

LIFE Living Rivers: Restoring rivers in Slovakia



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the European Union

Project

Implementation of the river basin management plan in selected river- sub-basins in Slovakia



Call	LIFE Strategic Nature and Integrated Projects (SNaP/SIP)	Partneri projektu			
Acronym	LIFE21-IPE-SK-LIFE Living Rivers	 Výskumný ústav vodného hospodárstva		 ŠTÁTNA OCHRANA PRÍRODY SLOVENSKEJ REPUBLIKY	 MINISTERSTVO ŽIVOTNÉHO PROSTREDIA SLOVENSKEJ REPUBLIKY
Project code	101 069 837	 Fakulta rybárství a ochrany vod Faculty of Fisheries and Protection of Waters	 Jihočeská univerzita v Českých Budějovicích University of South Bohemia in České Budějovice	 SLOVENSKÝ VODOHOSPODÁRSKY PODNIK, štátny podnik	 Vodohospodárska výstavba
Duration	1.1.2023 - 31. 12. 2032	 Bratislavské regionálne ochranné združenie			
Budget	27 799 402,33 €				
EU contribution	16 677 073,39 €				

Funding



Program

Programme for Environment and Climate Action (LIFE)

Strategic Integrated Project (SIP)

Sub-programme: Circular Economy and quality of life

Thematic priority: **Water**

Support the full implementation of the following plans and strategies:

River basin management plans pursuant to Annex VII to the Water Framework Directive, Flood Risk Management Plans pursuant to the Floods Directive or Marine Strategies pursuant to the Marine Strategy Framework Directive

Project partners

6 public bodies
3 NGOs
1 university
Stakeholders
International cooperation



ŠTÁTNA
OCHRANA PRÍRODY
SLOVENSKEJ REPUBLIKY



MINISTERSTVO
ŽIVOTNÉHO PROSTREDIA
SLOVENSKEJ REPUBLIKY



Fakulta rybnářství
a ochrany vod
Faculty of Fisheries
and Protection
of Waters

Jihočeská univerzita
v Českých Budějovicích
University of South Bohemia
in České Budějovice



SLOVENSKÝ
VODOHOSPODÁRSKY
PODNIK, štátny podnik



Vodohospodárska
výstavba



Key EU documents and directives

- Water Framework directive 2000/60/EC
- EU Floods directive 2007/60/EC
- European Union Strategy for the Danube Region (EUSDR)
- The Convention on Co-operation for the Protection and Sustainable Use of the River Danube (Danube River Protection Convention - DRPC)
- EU Habitats Directive 92/43/EEC,
- EU Birds directive 2009/147/EC
- Convention on the Conservation of European Wildlife and Natural Habitats (Bern convention),
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn convention),
- Pan-European Action Plan for Sturgeons
- Biodiversity Strategy 2030
- EU Strategy on Adaptation to Climate Change
- European Green Deal
- Nature Restoration Law – in preparation
- ...

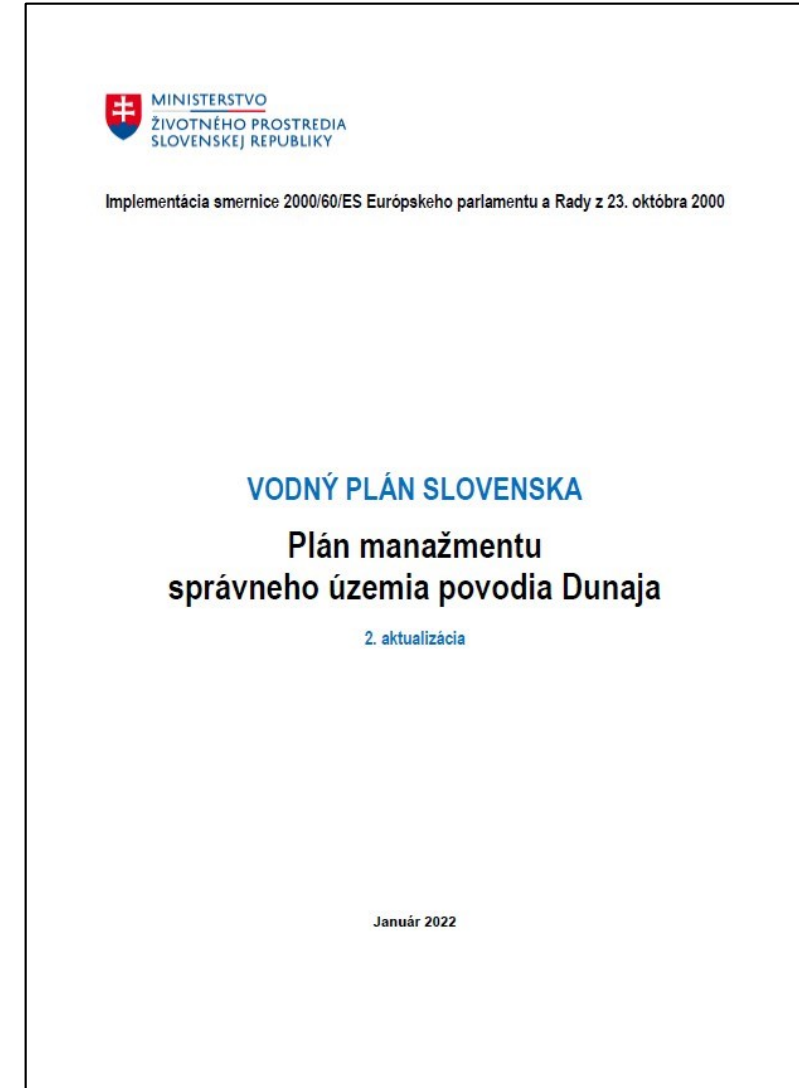


National policy

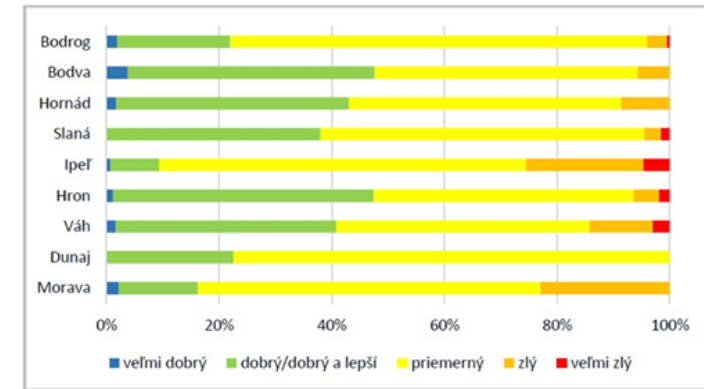
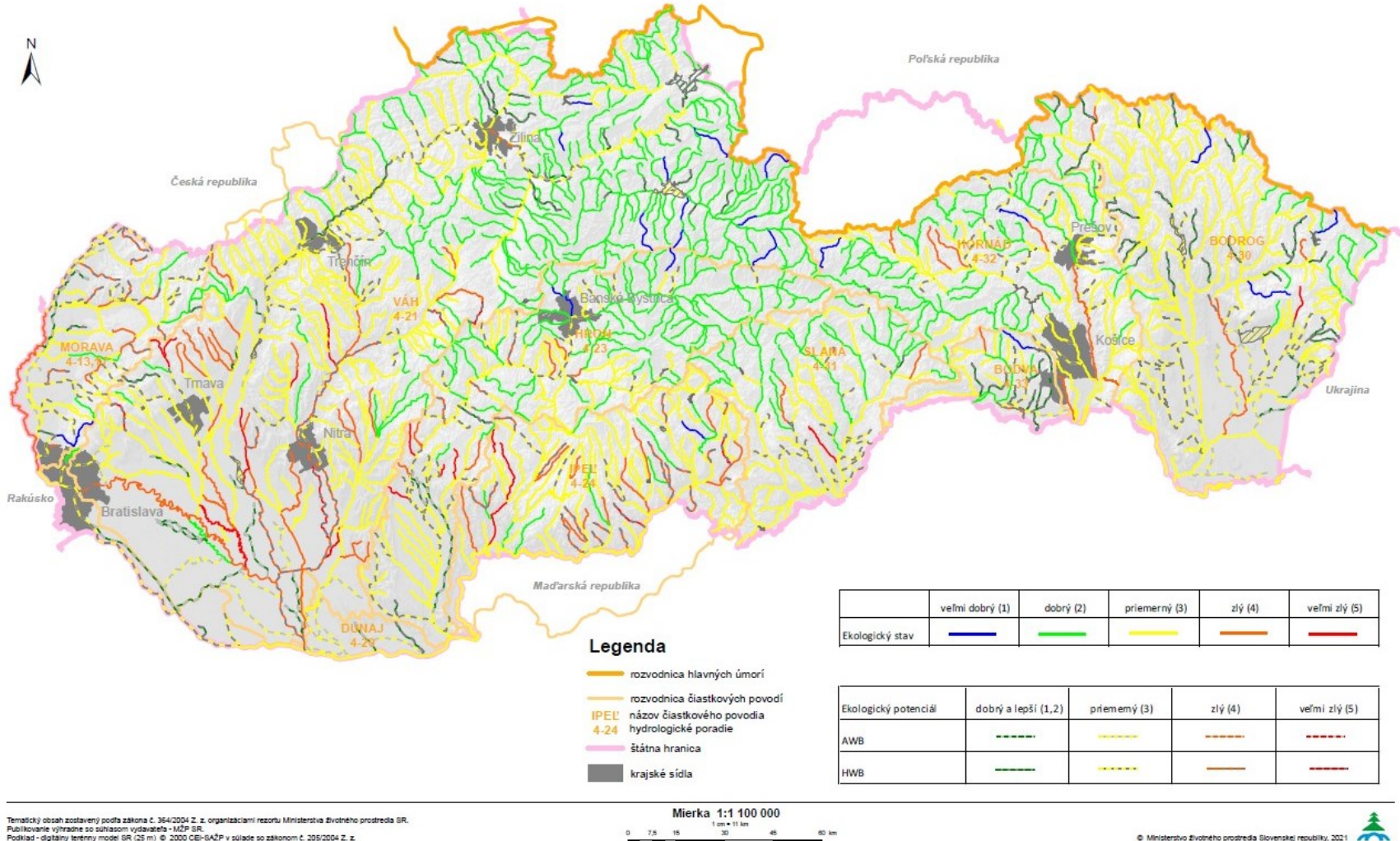


Water Policy Conception
(2021-2030 with
prospects till 2050) –
adopted by the
government 1.6.2022

The 3rd River Basin
Management Plan (2021-
2027) adopted by the
government 11.5.2022



Ecological status of water bodies 2013-2018



59 %

Water bodies failed to reach good ecological status/potential

Main project goal

- Implementation of the 3rd RBMP of the Danube (2021-2027) - ecological targets of the WFD to achieve good GES/GEP of surface water bodies
- Active measures (in the field) on:

10

Water bodies

344

km



Indicators

3 268 ha

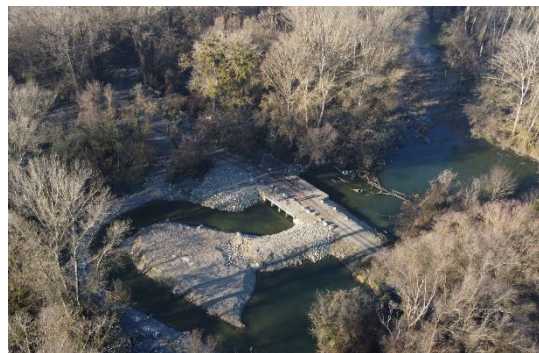
biotopes

13,6 km

side-arms

15 barriers

removed/modified



Key topics

**HYMO
measures**

management of
protected areas

sustainable forest
management



sustainable land
management

native fish species,
sturgeons

water quality
measures on
local scale

How?

Planning

Monitoring

Implementation

Stakeholders



Cooperation

Capacity building

Communication

Mobilisation

Replication

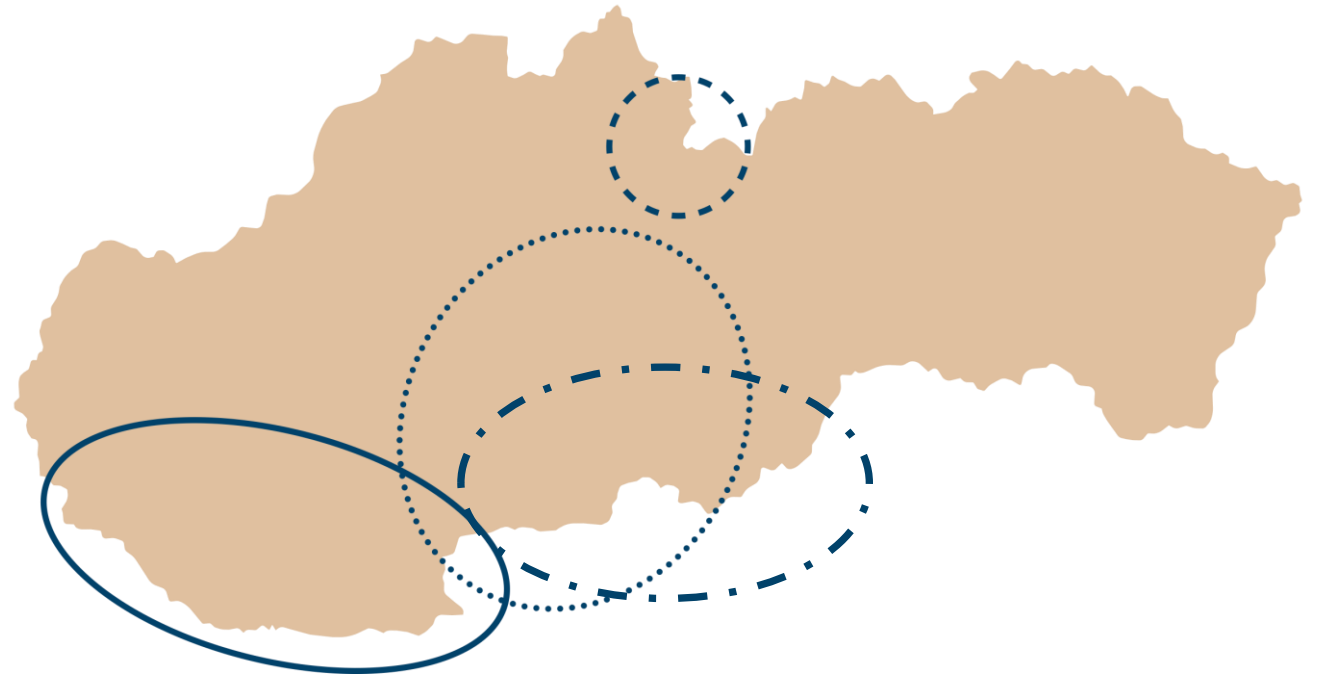
Project sub-basins

Danube

Hron

Ipeľ

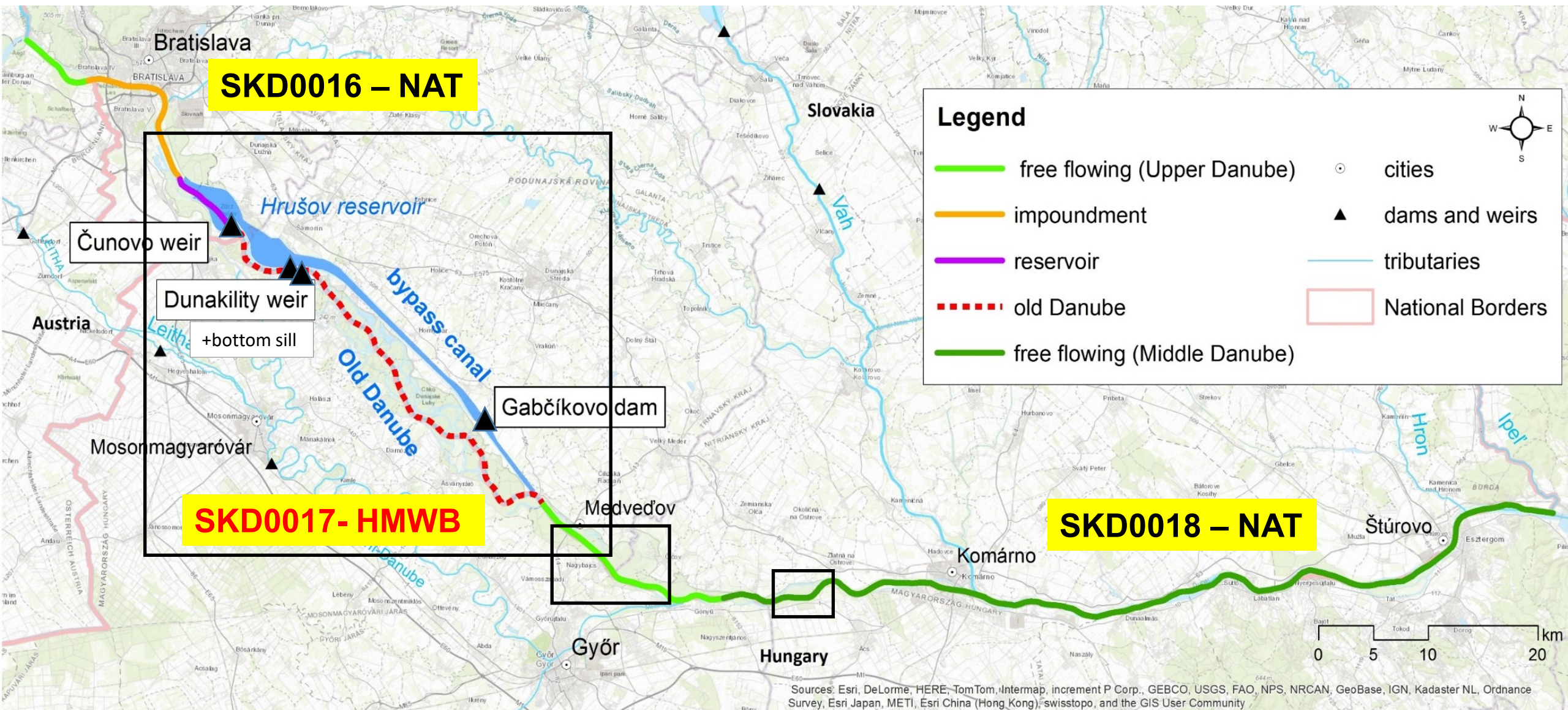
Belá



19 Natura 2000 sites

Our cases

1. The Danube



Ecological status/potential: 3 (moderate)

Slovak section of the Danube river: 172 km

Barriers on the Danube, canal, in the side-arm system (SK-HU reach)



Dunakiliti dam (HU)
and bottom sill (SK/HU)



Čunovo dam

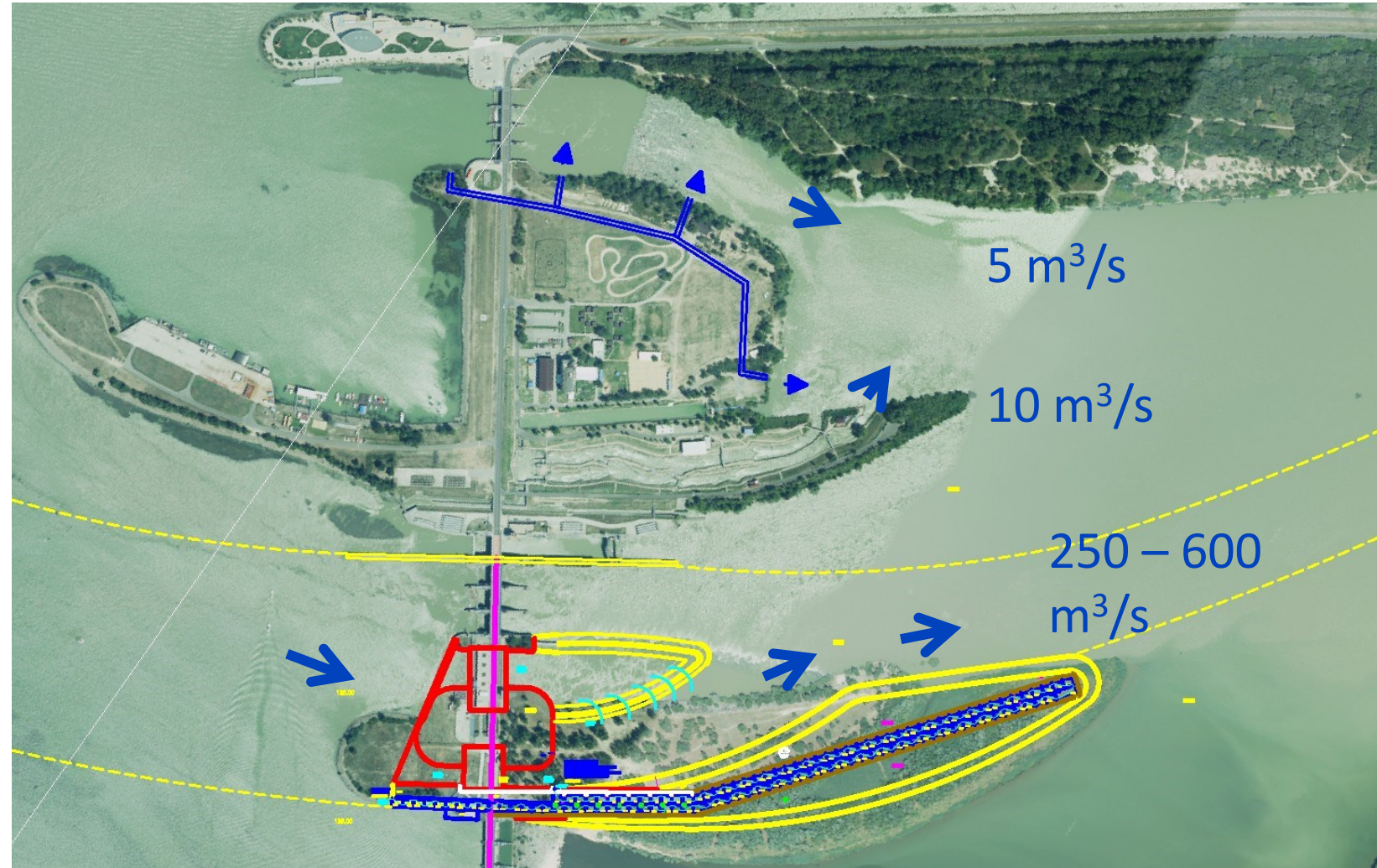


Gabčíkovo HPP



Čunovo dam

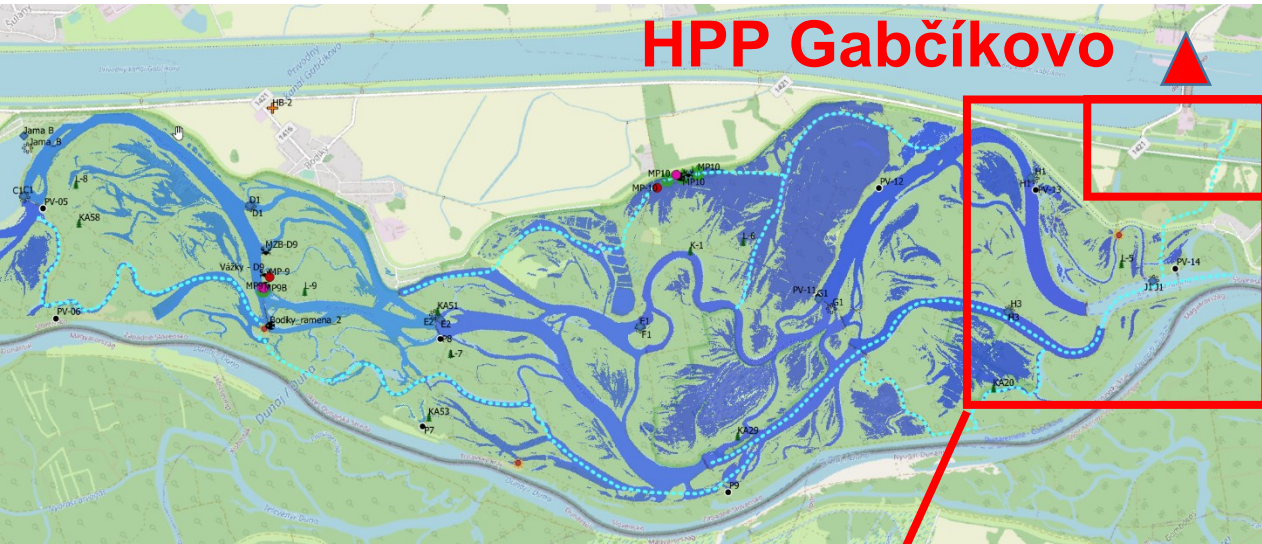
- Reconstruction of HPP – 2nd HPP being projected - ca 2028-2032 in operation
- **Main fishpass:** giant sturgeon (size 4 m), sterlet - *acipenser ruthenus*, *barbus barbus*, *aspius aspius*
- **Secondary fishpass** - slow migratory species



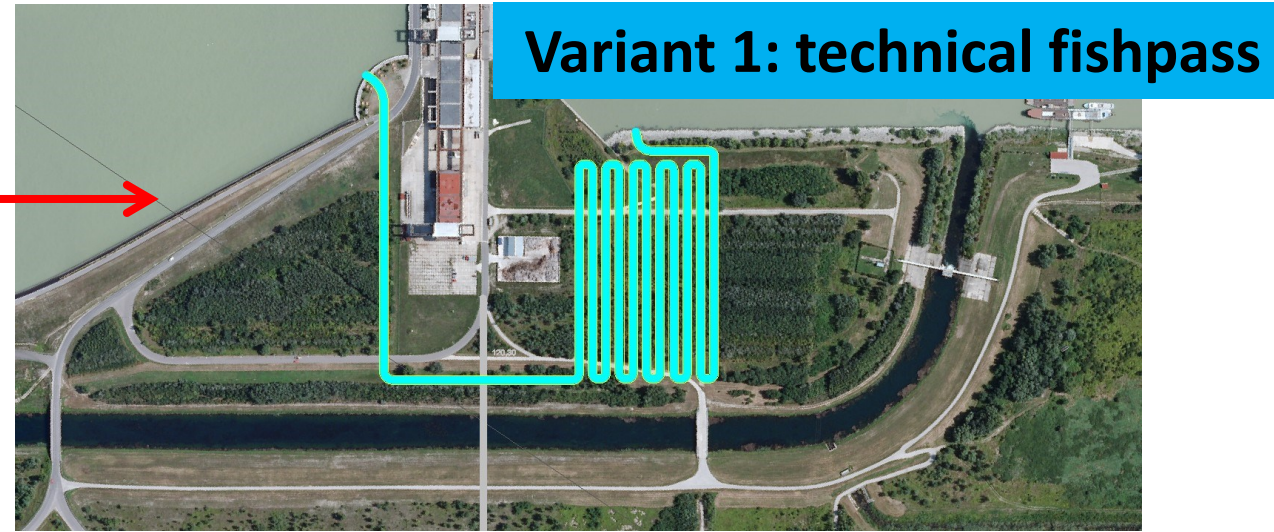
Gabčíkovo HPP - Danube sidearm system (SK side)



Biocorridors for fish migration- free flowing, without impoundments, gravel bed



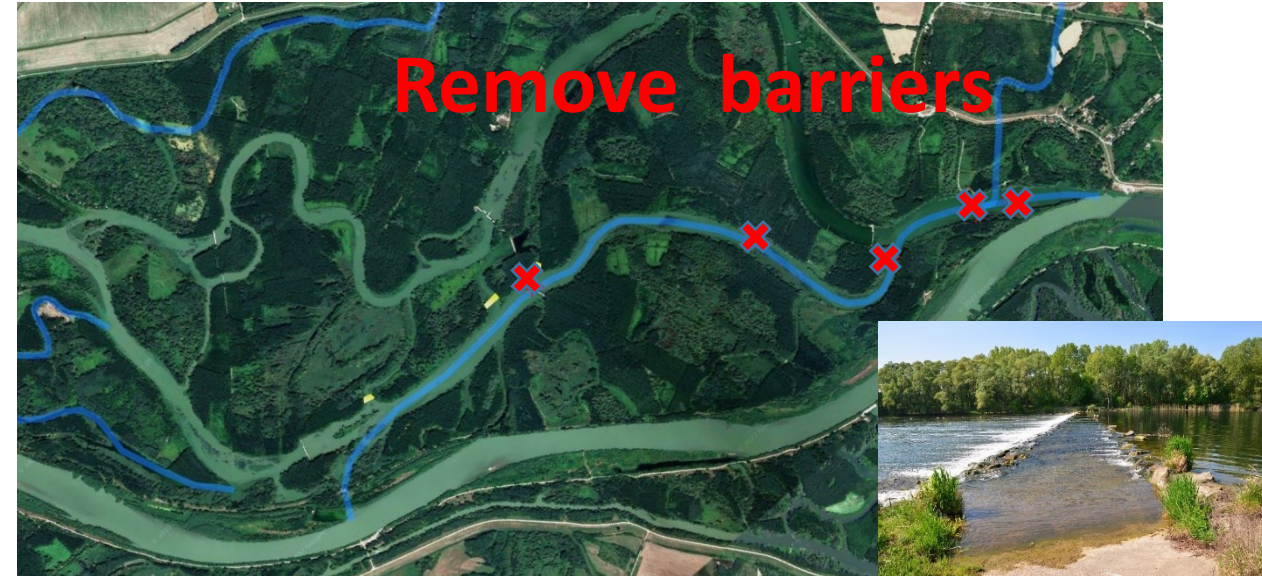
HPP Gabčíkovo



Variant 1: technical fishpass

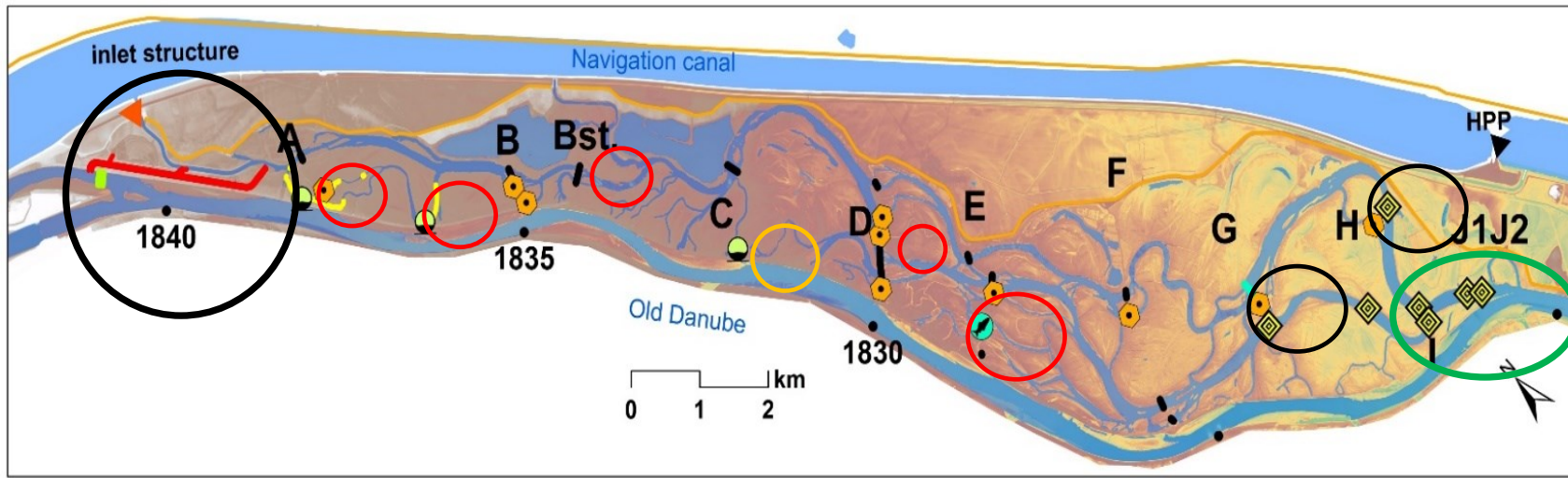
Variant 2: biocorridor

+reconstruction of flood protection dyke



Remove barriers





Legend

Proposal of restoration measures

- culvert construction (no longitudinal connection at present)
- culvert structure enlargement
- inflow channel from the Danube
- fishpass reconstruction
- bottom sill to impound water in the Old Danube
- increase the number of existing culverts
- sediment removal (side-arms reconnection)
- barrier altitude increase



LIFE14 NAT/SK/001306



No new barriers on the Danube



Insula magna – Hungarian project - need bilateral cooperation and harmonisation of plans

Complementary projects

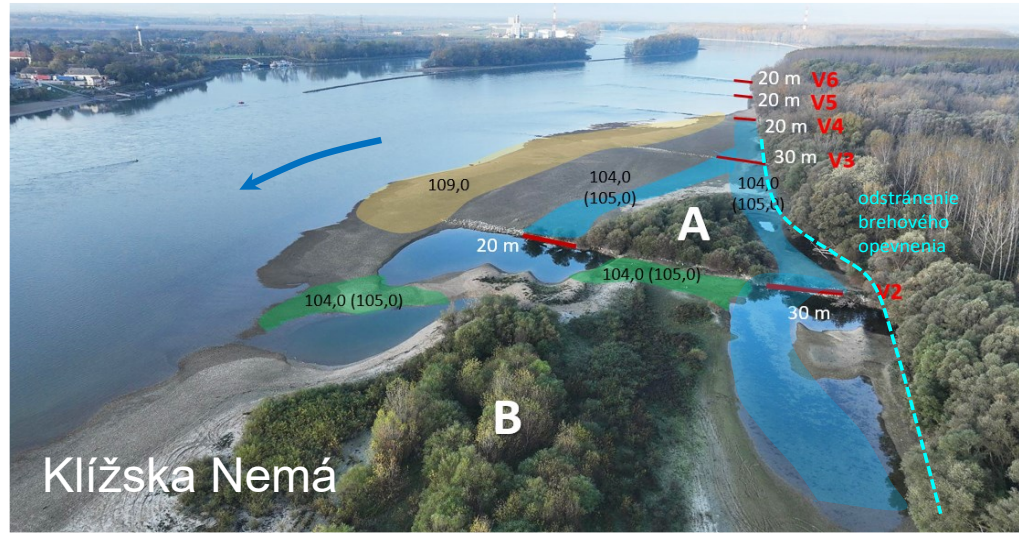
Side-arms reconnections, Groin reconstructions



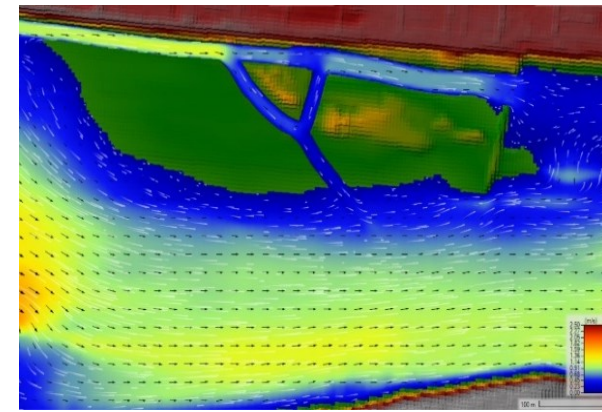
PLÁN [OBNOVY]



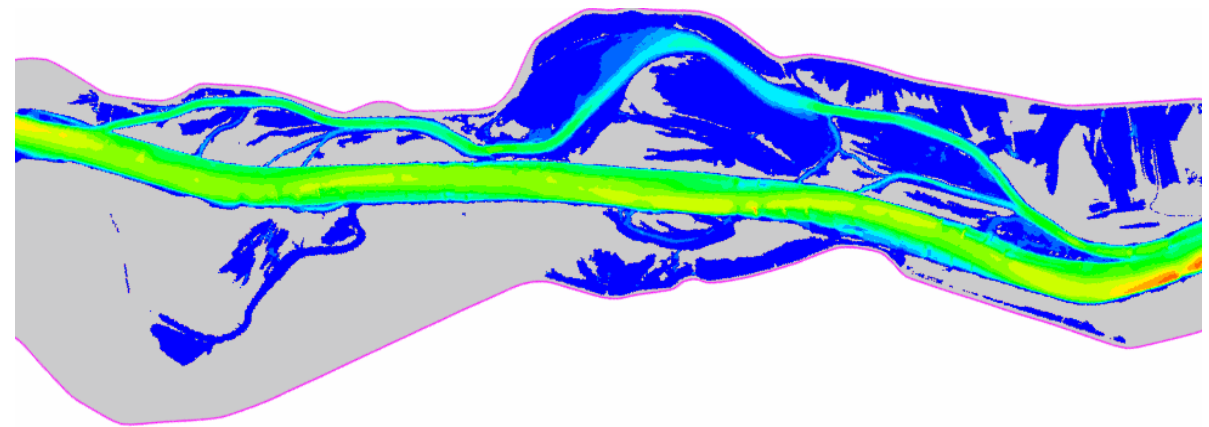
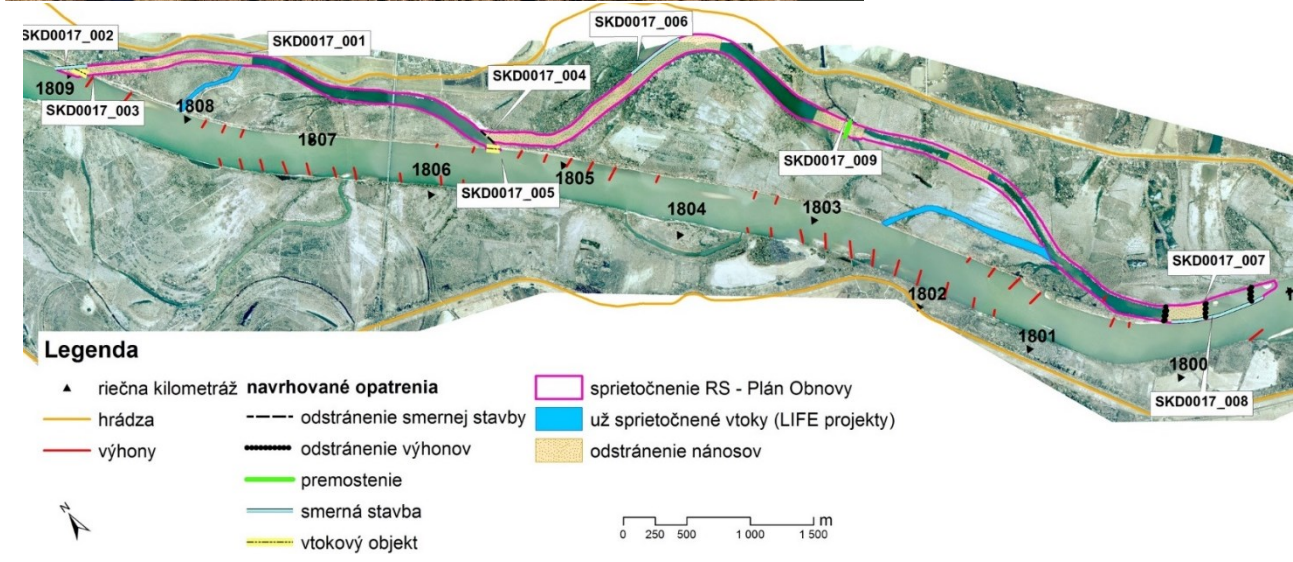
Medveďov



Klížska Nemá



Velocities at low flow 1000 m³/s – scenario 2



Source: VÚVH studies

2023

- Initial works for telemetric monitoring and ichtyological surveys
- 20 000 sterlet individuals marked and stocked at 3 sites on the Danube



Our cases

2. The Hron

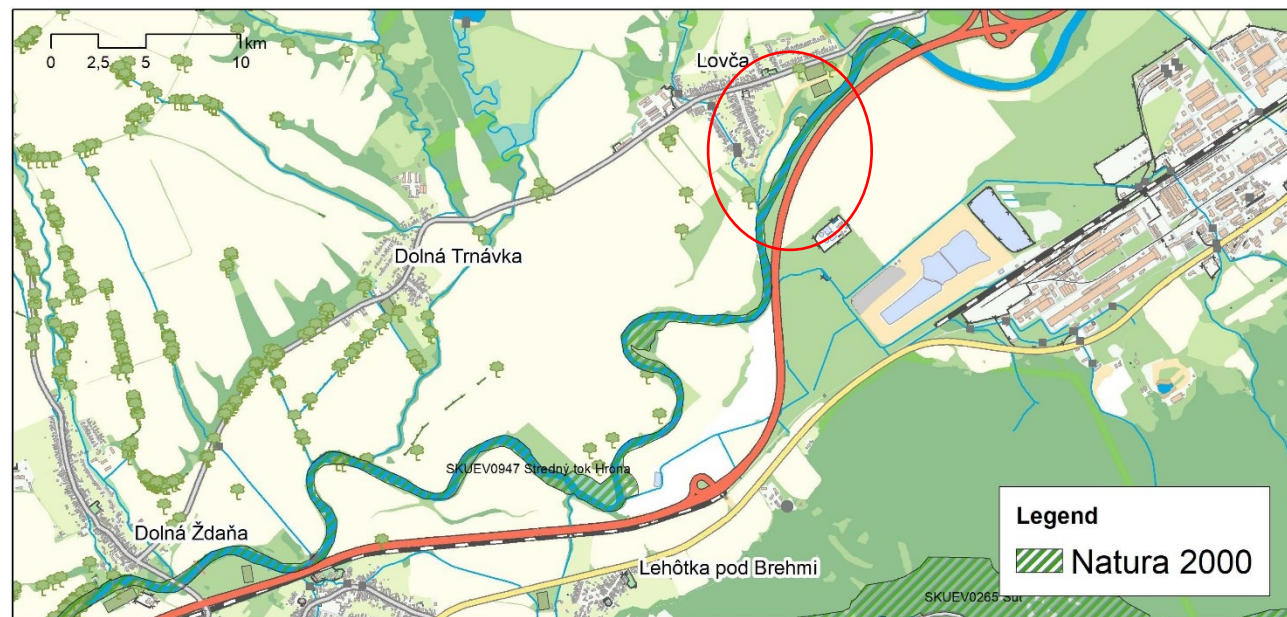
Hron River



- Chain of small HPPs (infridgement case), +regulated reaches

Planning:

- Lateral connectivity (side-arms, meanders)
- Remove bank protection
- Riparian vegetation



Hron River

- Barrier mapping and prioritisation
- Obsolete barriers
- Remove barriers on tributaries



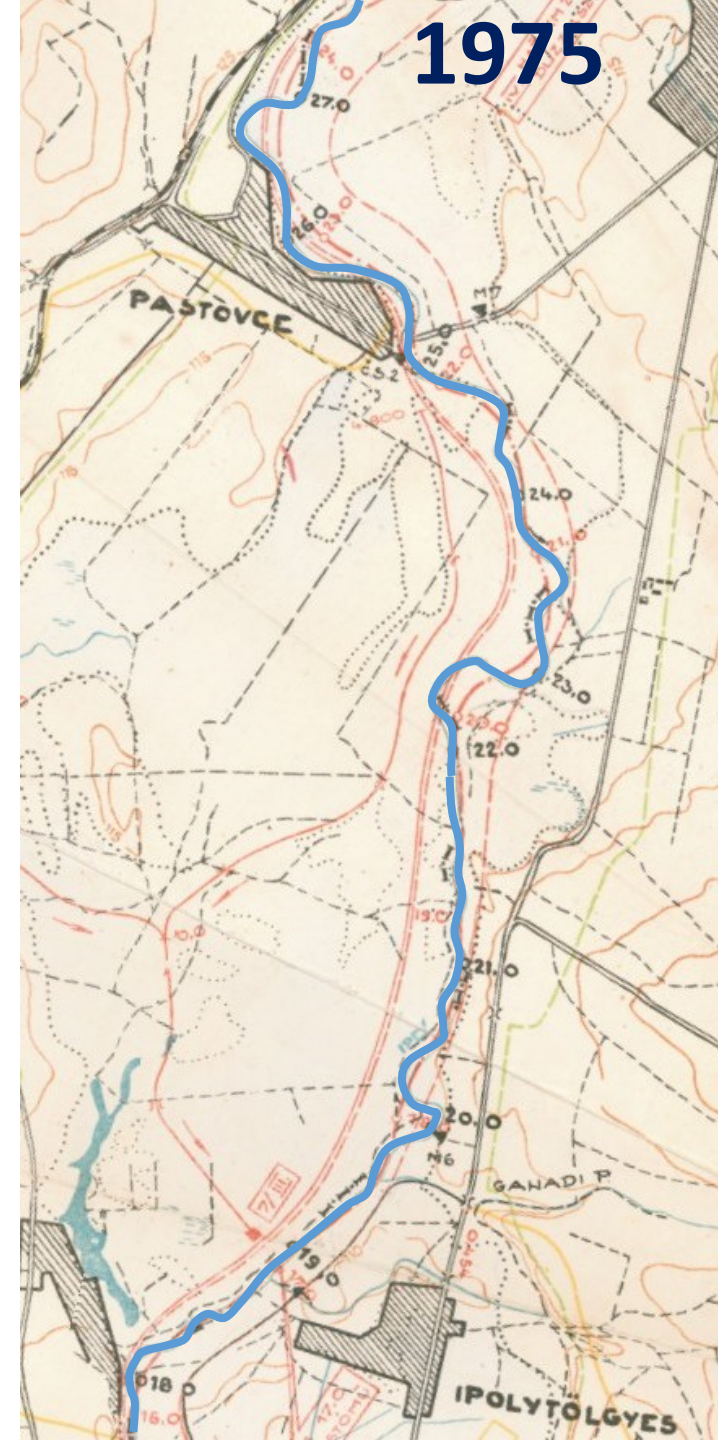
Our cases

3. The Ipele'

Ipel' River



- Reconnect meanders
- Remove bank protection
- Riparian vegetation
- Barrier removals – complementary
- Obsolete barriers



Our cases

4. The Belá

Belá River



- Braided river – gravel channels
- Flood management
- Small HPP
→ erosion!
- National Park
- Native fish species – hatchery
- Vegetation waste water treatment plant



First year of the project LIFE time



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Thank you!



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