

Assessment of the Restoration Potential in the Transboundary UNESCO Biosphere Reserve “Mura-Drava-Danube”

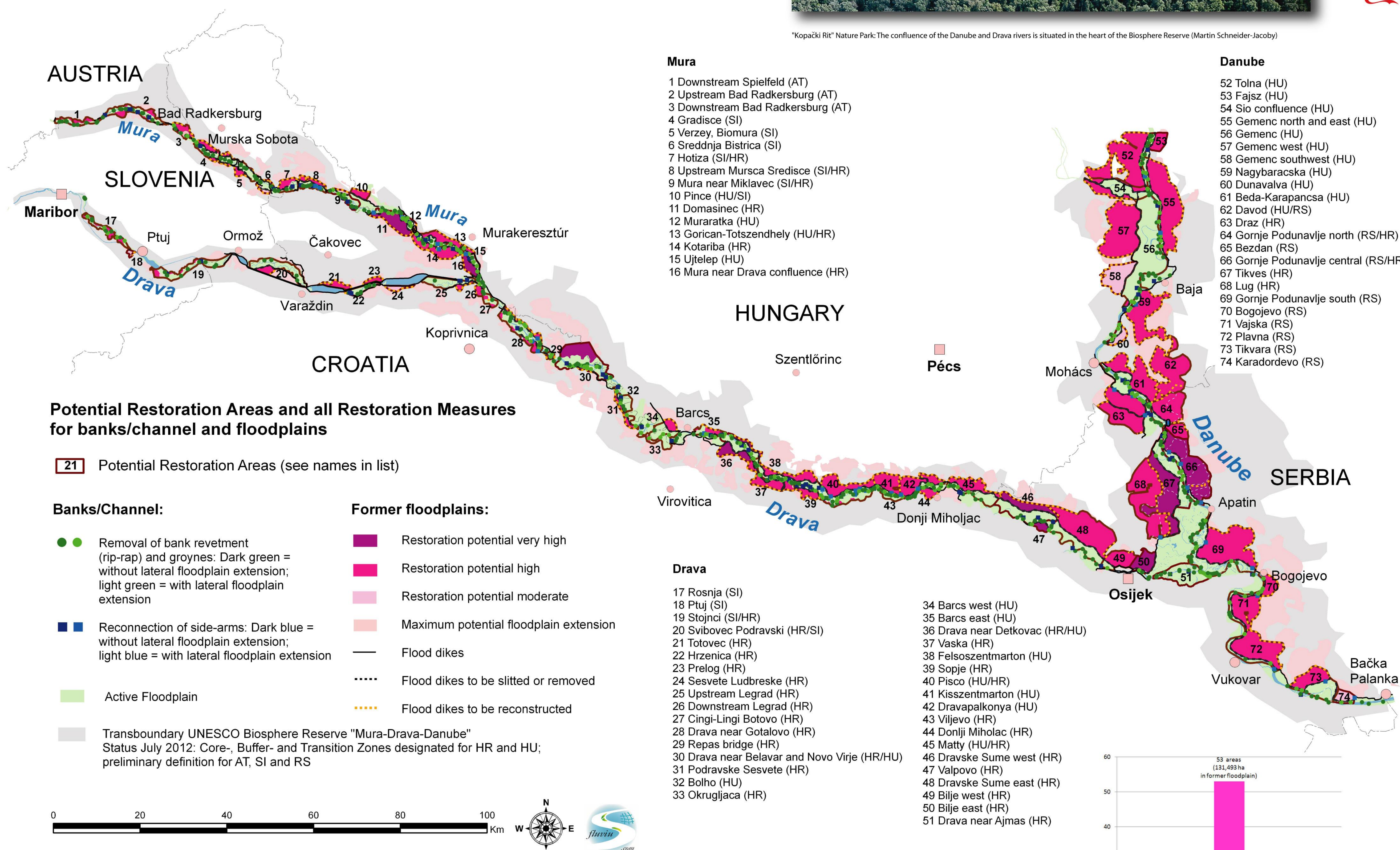
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Spanning Austria, Croatia, Hungary, Serbia and Slovenia, the lower courses of the Drava and Mura rivers and related sections of the Danube are among Europe's most ecologically important river and floodplain areas, the “Amazon of Europe.” In March 2011, the environment ministers of all five countries agreed to jointly protect and manage the area as a Transboundary UNESCO Biosphere Reserve, under the name “Mura-Drava-Danube” (TBR MDD).

The aim of the restoration potential study is to provide impetus for necessary restoration efforts and to serve as a base line document for future restoration planning in the area. One particular aim is to support the proposals of the ministerial agreement and follow-up for joint zoning and management planning in the Transboundary UNESCO Biosphere Reserve in Austria, Croatia, Hungary, Slovenia and Serbia. It is also intended to provide support for implementation of the “Drava Declaration” and management, an international agreement on river and floodplain restoration along the Drava. This declaration was signed by the heads of delegations to the ICPDR (International Commission for the Protection of the Danube River) from Slovenia, Austria, Hungary and Croatia as well as the representative of the Republic of Italy.



“Kopački Rit” Nature Park: The confluence of the Danube and Drava rivers is situated in the heart of the Biosphere Reserve (Martin Schneider-Jacoby)



River banks/stretches

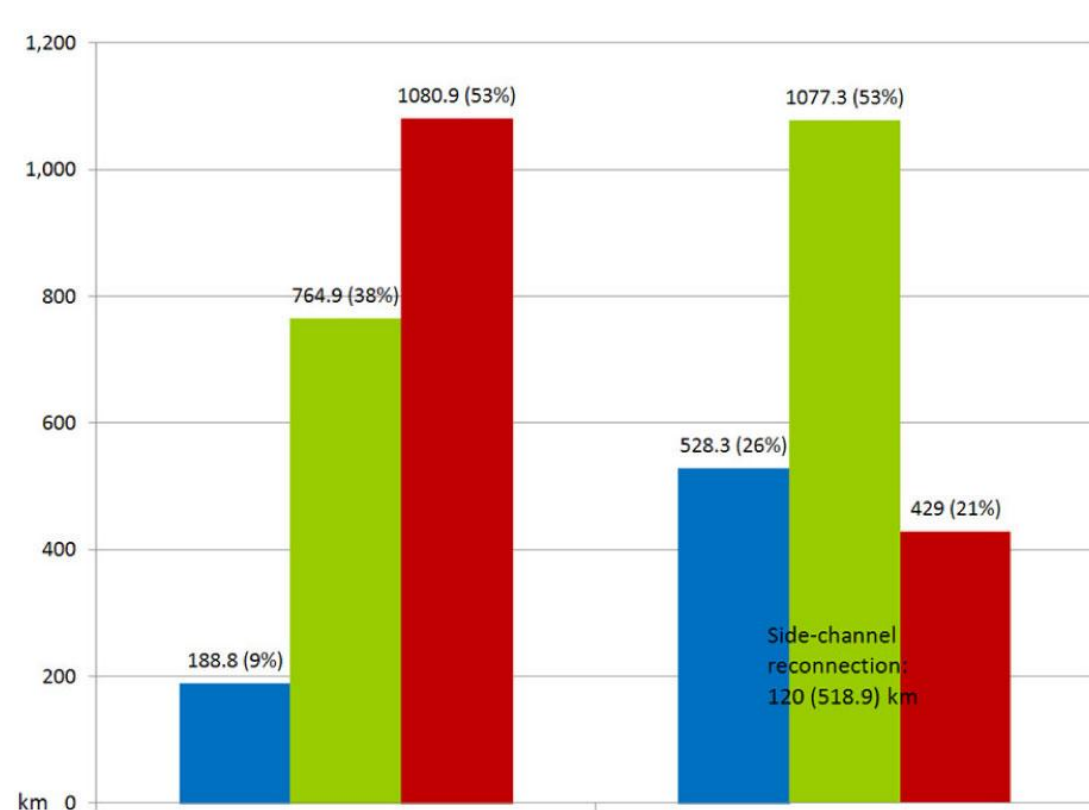


Figure 1: Status and restoration potential of river banks (total length, percentage for both river banks in km). Only main and permanent side channels were analysed for this study.

Floodplains

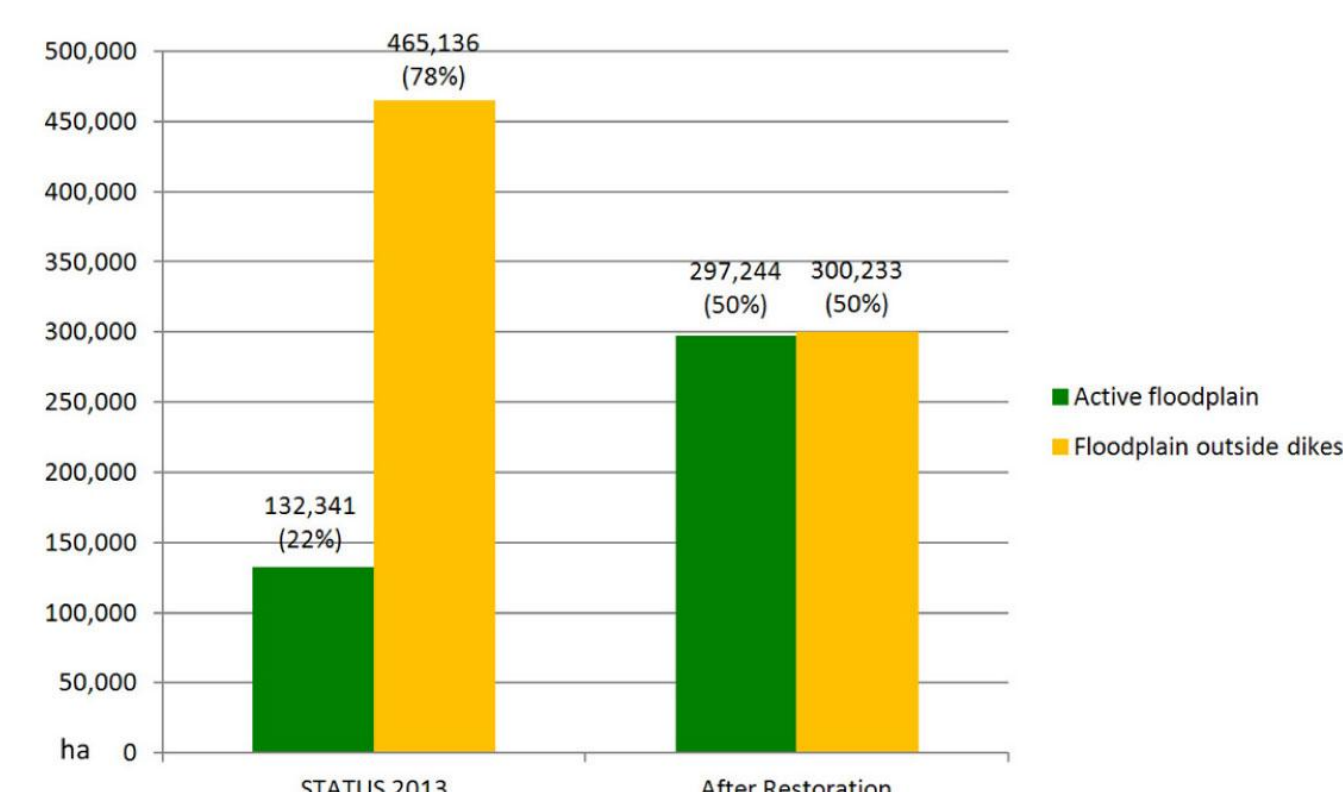


Figure 2: Status and restoration potential of floodplains.

Figure 3: Prioritisation of floodplain areas for reconnection (compare map).

Prioritisation of floodplain reconnection

Altogether 74 potential priority restoration areas have been identified along the three rivers (compare list of potential areas in the map). The total area is 251,212 ha, and includes land on both active and morphological floodplains. The 74 areas contain most of the stretches proposed for bank and channel restoration, which should be seen as an integral part of the comprehensive plan for restoration of the whole area.

Figure 3 shows the detailed distribution of prioritisation classes (based on landuse/habitats, nature protection, flood retention potential and hydromorphological situation). The calculation is based on only 72 areas, since two contain no floodplain extension. The first category, “very high potential”, is represented by nine areas (13% or 25,173 ha), the second category, “high potential” by 53 areas (74% or 131,493 ha) and the third, “moderate” category by ten areas (13% or 8,237 ha). In areas of highest priority, an average of about 10 km of dikes must be removed or relocated.



“River Recreation” at the Confluence of Mura and Drava Rivers near Legrad, Croatia (Tanja Nikowitz, WWF)