



# Restoration of wetland habitats along the Mura – NATURA MURA

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## Project Natura Mura

- Operational Programme for the Implementation of the EU Cohesion Policy 2014-2020.
- Project duration: **01.03.2020 30.11.2023**.
- Value: **4.571.854,99 €.**
- Main aim: The project addresses 3 target qualification habitat types of 12 target qualifying plant and animal species of the Natura 2000 Mura area.

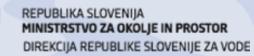






#### **PROJECT PARTNERS:**

- The Institute of the Republic of Slovenia for Nature Conservation (IRSNC),
  - Slovenian Water Agency (DRSV),
  - Slovenian forest company (Slovenski državni gozdovi d.o.o. (SiDG)),
    - Municipality Velika Polana,
    - Slovenia Forest Service (ZGS),
    - The Murska Sobota Development Centre (RCMS).





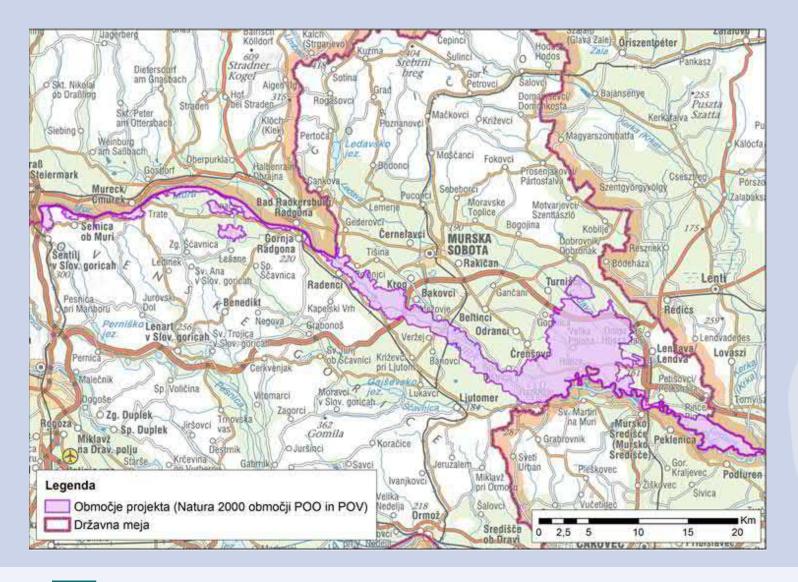








#### **PROJECT AREA**



#### **Natura 2000:**

- > SAC and SPA Mura
- > 147,5 km<sup>2</sup>







## **Project goals**

Achieving a favorable conservation status of species and habitat types of the Natura 2000 Mura area and thus achieving the objectives of Natura 2000 management plan, preservation and restoration of natural values (Mura riverbed, arms and backwaters, floodplain forests, wet meadows) along the Mura River

The project addresses 3 qualifying habitat types and 12 qualifying plant and animal species:

- > HT 6510,
- ➤ HT 91E0\*,
- ➤ HT 91F0,
- Green snaketail Ophiogomphus cecilia,
- > Large white-faced darter Leucorrhinia pectoralis,
- Danube crested newt Triturus dobrogicus,
- > Italian crested newt *Triturus carnifex*,
- European fire-bellied toad Bombina bombina,
- Yellow-bellied toad Bombina variegata,
- Graphoderus bilineatus,
- Cucujus cinnaberinus,
- > Carabus variolosus,
- > Eurasian beaver Castor fiber,
- > Eurasian otter *Lutra lutra*,
- Middle spotted woodpecker Dendrocoptes medius.









## **Project goals**

- > ensuring and maintaining good ecological status of waters and thus achieving the objectives of the WMP;
- > increasing the retention capacity of high waters and thus improving flood safety;
- > reducing the deepening of the river bed and thus maintaining the level of groundwater in the area for drinking water sources and agricultural and forest land;
- restoration of the structure and function of floodplain forests, thus providing conditions for the long-term sustainable use of natural wood resources;
- > restoration and maintenance of extensive wet grasslands and thus the production capacity of agricultural land,
- > establishing a quality interpretation for experiencing nature in the Natura 2000 Mura area and thus supporting the achievement of educational and development goals of the Mura Biosphere Reserve;
- > new jobs in the region;
- improving the quality of the living environment of local people...







## **Project activities**

## 5 activity sets:

- Maintenance and restoration of wet grasslands
- Restoration of river dynamics and aquatic habitats
- Maintenance and restoration of floodplain forests
- Land purchases
- Establishment of a comprehensive interpretation in the Natura 2000 Mura area









## Maintenance and restoration of wet grasslands

- Partners: Municipality Velika Polana, IRSNC
- Conservation goal: Improving the conservation status of HT 6510 meadows

#### **Main activities:**

Clearing of scrubs from overgrown grasslands (10 ha).

Ensure proper use of restored HT 6510 (10 ha).

> Ensure long term use (after project end).









## Restoration of river dynamics and aquatic habitats

- Partners: DRSV, IRSNC
- central part of the project
- Target species/HT: HT 91E0\*, 91F0, Green snaketail, Large white-faced darter, Danube crested newt, Italian crested newt, European fire-bellied toad, Yellow-bellied toad, Graphoderus bilineatus, Carabus variolosus, Eurasian beaver, Eurasian otte
- > Restoratoin of oxbow lakes and small ponds
- o oxbow Podkova (350m, 10.000m3)
- o oxbow Zaton (600m, 16.000m3)
- o small ponds (20 ponds, 100m2) Grafični prikaz aktivnosti: Varstveni cilj 4.1.8. (SP\_1188)



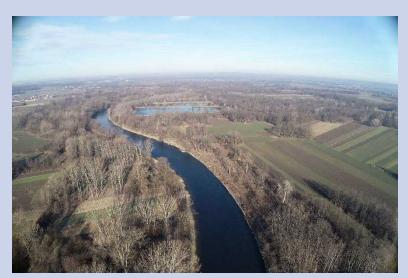


## Restoration of river dynamics and aquatic habitats Restoration of side arms Dokležovje II Lukačeva struga Besnica II Dokležovje I Srednja Bistrica Alter graba ZAVOD REPUBLIKE SLOVENIJE

## 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)















## Maintenance and restoration of floodplain forests

Partners: ZGS, SiDG

Target species/HT: HT 91E0\*, 91F0, Middle spotted woodpecker

#### Reforestation by planting seedlings

- ➤ Restoration of HT 91E0 \* by replacement of non native poplar plantations (9 ha)
- Restoration of HT 91E0 \* by replacing areas of invasive alien plant species (5 ha)
- ➤ Restoration of HT 91F0 by replacement of non native poplar plantations (5 ha)
- ➤ Restoration of the Middle spotted woodpecker habitat in Črni log (10 ha)







## Maintenance and restoration of floodplain forests

- Promoting natural rejuvenation
- >HT 91E0\* (2 ha)
- >HT 91F0 (1 ha)

















## Land purchases and exchanges

- Partners: IRSNC, SiDG, DRSV
- Target species/HT: Green snaketail, Cucujus cinnabereus, Middle spotted woodpecker
- Purchase of land in the area of the the Konjišče riverbed widening(1.9 ha);
- Purchase of 25 ha of land threatened by river erosion or oldgrown well-preserved forests;

Exchange of 3.3 ha of private land on the island of the Mura near Srednja Bistrica









## **Nature interpretation**

- Creating an interpretation plan
- Implementation of information centers in Sladki Vrh, Veržej and Velika Polana
- Arrangement of 4 learning paths
- Arrangement of 5 learning polygons
- Production of a short promotional (educational) film





