WETLAND RESTORATION

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WHAT ARE WETLANDS

Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. Many different wetland types exist, such as Seagrass, Kelp Forests, Coral Reefs, Estuarine Waters, Salt Marshes, Mangroves, Tidal Flats, Lakes, Rivers and Streams, Inland Marshes and Swamps, and Peatlands (Mires).

WETLANDS COVER A SIGNIFICANT AREA OF THE EARTH

Recent global estimates indicate that inland freshwater, coastal, and marine wetland types extend over 1,800 million hectares, roughly equivalent to half the land area of Africa.

HUMAN USE OF WETLANDS

Humans have always used and altered watercourses and floodplains for a wide variety of purposes:

- land reclamation for settlements and food production
- energy generation
- water supply
- flood protection
- wastewater drainage
- goods transportation
- recreation

To enable these diverse uses, considerable interventions in the rivers and their surroundings are necessary. This can lead to the impoverishment of biotope and species diversity. Interventions occur when watercourses are straightened, narrowed or forced into a rigid corset by construction.

WETLANDS ARE ENDANGERED WORLDWIDE



177 million ha of inland marshes and swamps lost since 1970

Documented wetland loss has occured for all natural wetland types

Milliones of hectares of wetlands have been lost due to land use change

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WHAT IS WETLAND RESTORATION

Wetland restoration is the return of a wetland modified by humans to its natural state.



HOW WETLAND RESTORATION WORKS

Restoration often involves one or more of the following processes: rebuilding previous physical conditions, adjusting the soil and water chemically, and manipulating biological factors - for example, by reintroducing native plant and animal species that are no longer present.

But every restoration project has specific conditions and goals. First, the natural reference status is compared with what is feasible and then a development goal is set. Long-term planning and the involvement of all stakeholders is crucial for the success of restoration projects.

The aim should be to harmonize the numerous interests on the part of shipping, hydropower use, flood protection, nature conservation, recreation and tourism, urban development as well as agriculture and forestry as far as possible, while at the same time ensuring the ecological functionality of watercourses as the basis for all these services.

BENEFITS OF WETLAND RESTORATION

- More effective, natural water purification through decomposition processes in intact, renaturalized river beds
- Increase in fish density due to renaturalized habitat conditions
- Contribution to climate adaptation: Near-natural watercourses and their wooded banks filter the air and reduce the concentration of harmful particulate matter
- Store carbon
- Protect local communities from natural disasters
- Increase in the quality of living, life and recreation in a near-natural, renaturalized river landscape

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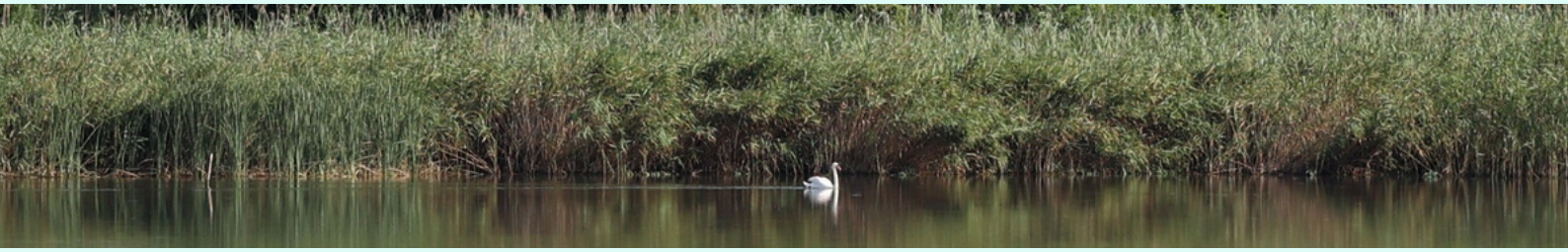
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RESOURCES



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Pictures

© 2025 DaWeRest – Picture of a wetland: MD Demo Croatia
© 2025 DaWeRest – Picture of a winter landscape: LD Demo Bulgaria (Photo: ADRM)
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