Case study #08: Danube floodplain Romania

Case study cluster: large transboundary rivers

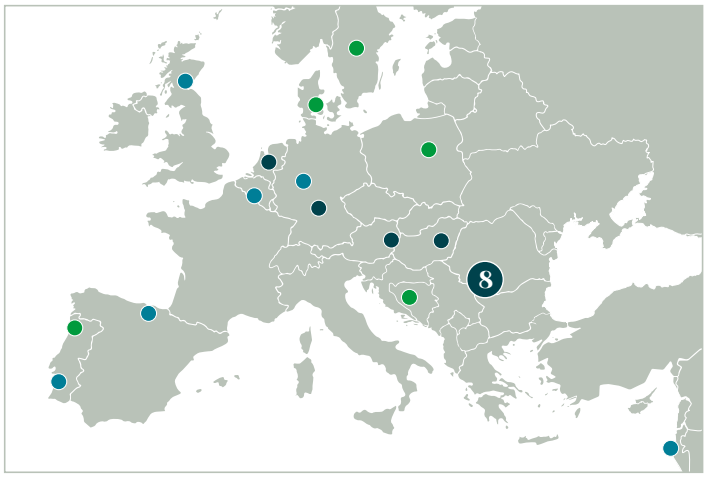
Country: Romania

Scientific partner: GeoEcoMar

Implementation partner: WWF-Romania

Twinning case study: Upper Danube

Website: wwf.ro/ce-facem/ape-dulci/reconstructie-ecologica/garla-mare/



Demonstration

- **Type of restoration:** Lower Danube
- **Size:** the length of the river flowing in Romania: 1,075 km (Romania represents 29 % of the surface area of the whole Danube Basin, with a length of 37.7 % of the Danube River flowing through its territory.), Danube floodplain: approximately 400,000 ha agricultural land along the lower Danube
- **Location(s):** Gârla Mare
- **Value of the case:** flood risk mitigation, floodplain restoration/reconnection, ecological status restoration, lateral connectivity, wetland restoration
- **Stakeholders involved:** Ministry of Agriculture, Romanian Waters National Administration, National Agency for Environmental Protection, local administration, county council, NGOs, citizens, farmers
- **Sectors involved:** agricultural/fish farming

Implemented within MERLIN

- **Restoration measures**: Sediment and vegetation removal; stream restoration to reconnect the floodplain.
- **Size**: 823 ha restored land, 12 km restored stream length
- **Scope**: regional
- **Vicinity**: rural
- **Stakeholders involved**: water authority, environment authority, fishery authority, nature protection (NGOs), local community, land owners
- **Estimated costs**: 1,070,000€ (including planning, monitoring and construction costs) + 5,000€ annual monitoring costs

The MERLIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036337.

Lessons learnt

- Successful restoration requires flexibility to overcome unforeseen challenges
- Open communication and collaboration turn obstacles into learning opportunities
- Active leadership by public authorities is essential for long-term scaling

Additional information

Gârla Mare was selected to demonstrate the benefits of reconnecting former/transformed wetlands back to the natural flood pulse of the Danube, to enhance the benefits provided to nature and local communities.

The area is important during wintering for Phalacrocorax pygmeus, Aythya nyroca and Aythya ferina, during migration period is important for Ph. pygmeus and Ph. carbo. The Gruia-Gârla Mare area hosts 19 birds species protected under The Birds Directive, 89 birds species protected under The Bonn Convention and 6 globally endangered birds species.

Strengths

- Broad restoration support
- High biodiversity potential
- Long-term restoration experience

Weaknesses

- Limited socio-economic assessment
- Limited capacity and funding

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Opportunities

- Wider uptake of NbS
- EU policy and funding
- Cross-sector collaboration

Threats

- Climate change
- Nature–development trade-offs
- Limited stakeholder commitment

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