

Convention on Wetlands
(Ramsar, Iran, 1971)



Restoration of wetlands (river ecosystems) of the Danube River

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(with using information from LIFE projects & Slovak Ramsar Committee – VÚVH/WRI, BROZ)

International Course on Wetland Restoration
(Czech Republic, October 2nd – 6th, 2023)

Protection – Dunajské luhy/Danube floodplains

– Special Protected Area

Bird Directive

16,512 ha

2008, 2013

– Protected Landscape Area

IUCN Category V

12,285 ha

1998

– National Park

IUCN Category II

21,047 ha

proposal

– other categories: SCIs, nature reserves, nature monuments, protected sites

– Ramsar Site

Ramsar Convention, no. 605

14,488 ha

1993

includes: network of tributaries, oxbow lakes, sand and gravel banks, floodplains, floodplain forests, reedbeds, marshes, low-lying meadows

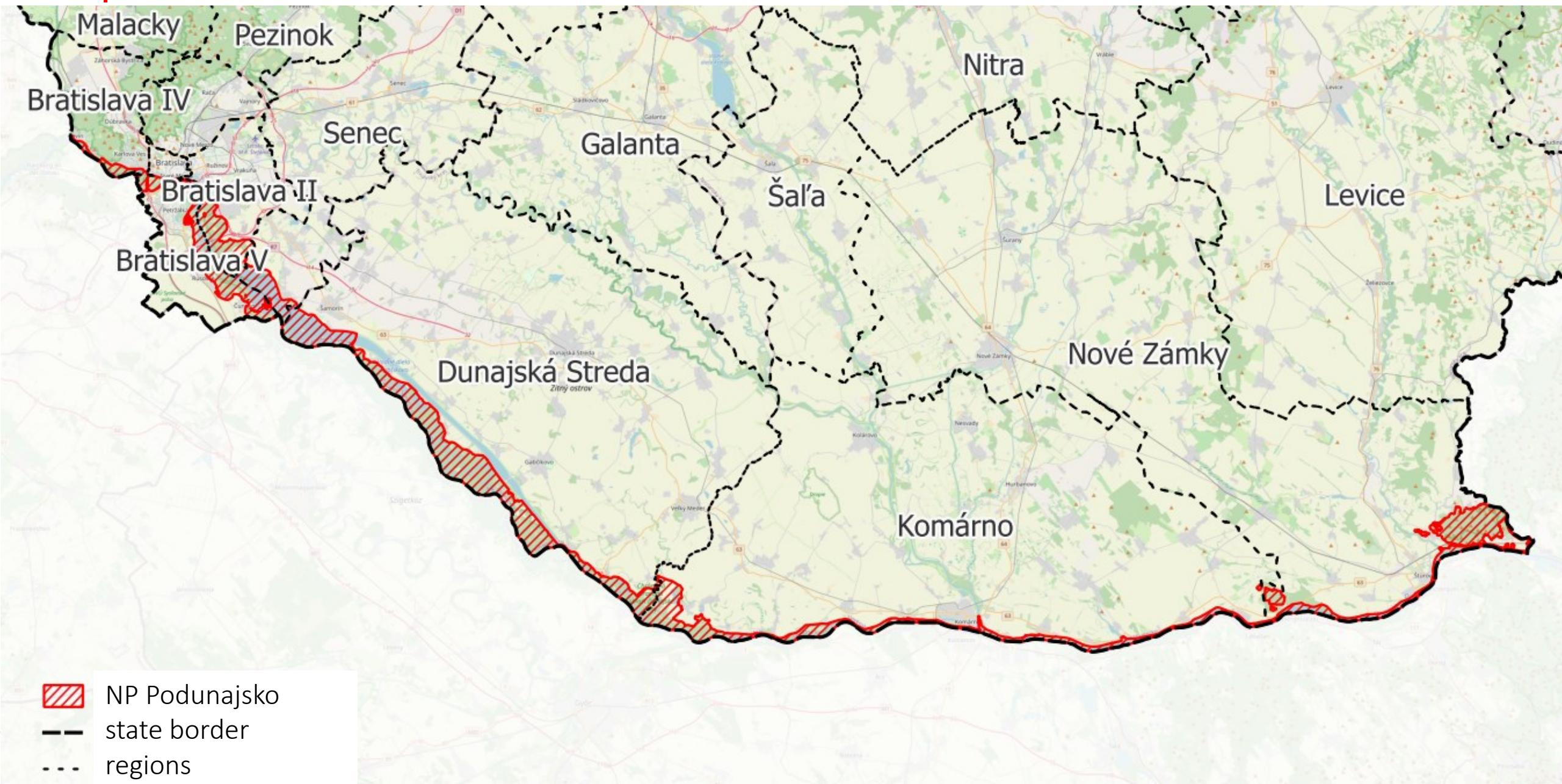
Danube + floodplain along the AT + HU borders

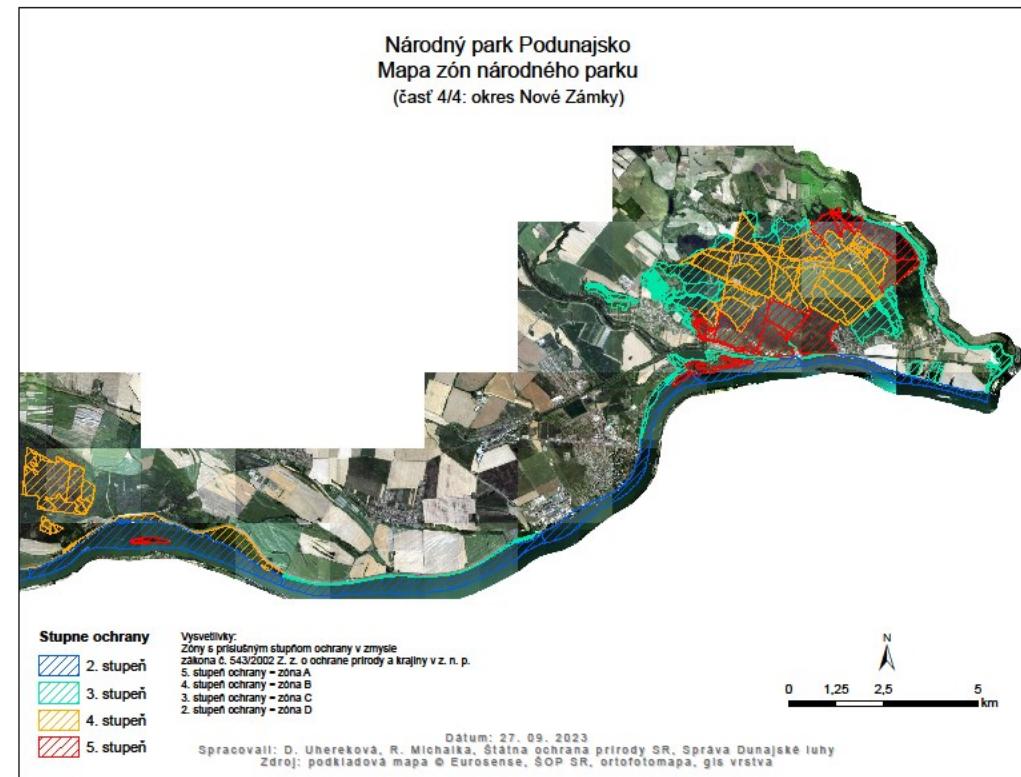
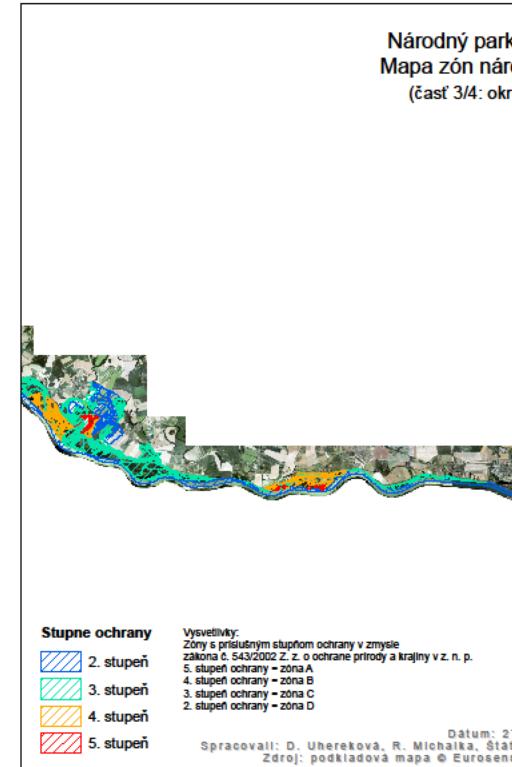
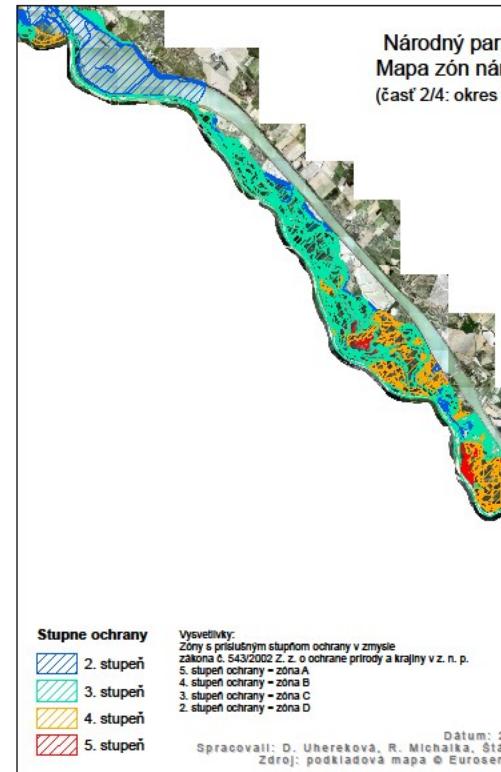
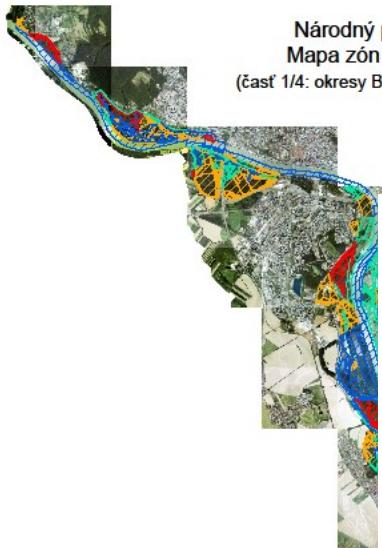
floodplains represent the most valuable source of drinking water aquifers in Central Europe

flora and fauna, waterfowl, sturgeons

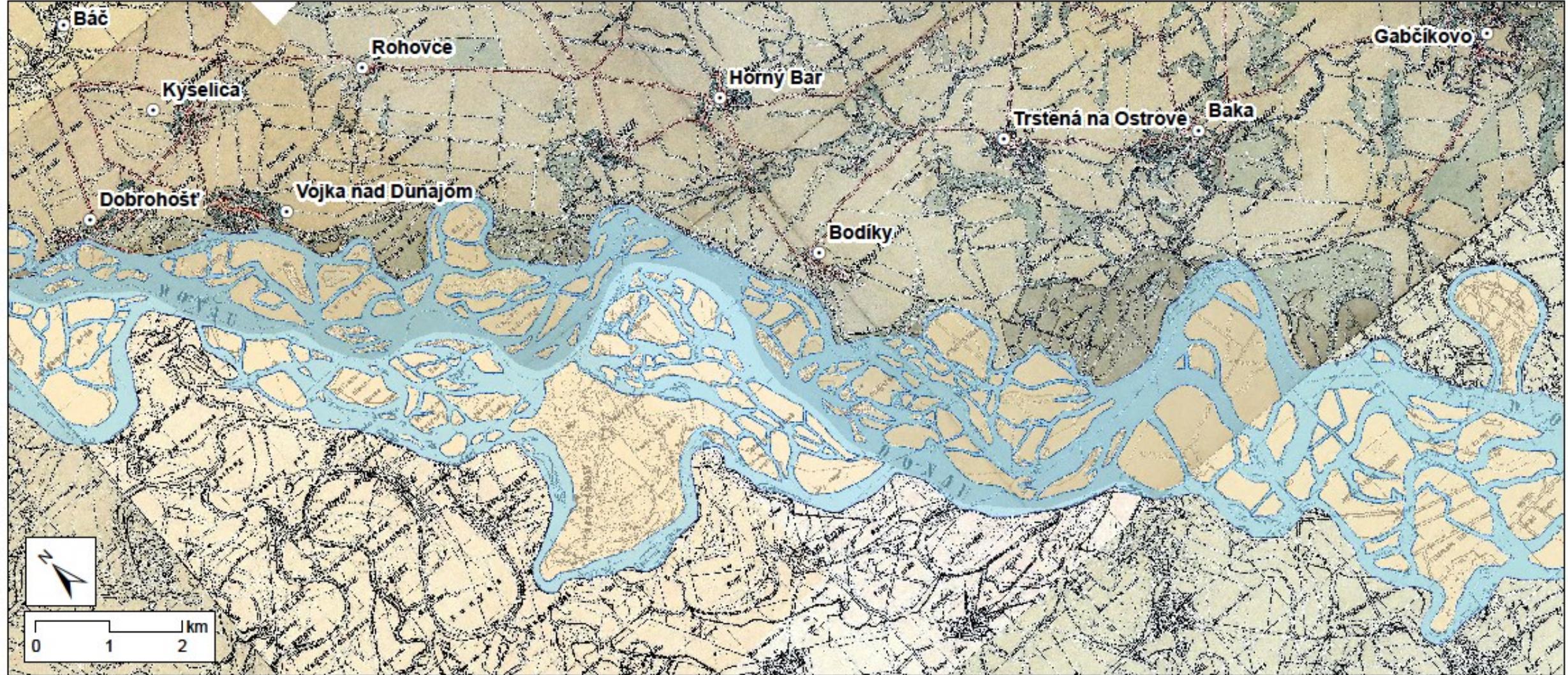


National Park – Podunajsko/Danube floodplains





Historical situation



Ecological Prioritisation Regarding Restoration Measures for River and Habitat Continuity

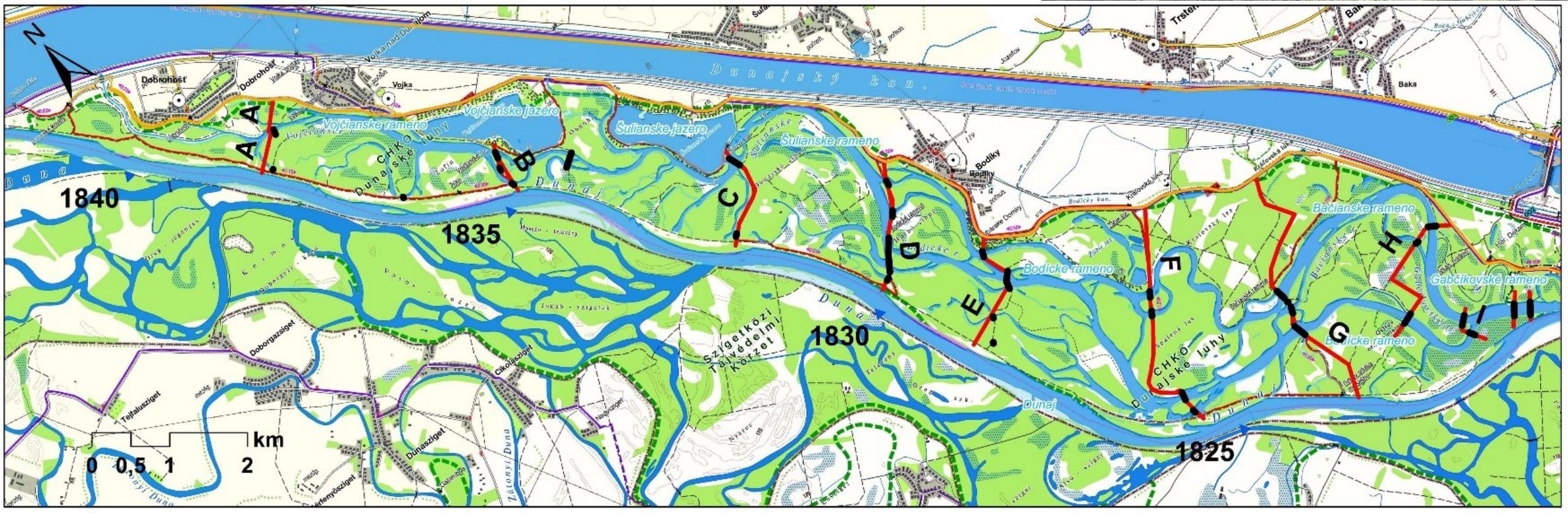
Gabčíkovo (SK)



Djerdap I, II/ Iron Gates I, II (RO, SE)

Current status

- HMWB – navigation, flood protection, water mgmnt
- water regime, river dynamics
- hydro-morphological alterations, river banks, islands
- connectivity
- remnants – valuable priority habitats and species

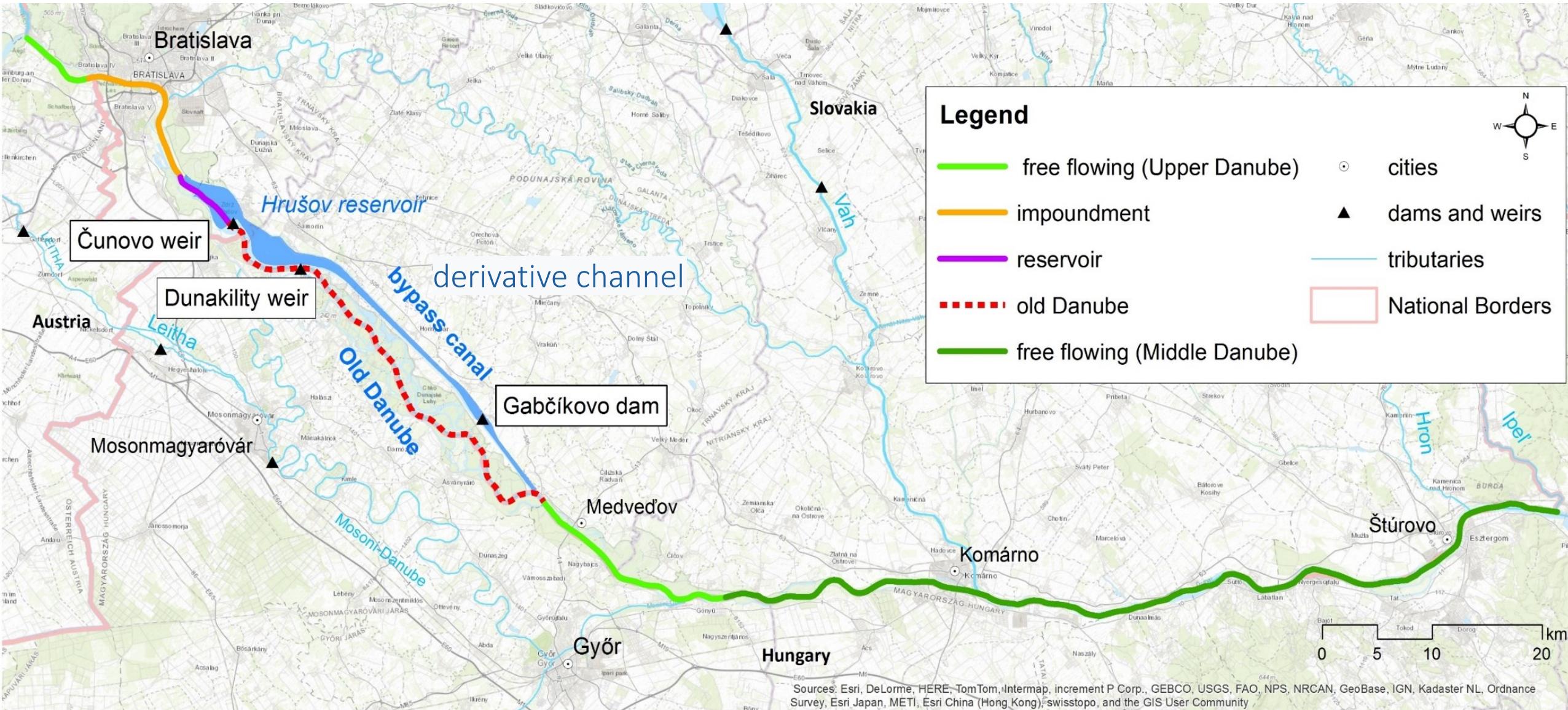


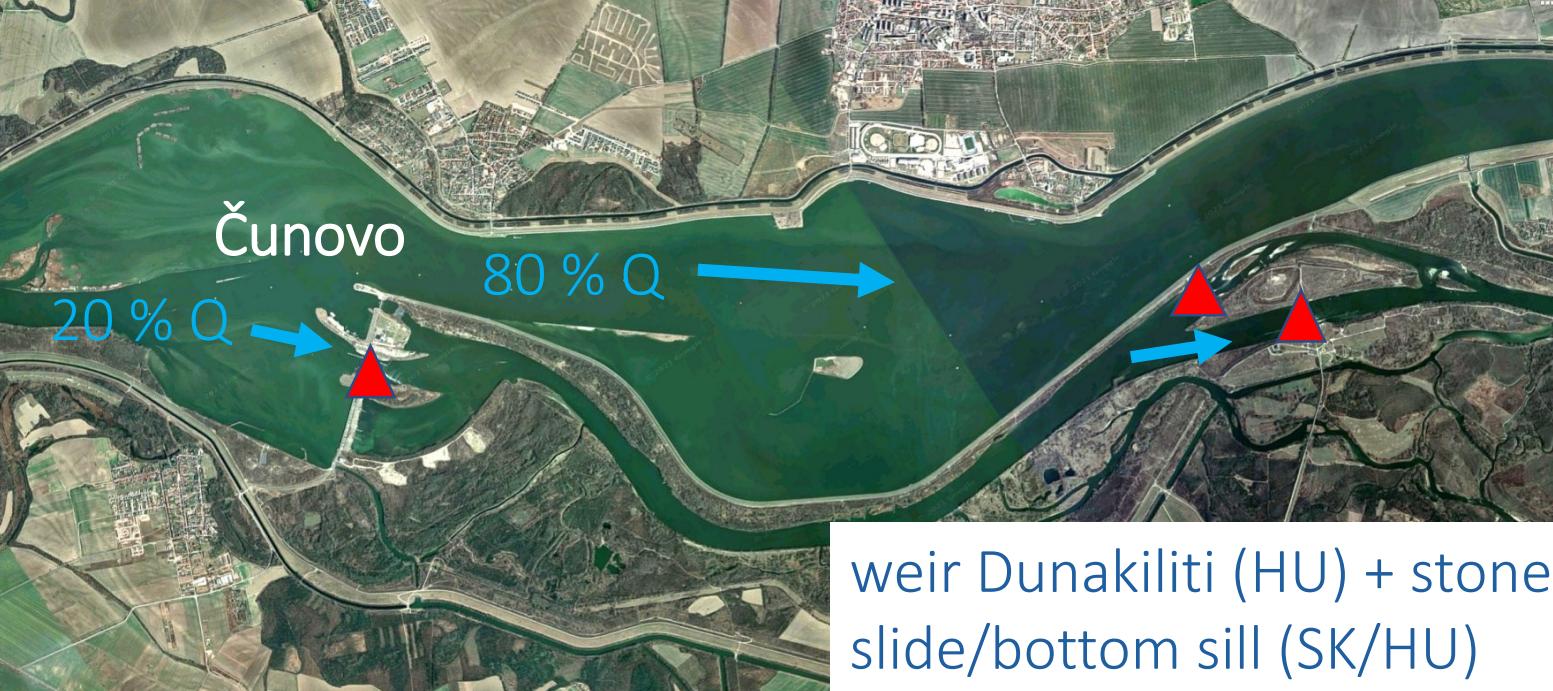
Restoration goals

- longitudinal connectivity – barriers passable for migration (sturgeons), weirs in inland Danube delta oxbow system (replacement of pipe culverts with frame ones)
- lateral connectivity – side arms openings (straightened river, cutted branches)
- natural beaches, shallow banks, wild gravel islands
- steep banks and walls by removal of artificial embankments
- water regime – natural/simulated floods (120 m³/s)
<https://www.youtube.com/watch?v=-q7z8sm5UaM>
<https://www.youtube.com/watch?v=zLvMqSkVKtE>
- hydrological dynamics (natural erosion and sedimentation processes)
- fine sediments management, gravel management, gravel river bed
- system of periodically flooded wetlands in the inundation area
- new types of navigation groynes
- floodplain forests management, grazing of cattle, pruning head willows, etc.



Current status and restoration potential





Gabčíkovo hydroelectric power plant
<https://www.vvb.sk/>

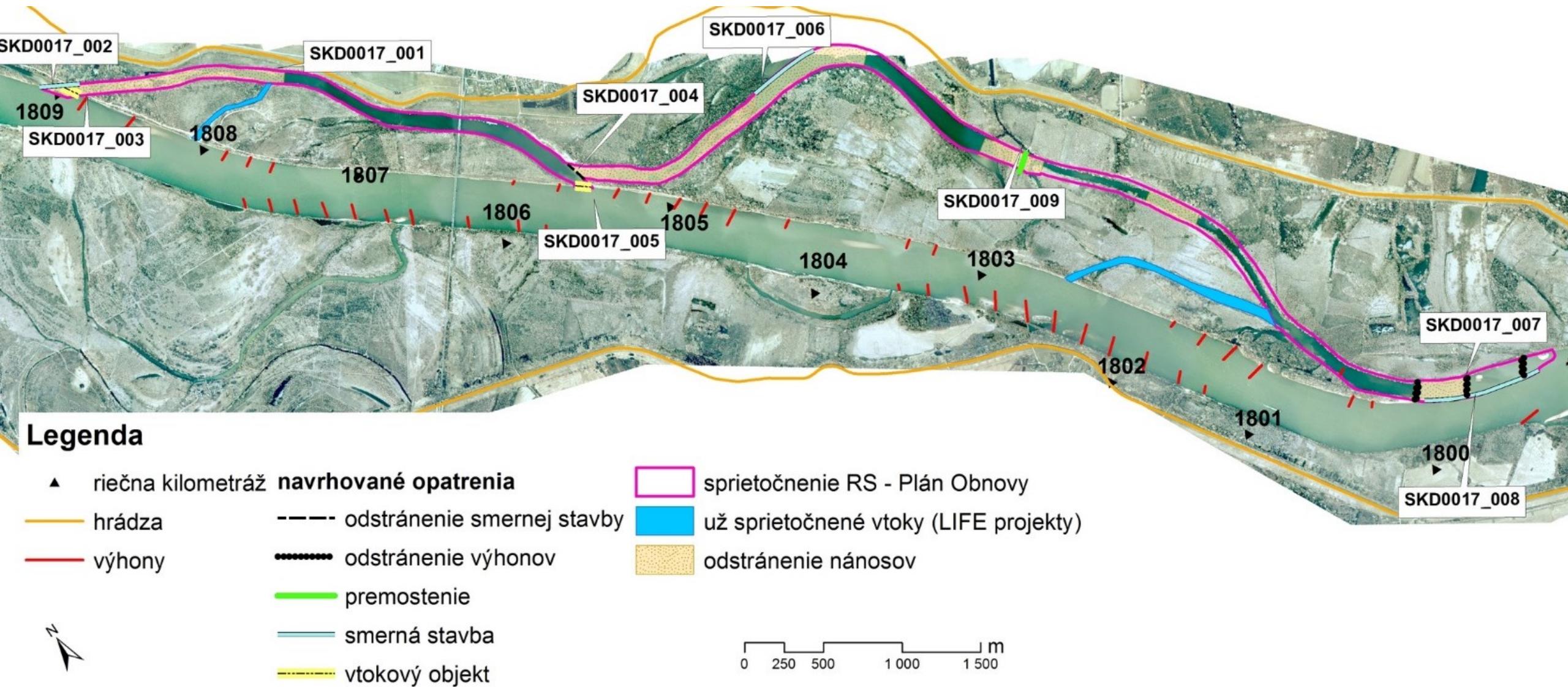


Barriers
in Danube and in the channel



Restoration – examples and proposals

e. g. Sap-Medveďov-Klúčovec river branch system



Restoration – examples and proposals

- Medveďovské side-arm 2012 (2024/2025)
- Veľkolélske side-arm 2013, 2014, 2015, 2022 (2024)
- Devínske side-arm 2014 – 2015
- Karloveské side-arm 2015 (2024)
- Klúčovské side-arm 2019 (2024/2025)
- lower Vojčianske side-arm 2023
- Šulianske side-arm 2023
- side-arm Foki/Istragovské (2024)
- Ovsištské, Michalovské, Jarovské, Hamuliakovské side-arms



Financing

- LIFE Nature and Biodiversity projects (LIFE21-IPE-SK-Living Rivers, LIFE17 NAT/SK/000621 Microtus II, LIFE18 NAT/AT/000733 DLLD, etc.)
- Recovery and Resilience Facility (RRF)
- Norway grants – NFM
- Vodohospodárska výstavba, š. p./ Water Management Construction, state enterprise
- structural funds – OP Slovensko
- etc.



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the European Union**



PLÁN [OBNOVY]

Thank you...



Let's open up rivers for more **Happy Fish**
and join **World Fish Migration Day!**

