Ecological Restoration of Pochina Lake, Romania

Year of issue

2025

Summary

The project’s objective was to improve the conservation status of aquatic bird species in Lower Prut Floodplain Natural Park (Galați County, RO) through scientific inventory, monitoring, site restoration, awareness-raising, implementation of the park management plan, and the designation of Natura 2000 SPAs. Partners were the University of Bucharest, the Romanian Ornithological Society and Romsilva – Galați Forestry.

At Pochina, two Prut–lake channels were cleaned and re-profiled (supply L = 362 m; evacuation L = 235 m), with small dykes/footbridges to maintain levels and enable gravitational flushing of sediments; a birdwatching tower was installed. Pochina is a national natural reserve (RONPA0432, 74.8 ha) located near Rogojeni (Suceveni Commune) and lies within the park’s Natura 2000 framework.

Photo Gallery



Location

45.991667, 28.096111

Project

NWRM

National ID

Romania_ 07

Sector

Hydromorphology

Installation Date

2010-10

Implementation status

Completed

Contact

Barbu Constantin, RECImola Koszta, REC

Overview

Location of the project

In Rogojeni village (Suceveni commune); access on DJ242D Suceveni–Rogojeni; the park boundary intersects DN26 near Rogojeni.

Country

Romania

NUTS2 Code

Sud-Est

Sponge measures implemented in the case study

Floodplain restoration and management

Lake restoration

Objectives

Improve the conservation status of 13 priority and 50+ other Birds Directive species present in the Lower Prut Floodplain Natural Park.
Re-establish the ecological balance of lakes by fixing degraded hydrological structures and improving/maintaining water levels.
Designate four SPAs (Romanian Natura 2000) and prepare/approve an integrated park management plan and administration.
Carry out inventories and monitoring, plus public engagement (village consultations, picture books, nature trails, six annual environment days, bird-watching towers).
Clean and re-profile two Prut–lake channels: supply 362 m, evacuation 235 m; build small dykes/footbridges to maintain levels and allow gravitational flushing.

Involved partners

Authority type	Authority name	Authority role	Comments
Other	County Council Galati	Financing	County Council
Other	University of Bucharest, Research Center for Environment and Impact Studies	—	Research and development ceter for the environment
NGO	Romanian Ornithological Society	Monitoring	—
Forest owners	Forestry Department Galati	—	—
NGO	Park Administration Lower Prut Floodplain	—	—
Other	The administrative circumscription of Suceveni Commune, Rogojeni Village	Other	—

Site Information

Climate Zone

Cool temperate dry

Precipitation

500.00 mm

Temperature (°C)

11.00 °C

Elevation range

2

Groundwater level

~9–32 m depth; flow toward the Lower Prut floodplain

Vegetation class

Aquatic & palustrine vegetation.

WFD Ecological status

Moderate

WFD Chemical status

Good

Water quality status

Organic loading and high mineralization; risks from agricultural pesticides and transboundary accidental discharges

Design and Implementation

Project scale

Micro

Project scale specifications

Site-level hydromorphology within a meso-scale park project.

Project area

74,8

Area subject to Land use change or Management/Practice change (ha)

41.80 ha

Favourable preconditions

Wetlands belong to the category of ecologically fragile areas, their dynamic being influenced mainly by the qualitative and quantitative characteristic of the water in the hydrographical basin in which they extend. For this reason, the conservation measures promoted in these spaces must be doubled by a strict control of the anthropic activities / arrangements using water for different purposes or as a medium of discharging some wastes.

Financing

Total cost

824710.00 €

Financing authorities

Authority name	Type of funding	Comments	Financing share
European Union	EU-funds: LIFE+	412,355 €	50 %

Authority name	Type of funding	Comments	Financing share
The Ministry of Environment and the Sustainable Development	National funds	412,355 € with all non-EU sources	50 %
Galati County Council	Local funds	412,355 € with all non-EU sources	50%

Compensations

Non

Policy and Governance

Policy description

The ecological reconstruction works carried out within the project ensure, by gravitational transfer, a water volume, enough to contribute to the conservation of this special conservation area, declared SPA.
Also, this water transfer from the Prut into Pochina Lake will allow for the cleaning of the bottom of the lake in the future, together with the excess of water being evacuated the extra alluvial deposits, too.
With a view to maintain the water level, dykes were built on the channels as well as footbridges for the free circulation.

Land ownership

State public domain (lake basin).

Policy targets

Increase Water Storage

Improved Biodiversity

Groundwater Recharge

Part of a wider plan

Oui

Wider plan

Wider plan type	Wider plan focus	Name
National	Environment & Biodiversity	Lower Danube Green Corridor programme

Public consultation

Oui

Consultation activities

Activity stage	Activity type	Key issues
Implementation phase	Awareness raising activities	These include information dissemination, consultation of every village in the area, and active participation and education with local educational material to be produced. The project takes into account that there is a relatively high illiteracy in the area and will address stakeholders in wide variety of ways, including picture books, nature trails, six annual environment days with expeditions into the area, children's exhibitions, and bird watching towers

Has contractual arrangements

Non

Impacts and Monitoring

Monitoring System

Monitoring requirements

Monitoring is carried out under the park management plan, with Romanian Ornithological Society (SOR) listed as a monitoring actor for Pochina and LIFE requiring continued checks of birds and water quality/quantity.

Monitoring parameters

As in the project framework, the site tracks bird population status and organochlorine pesticide bioaccumulation in birds, alongside water quality and quantity.

Maintenance

Maintenance requirements

The two Prut–Pochina channels are kept functional with dykes/footbridges to hold levels, and gravitational flushing is used to clear sediments after the initial dredging and re-profiling done in 2009.

Socio-economic Impacts

Direct benefits information

Better conditions for the birds population; increasing the number for aquatic bird species (especially those listed in Annex I of Birds Directive, Bern Convention and in ORNIS lists); improve the trophic state and saprobity of the target aquatic systems; allowing the water oxygenation of the lakes through the input of the fresh water from the Prut River; including the monitoring birds protocols in the adaptive Management Plan of Lower Prut Floodplain Natural Park;
Channel works and a bird tower underpin eco-tourism/education and fisheries potential.

Ancillary benefits information

Supply the potential of fisheries resources; using the potential of providing services for tourism and recreation;

Biophysical impacts: Hydrology

Hydrological effects

Increased water storage and maintained levels

Biophysical impacts: Biodiversity

Improved biodiversity

Oui

Information on improved biodiversity

Restoration of aquatic birds sites in the natural protected area located in Lower Prut Floodplain Natural Patk - Pochina Lake

Biophysical impacts: Water & Soil Quality

Water quality overall improvements

Positive impact-WQ improvement

Information on water quality overall

Improved trophic state and saprobity and oxygenation of the lakes by fresh Prut inflows.
Sediment removal/dredging was undertaken at the inlet.

Lessons Learned

Key lessons

The works at works of Pochina Lake assures, by gravitational transfer a sufficient water volum to contribute to the conservation of this special area, designated Special Protected Area (SPA).
A gravity-based reconnection (cleaning/re-profiling two Prut–lake channels) reliably secures sufficient water volume for SPA conservation and helps flush alluvial deposits; holding works (dykes/footbridges) keep levels steady while allowing circulation.

Barriers

Barrier type	Barrier role	Comments
Lacking financing sources	Main barrier	Park-level under-funded maintenance and siltation, reducing fish-farming usability by ~70% (a long-term operational constraint for hydraulic assets in the complex).
Expected maintenance needs	Secondary barrier	Persistent alluvial/sediment inputs requiring dredging and inlet enlargement.
Legal obligations / restrictions	Secondary barrier	Communication constraints in parts of the park (high illiteracy addressed by the LIFE outreach package).

Drivers

Driver type	Driver role
Organisation committed to it	Main driver

Success factors

Success factor type	Success factor role	Comments
Attitude of decision makers	Main factor	—
Financing possibilities	Main factor	Financing mix: EU LIFE+, national, county.
Communication activities	Secondary factor	Extensive stakeholder outreach and education during implementation.

Transferability

Highly transferable to low-gradient river–floodplain lakes: modest channel dredging plus small sluices and dyke repairs can restore levels and habitat. Success hinges on sediment load and long-term maintenance, available inflows, protected-area rules and stakeholder alignment. Watch for rapid re-siltation, drought-driven low flows and fish-farm constraints; embed monitoring of birds and water quality.

Sources

Sources

Some aspects concerning wetland restoration programs in the Prut River Basin

Lower Prut Floodplain - Ecological restoration of the Lower Prut Floodplain Natural Park

Ecological Reconstruction works - Pochina Lake

Wetland and floodplain habitats management and solutions in Lower Meadow of Prut Natural Park

Bird fauna long-term monitoring in the Romanian Lower Prut river basin

Planul de management – Parcul Natural Lunca Joasă a Prutului Inferior (PNLJPI)

Anexa nr. 1 – Lista consolidată a ariilor naturale protejate din România (RONPA)

LIFE Public Database – LIFE05 NAT/RO/000155 “Ecological restoration of the Lower Prut Floodplain Natural Park”

“2.1.7 Sectorul pescăresc” – FLAG Galați Strategy (archive 2012–2015)

“Schema cu Riscurile Teritoriale din județul Galați – 2024” (PDF)

“Despre primărie / About us” (Comuna Suceveni)

Fișa standard a sitului Natura 2000 – ROSCI0105 „Lunca Joasă a Prutului”