



From research to restoration, from conflict to cooperation – conserving nature at the lower Drava River in Slovenia

Damijan Denac

The River Connectivity Conference, Ljubljana, 22.10.2015



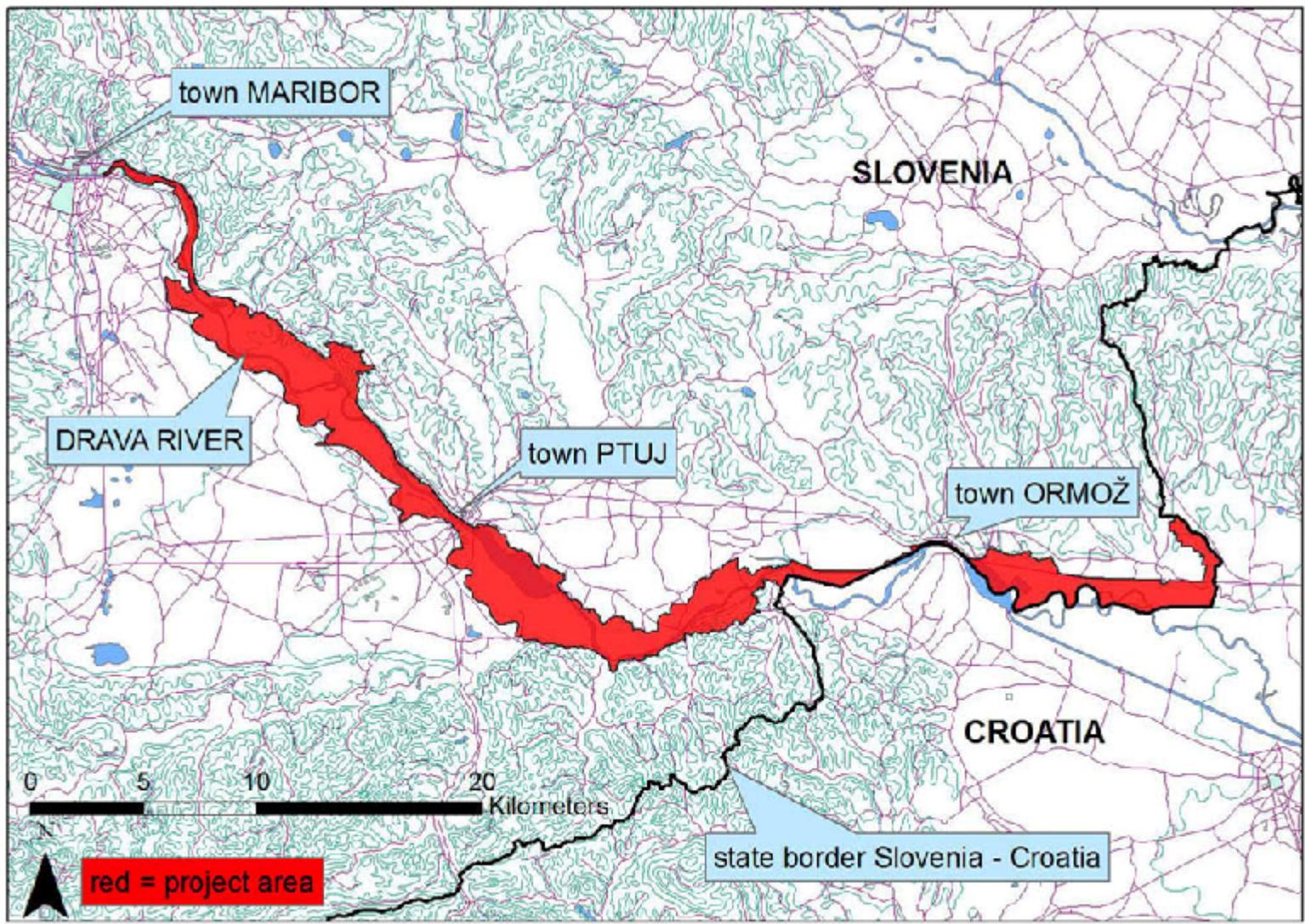


DOPPS – BirdLife Slovenia

- non-profit, NGO, established in 1979
- working in the public interest of nature conservation, environmental protection and research, 1000 members, > 200 volunteers, 24 experts employed, managing 3 nature reserves
- a national partner of the worldwide nature conservation organisation [BirdLife International](#) since 2001
- Mission: „We are working for the protection of birds and their habitats, thus contributing to nature conservation and the wider communities' welfare.“



Partnership for
nature and people





Characteristics of the Drava River downstream from Maribor today

- 3 large artificial accumulation lakes
- In the riverbed in majority 20 times less discharge than in the past, water table in average 1.6 m lower, overgrowing gravel bars
- Transport of gravel dramatically reduced – from 100.000 m³ in 1969 to recent 10.000 m³
- Groundwater level dropped for 2-3 m





Characteristics of the Drava River downstream from Maribor today

- Natura 2000 (SPA, SaC), 53 bird species, 21 other animal species, 9 habitat types





Main problems & threats

1. Degradation of river habitats – reduced breeding population of Little Ringed Plover (Flußregenpfeifer), Common Sandpiper (Flußuferläufer), Kingfisher (Eisvogel), Sand Martin (Uferschwalbe) and Common Tern (Flußseeschwalbe), extinction of Little Tern (Zwergseeschwalbe). Overgrowing of gravelbars, disturbances, inappropriate water maintenance works etc.
2. Relatively low local awareness of understanding importance of nature conservation (ecosystem services, public benefits)



PROJECT LIFE+

LIVEDRAVA

LIFE11 NAT/SI/882

<http://livedrava.ptice.si/>



Mestna občina Ptuj



Partnership for
nature and people



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA KMETIJSTVO IN OKOLJE



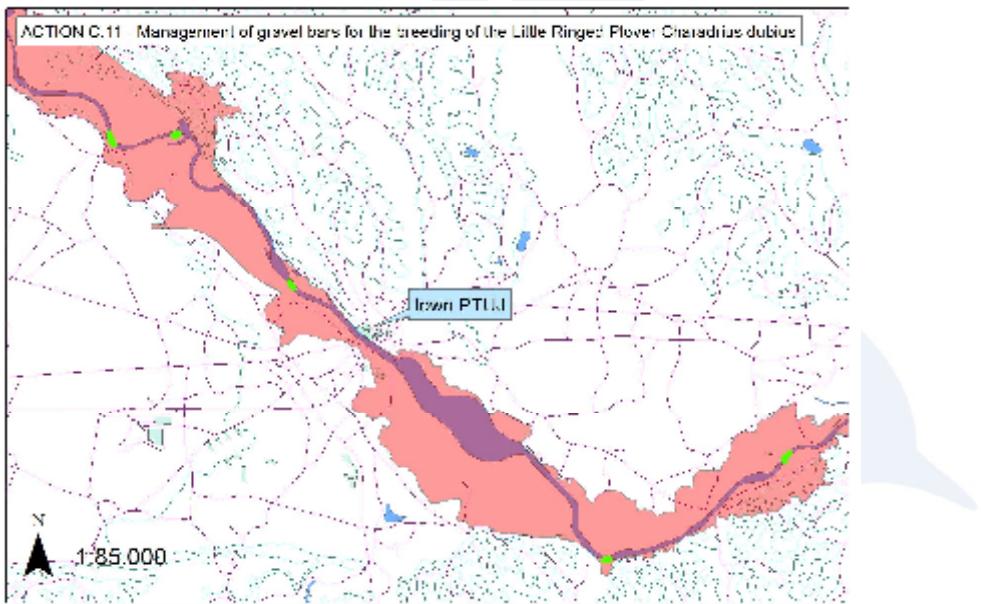
OBČINA ORMOŽ



OBČINA SREDIŠČE OB DRAVI



Degradation of river habitats – overgrowing problem





Spring 2014





2014



2015



| Year | Section | Breeding pairs <i>C. dubius</i> | |
|------|------------------|---------------------------------|-----------|
| | | min | max |
| 2013 | Maribor - Starše | 4 | 5 |
| | Starše - Ptuj | 9 | 11 |
| | Markovci - Zavrč | - | - |
| | Total | 13 | 16 |
| 2014 | Maribor - Starše | 17 | 18 |
| | Starše - Ptuj | 11 | 14 |
| | Markovci - Zavrč | 38 | 41 |
| | Total | 66 | 73 |
| 2015 | Maribor - Starše | 11 | 14 |
| | Starše - Ptuj | 10 | 12 |
| | Markovci - Zavrč | 34 | 38 |
| | Total | 55 | 64 |

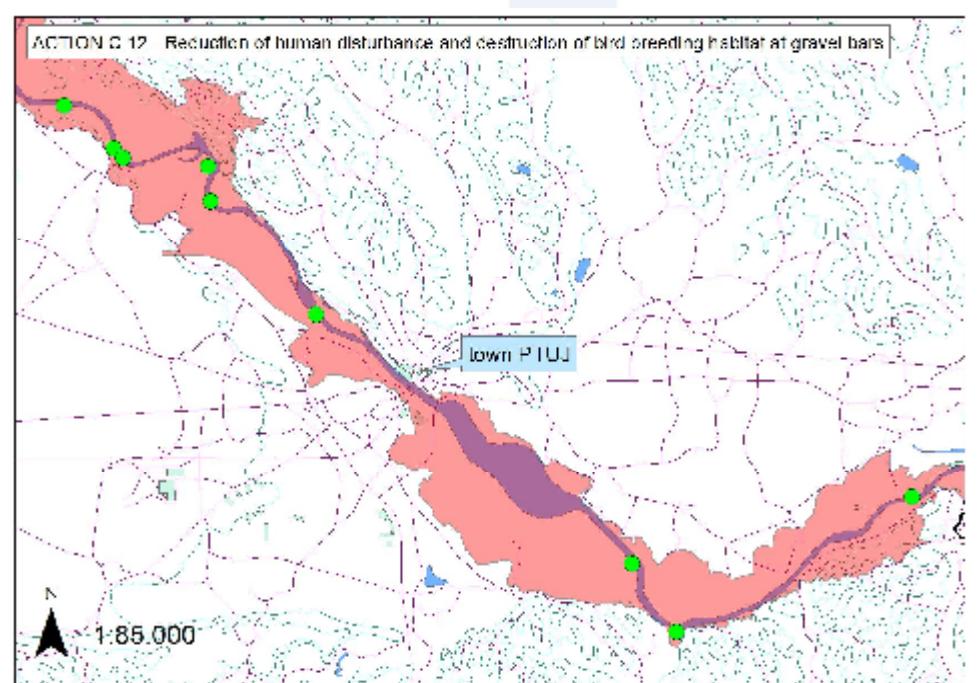
2015: 18 pairs on restored gravel bars, only!





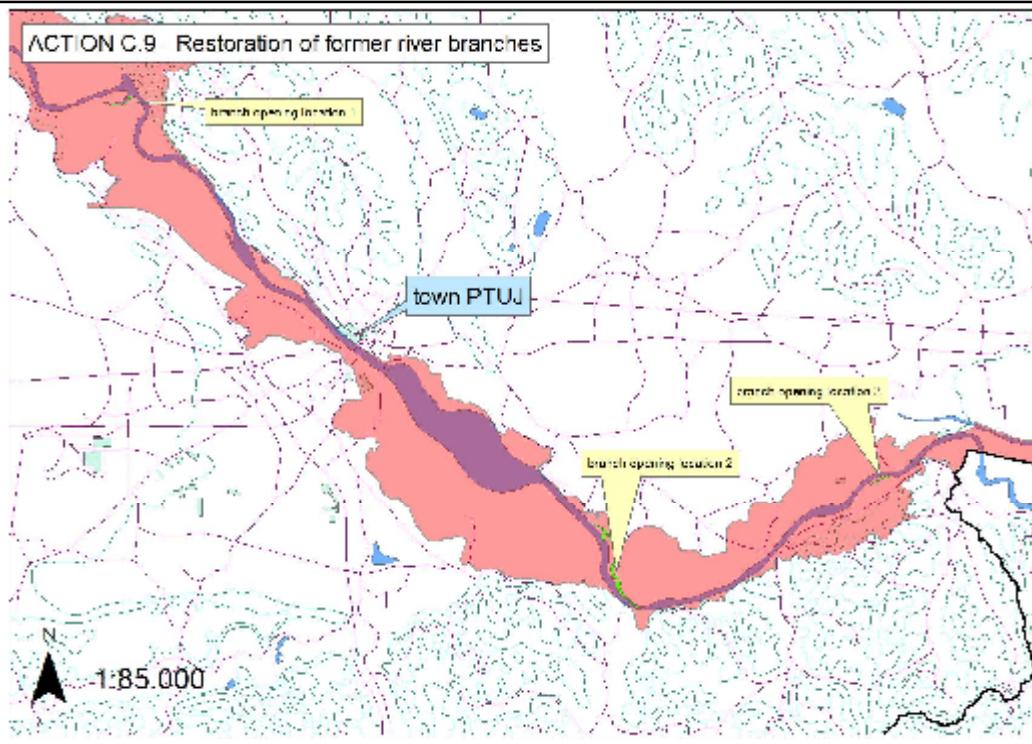
Degradation of river habitats – disturbance problem







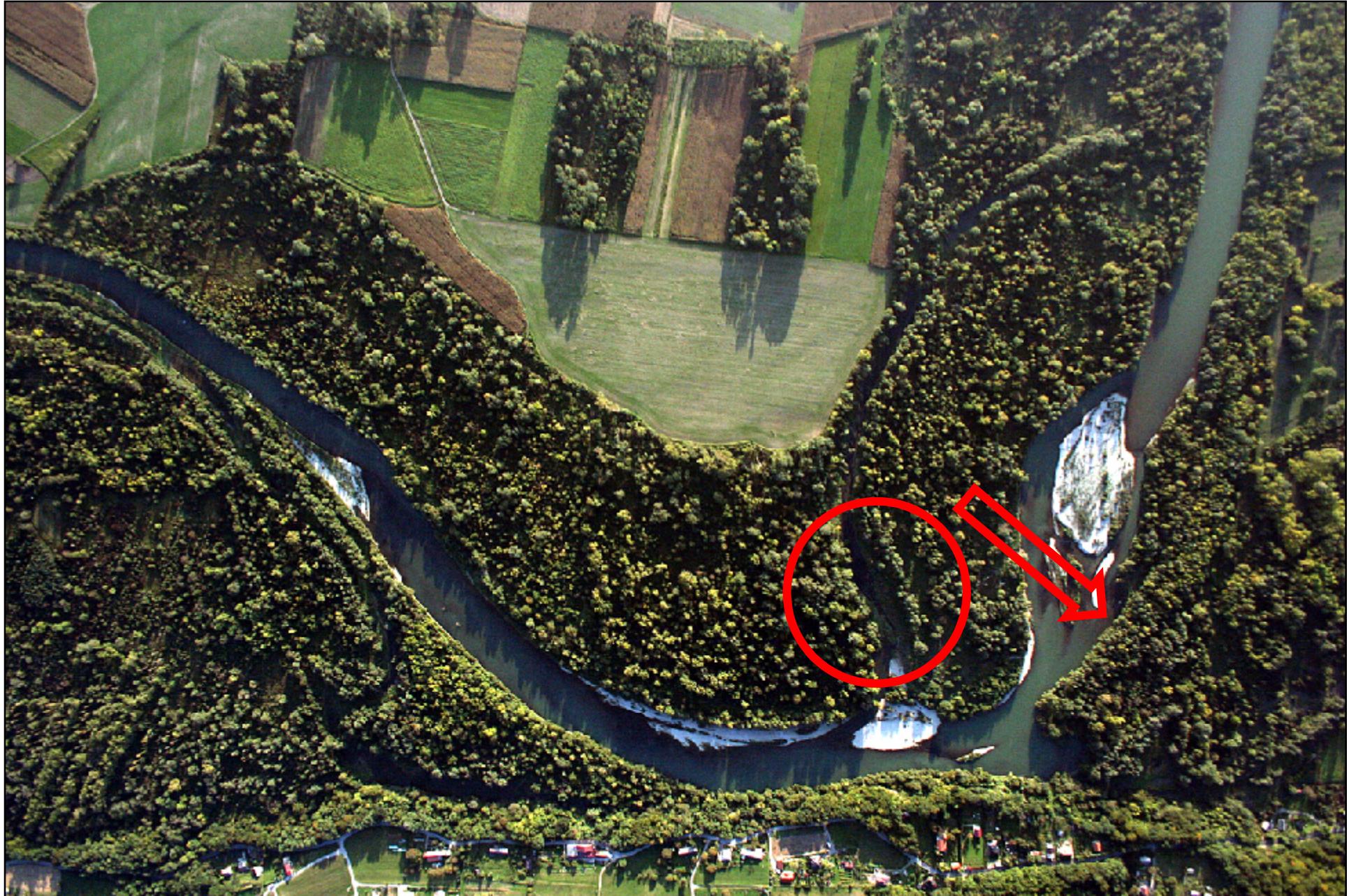
Partnership for
nature and people



Bitterling



Spined Loach - Steinbeißer







Partnership for
nature and people





- 2013: 8 banks, 385 Sand Martins, 1 Kingfisher
- 2014: 7 banks, 490 Sand Martins, 2 Kingfishers
- 10-20 % pop. Kingfisher
- 50-100 % pop. Sand Martin



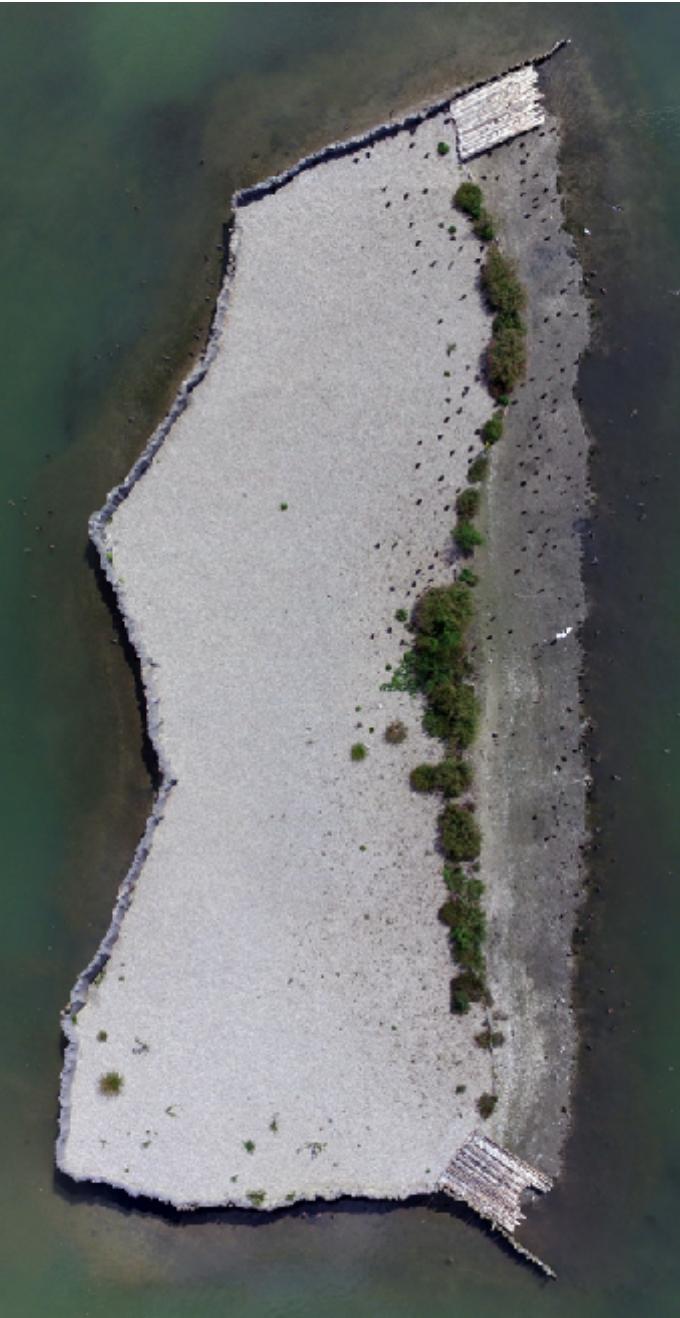


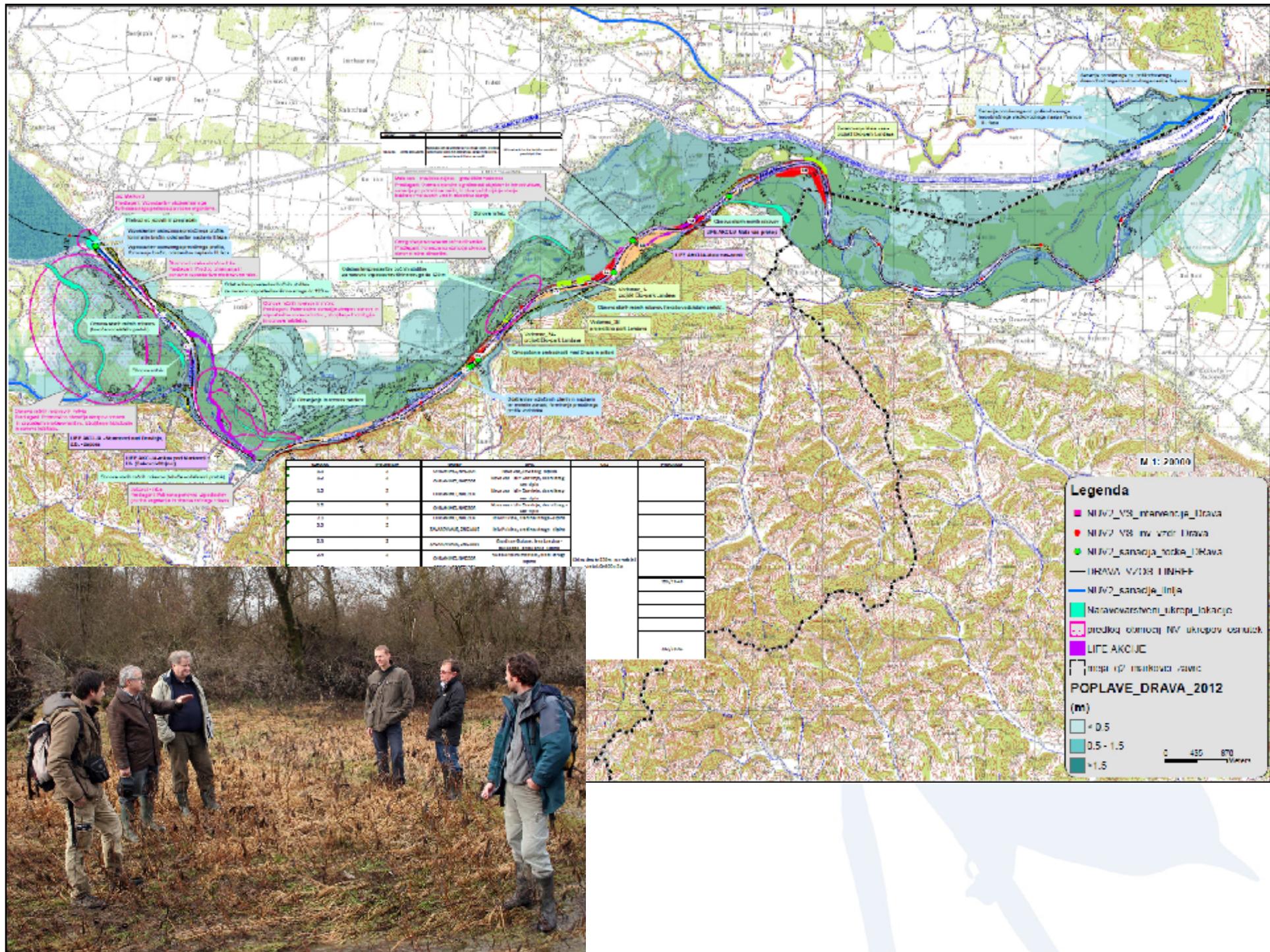






Partnership for
nature and **people**







Sources

- Anonymous (1978): Vodnogospodarske osnove Slovenije. Zveza vodnih skupnosti in Vodnogospodarsko podjetje Maribor. Ljubljana, 162 pp.
- Bonacci, O., Tadic, Z., Trninic, D. (1992): Effects of dams and reservoirs on the Hydrological characteristics of the lower Drava river. – Regulated Rivers: Research & Management 7: 349-357.
- Klaneček, M., Čuš, I. & Hojnik, T. (2005): Prodišča na Dravi med Markovci in Zavrčem ter možnosti učinkovitejših vzdrževalnih ukrepov. – Acta hydrotechnica 23 (38): 57–76.
- Žlebnik (1982): Hidrogeološke razmere na Dravskem polju. – Geologija 25: 151-164.
- Uradni list RS 49/2004: Uredba o posebnih varstvenih območjih (Območij Natura 2000).
- Uradni list RS 33/2013: Uredba o spremembah in dopolnitvah Uredbe o posebnih varstvenih območjih (Območij Natura 2000).

Photos

- Tilen Basle, Gregor Bernard, Andrej Bibič, BIOM, Dominik Bombek, DOPPS archive, Dejan Bordjan, Luka Božič, Damijan Denac, Google Maps, GURS, Kajetan Kravos, Matevž Lenarčič, Borut Mozetič, Jure Novak, Vesna Pirnat, Alen Ploj, Agata Suhadolnik, Gregor Šubic, Michael Tiefenbach, Davorin Tome, Sara Usnik, Al Vrezec, Eva Vukelič