

RESTORATION OF FLOODPLAIN HABITATS ON THE SK/ HU SECTION OF THE DANUBE



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Side-arms and floodplains along large rivers

LIFE+ project closing conference

18-19 November 2013, Mohács, Hungary



Conservation of Endangered Bird Species Populations in Natural Habitats of the Danube Inland Delta (LIFE07 NAT/SK/000707)

- **Coordinating beneficiary:**
 - Regional Association for Nature Conservation and Sustainable Development (BROZ), SK
- **Associated beneficiaries:**
 - Water management construction, state enterprise (VVB), SK
 - Comenius University in Bratislava, Faculty of Natural Sciences (PriF UK), SK
 - Az Észak-dunántúli Vízügyi Igazgatóság (EDUVIZIG), HU
 - Szigetközi Természetvédelmi Egyesület (SZITE), HU
- **Duration:**
 - 01/01/2009 - 30/06/2014



PROJECT SITE



TARGET BIRD SPECIES



Purple Heron

Little Egret

Little Bittern

Night Heron

Black Stork

Garganey

Gadwall

Marsh Harrier

Black Kite

Redshank

Common Tern

White-tailed Eagle

Kingfisher

Black Woodpecker

Sand Martin



PROJECT RESTORATION ACTIONS

Restoration of Istragov marsh (SK)

Restoration of branch systems, wetlands (SK, HU)

Restoration of lowland meadows (SK, HU)

Planting of native tree species (SK)

Restoration of steep river banks (SK)



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

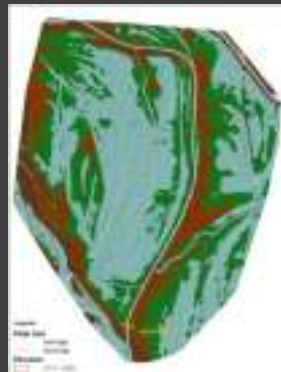
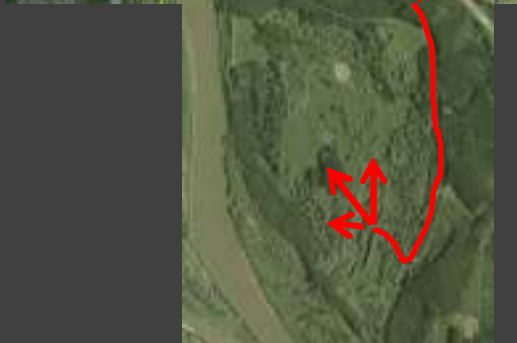
Restoration of Istragov marsh



- water from seepage canal
- the length of way 6 km
- along the way two large oxbows restored

1. Veľký háj
2. Dedinský ostrov

- technical works finished 04/2012
- test of filling started 04/2012
- additional works (08/2013, 05/2014)



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Velký háj oxbow



- 5,5 ha
- mostly dry since 1992
- 2012 again with water
- the depth 1,5 – 2,5 m
- favourable nesting and feeding habitat restored

5.3.2012

26.3.2012

11.4.2012



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Velký háj oxbow



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Rusovské rameno river branch (near Bratislava)

- removed 3 barriers – weirs
- technical documentation elaborated 06/2011
- technical works finished 03/2012



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Rusovské rameno river branch (near Bratislava)



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Rusovské rameno river branch (near Bratislava)



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Ostrov orliaka morského Island (rkm 1823)

- supply channel opened 13.7.2013



8.3.2012



11.7.2013

28.8.2013

RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Ostrov orliaka morského Island (rkm 1823)

- supply channel opened 13.7.2013



11.7.2013



28.7.2013

RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOW

Szárazerdei river branch (HU)

- location near rkm 1844
- overall length 1500 m



09/2011



03/2012



09/2011



11/2011



03/2012

RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Ásvány river branch system (HU)

- rkm 1822 - 1817
- restored open water surface 8,9 ha



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Medved'ovské rameno river branch (rkm 1808)

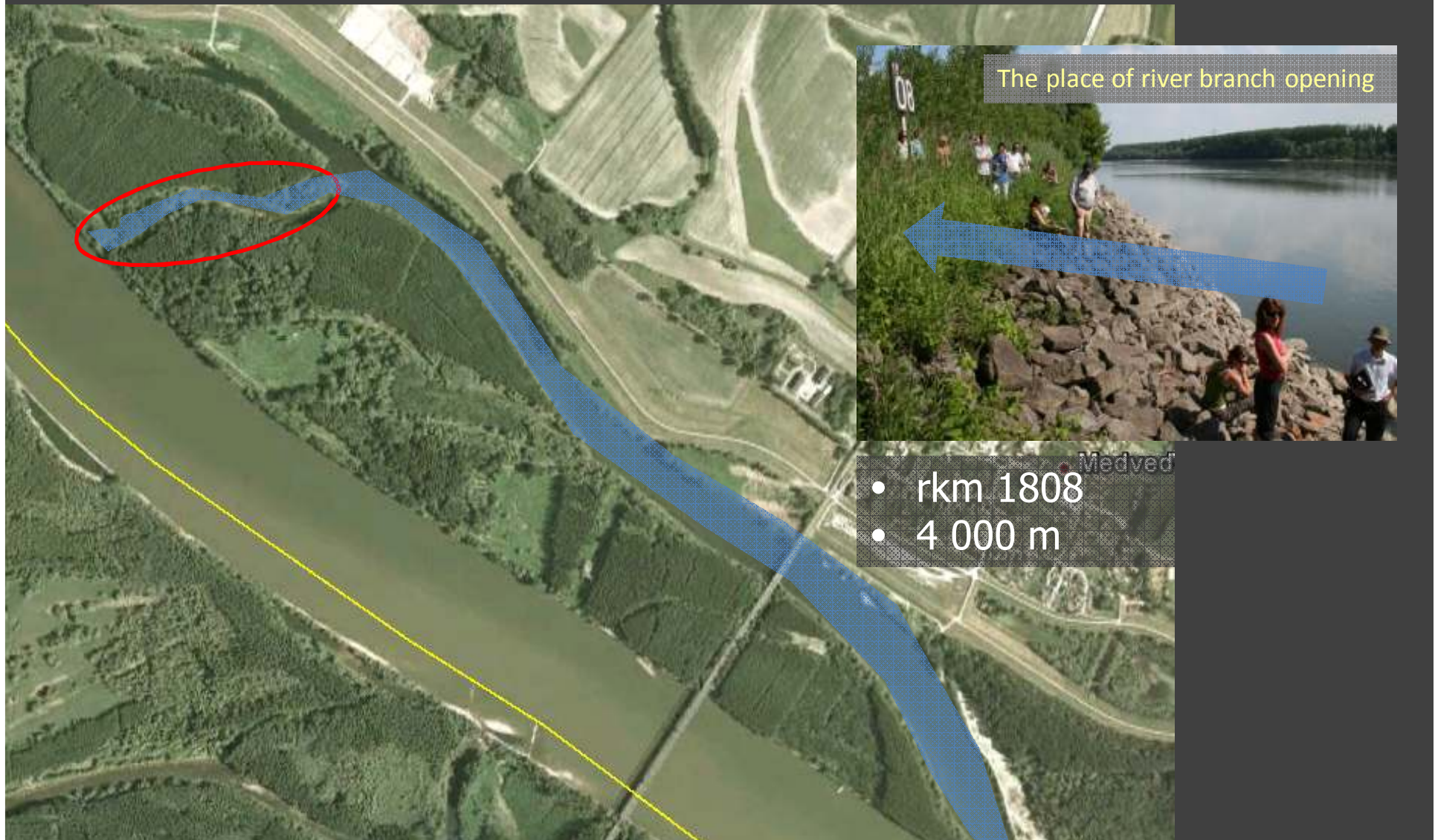


- expert study elaborated 02/2010 (VÚVH)
- technical documentation elaborated 11/2011 (SVP)
- technical works finished 12/2012



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Medved'ovské rameno river branch (rkm 1808)



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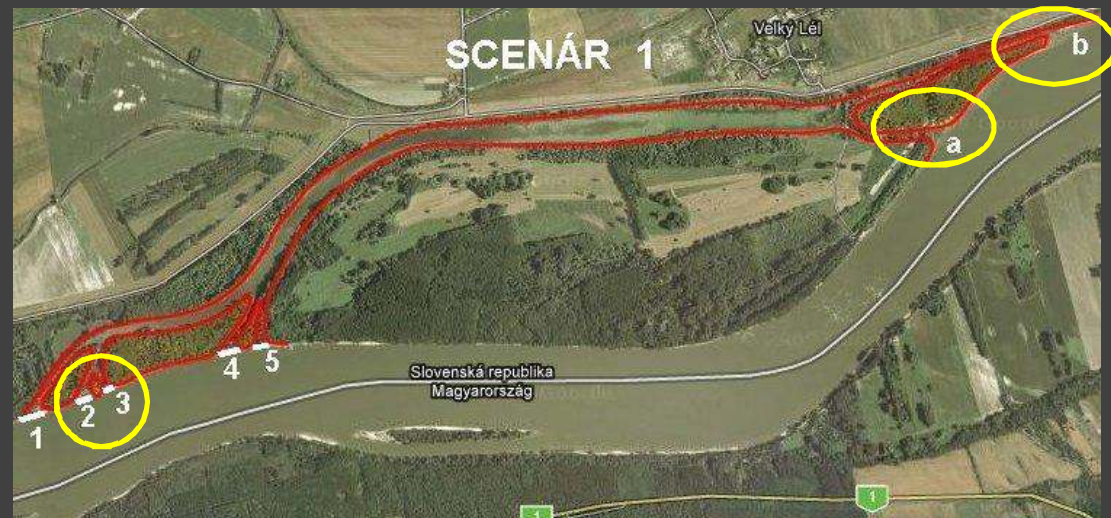


RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Veľkolélske rameno river branch (rkm 1786 - 1781)



- expert study elaborated 02/2010 (VÚVH)
- technical documentation elaborated 01/2012, 06/2013



- reconnection of **inflow** and **outflow** to Danube
- inflow reconnected in arms **2, 3**
- outflow reconnected in arms **a, b**

RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Veľkolélske rameno river branch (rkm 1786 - 1781)

- inflow will open in total width of 100 m
- technical works on **inflow** started 09/2013 and will be finished **21/11/2013**



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Veľkolélske rameno river branch (rkm 1786 - 1781)

17.9.2013



1.10.2013



7.10.2013

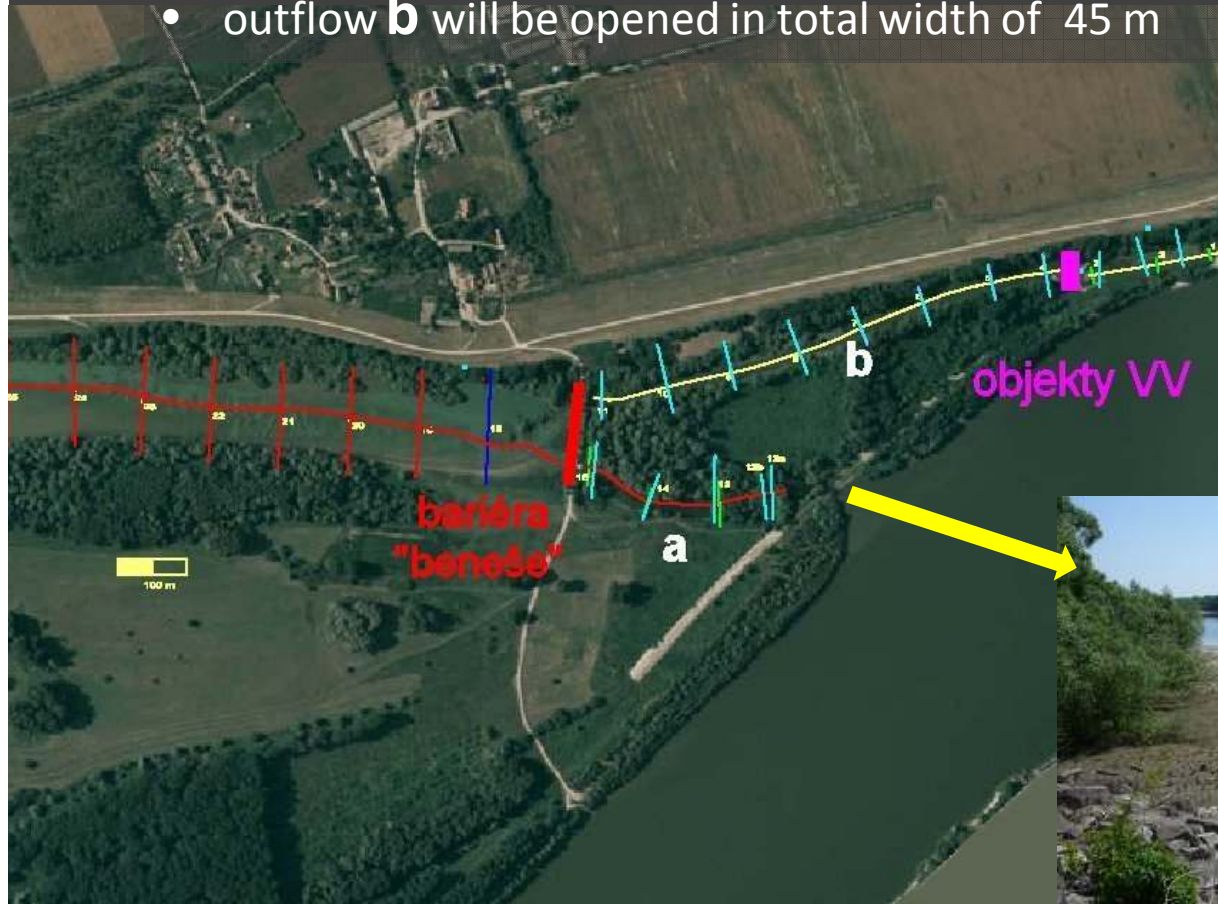


31.10.2013

RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

Restoration of Veľkolélske rameno river branch (rkm 1786 - 1781)

- outflow **a** will be opened in total width of 80 m
- outflow **b** will be opened in total width of 45 m



RESTORATION OF LOWLAND MEADOWS



- expert study elaborated 11/2009



RESTORATION OF LOWLAND MEADOWS

- 2009 purchased 70 cows, 100 sheep and 20 goats
- 2010 purchased the herd of 8 Hucul horses



RESTORATION OF LOWLAND MEADOWS



Restored lowland meadows by:

- grazing
- combination of removing of invasive trees and grazing
- grassing of arable land by seeds of natural grasslands species

Total size of the restored lowland meadows is more than 200 ha

RESTORATION OF STEEP RIVER BANKS

- Veľkolélsky ostrov Island (rkm 1783)
- large stones embankment removed on 50 m



RESTORATION OF STEEP RIVER BANKS

- Chĺaba (rkm 1709)
- restored 200 m of steep river bank
- in the past: nesting colony of Sand Martins



RESTORATION OF STEEP RIVER BANKS

- early August 2011



- late August 2011



RESTORATION OF STEEP RIVER BANKS

- May 2012 : 970 breeding pairs of Sand Martin
1 pair of European Bee-eater
- the largest Sand Martin colony in Slovakia





Thank you for your attention



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

3) Dunajské kriviny river branch system

- technical documentation elaborated 09/2010
- technical works finished 07/2013



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

3) Dunajské kriviny river branch system



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

3) Dunajské kriviny river branch system



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

8) Restoration of Medved'ovské rameno river branch (rkm 1808)



RESTORATION OF WETLANDS, DRIED-UP RIVER BRANCHES AND OXBOWS

9) Restoration of Velkolélske rameno river branch (rkm 1786 - 1781)

- reconstruction of weir (the way to Island)
- modification by triple-pole bridge (45 m)

