water quality and strengthened climate resilience for the surrounding rural community.



© Branislav Svorcan

RESTORIVER partners:
City of Sombor
WWF-Adria



© Neven Ristić



Foki side-arm | Bratislava in Slovakia

The Foki side-arm is a historic Danube branch in the Inland Delta, about 40 km from Bratislava. River regulations and reduced inflow linked to the Gabčíkovo Waterworks disconnected it from the river. The pilot restored 350 m of the branch by removing sediments to improve water circulation and strengthen the floodplain ecosystem. The intervention improved water retention, reconnected habitats, enhanced filtration and groundwater conditions, and strengthened climate adaptation benefits for the Inland Delta.



© Jakub Krška

RESTORIVER partners:
WWF-Slovakia
Water Research Institute



© WWF Slovensko, Miroslav Ocadlik

Vúvh Výskumný ústav
vodného
hospodárstva

Living floodplains

Urban and periurban Danube floodplains are heavily altered, reducing their natural water retention and climate resilience. Yet their proximity to large populations and existing green-blue infrastructure makes them prime locations to showcase nature-based solutions as living floodplains.

Island Beliczay | Érd in Hungary

Island Beliczay was shaped by the Danube. Although its former sidearm has disappeared, major floods still regularly inundate the area. The island is managed by forestry, yet valuable natural habitats remain. Climate change and historical river alterations now threaten both habitat resilience and forestry practices. The pilot focused on developing joint solutions through a participatory planning process. By the end of this project, a feasible restoration concept is identified that would enhance groundwater recharge, cool the microclimate, support wetland habitats and strengthen climate resilience for people and nature.



© Katalin Cséfalvay



© Szilvia Ádám, WWF-Hungary

RESTORIVER partners:
WWF-Hungary
Érd Municipality
General Directorate
of Water Management in Hungary



ERD



OUR WATER VISION

Lake Zaghen | Tulcea in Romania

The Zaghen ecological reconstruction area is the largest wild zone just outside Tulcea, owned by the municipality. Once part of the Danube floodplain, it was converted to agricultural land during the communist era, then fully restored to a natural state using European funds, but the need of follow-up measures is identified. Adaptive reed management helps maintain open-water corridors, improve hydraulic connectivity and water storage, and strengthen long-term climate resilience and biodiversity in this urban green-blue refuge.



© Tulcea Municipality



© Tulcea Municipality

RESTORIVER partners:
Romanian Ornithological Society
Tulcea Municipality
National Administration
"Romanian Waters"



Multi-purpose sites

The nature-based solutions show that even small, well-placed measures can boost water retention, improve microclimate and enhance ecology without reducing recreational value of urban parks. These multi-purpose sites serve thousands daily, making them ideal for visible and easily replicable interventions.

Maksimir Park | Zagreb in Croatia

Maksimir Park is a mosaic of oak forests, grasslands, streams, channels and lakes. As one of the oldest public parks in Europe, it spans 330 hectares and represents the largest green area and a key reservoir of urban biodiversity in the center of Zagreb. The park is legally protected and managed by Zagreb City Nature. Small-scale natural water retention measures restored flow, improved retention and forest-stream connectivity, strengthened urban biodiversity and delivered cooling, flood-mitigation and microclimate benefits in the park's most visited area.



© Zagreb City Nature



© Zagreb City Nature

RESTORIVER partners:
Public Institution Maksimir
WWF-Adria



Western Prista Park | Ruse in Bulgaria

The Park is a semi-natural green area along the Danube accessible to the 150,000 residents of Ruse. Despite its popularity for leisure, sport and nature experiences, the park's ecological condition has been weakened over time. Degraded vegetation and remnants of old grey infrastructure have reduced the park's ability to retain water, cool the microclimate and support healthy soils and biodiversity. Small-scale measures restore infiltration, enhance cooling and habitat quality, and offer a replicable model for climate-resilient urban green spaces in Ruse.



© Ruse Municipality



© Ruse Municipality

RESTORIVER partners:
Ruse Municipality
Bulgarian Society for the Protection of Birds





**Interreg
Danube Region**



Co-funded by
the European Union

RESTORIVER



RESTORIVER Partners:

Bulgarian Society for the Protection of Birds

Ruse Municipality, Bulgaria

WWF Adria – Association for protection of nature
and conservation of biological diversity

Zagreb City Nature

General Directorate of Water Management

WWF World Wide Fund for Nature Hungary

Municipality of Érd City with County Rank

National Administration "Romanian Waters"

Romanian Ornithological Society

Tulcea Municipality, Romania

City of Sombor, Serbia

World Wide Fund for Nature Adria - Serbia

Water Research Institute

WWF Slovakia

Public Union World Wide Fund for Nature Ukraine



Discover more on the RESTORIVER [Storymap](#) or [website](#).