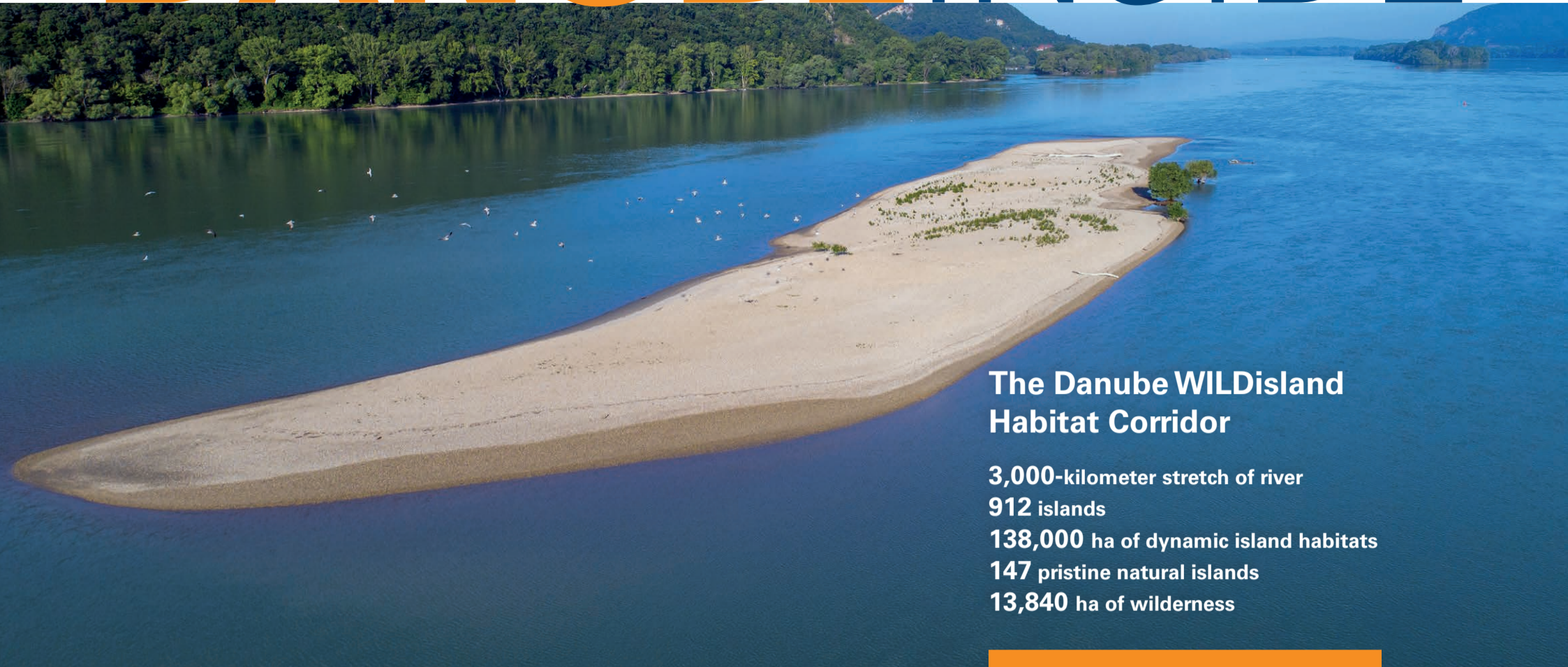


DANUBE INSIDE



The Danube WILDIsland Habitat Corridor

3,000-kilometer stretch of river
912 islands
138,000 ha of dynamic island habitats
147 pristine natural islands
13,840 ha of wilderness

LIFE WILDIsland Jointly for the Danube WILDIsland Habitat Corridor

More than 70% of the LIFE WILDIsland project budget (14,2 Mill. €) will be invested in specific conservation and restoration measures: the hydromorphological elements of over 48 km of water bodies will be improved; river dynamics and hydrological regimes will be restored on 915 ha; and around 352 ha of natural alluvial forests will be improved through transformation of hybrid poplar plantations, reforestation, and invasive species management.

Rivers and their riparian zones form the backbone of eco-corridors. This is especially true for the Danube, which links more biogeographic regions than any other natural object in Europe. The Danube is a hub of biodiversity and an essential lifeline for Europe. There is a clear commitment to preserving its natural heritage, with over 100 Natura 2000 protected sites of European significance on the Danube, and 230 along its course.

The Danube WILDIsland Habitat Corridor comprises around 900 islands covering a surface area of over 138,000 ha. Around 385 of the islands may be characterized as being in a near-natural state; 147 of them (14,000 ha) may be called pristine and characteristic of river wilderness.

DANUBE PARK's goal is to establish the Danube Wild Island Habitat Corridor as "best practice" for EU Green and Blue Infrastructure. The LIFE WILDIsland project is devoted to conserving the Danube's 147 characteristic WILDIslands and to restoring another 34 islands. This unique initiative is based on Danube-wide, cross-sector cooperation among the Protected Areas of DANUBE PARKS, waterways and forestry companies, and the hydropower sector.

DANUBE PARKS The Danube River Network of Protected Areas

The need to jointly preserve this unique natural heritage determined the establishment of the Danube River Network of Protected Areas (DANUBE PARKS). The Association comprises 21 national parks, biosphere reserves and nature parks from 9 Danube countries.

www.danubeparks.org





The Danube islands

Flagship habitats of intact rivers

The Danube River Basin is host to a variety of fascinating and dynamic ecosystems: wetlands and floodplains, alluvial forests and damp meadows, backwaters and side arms, sand and gravel banks. It is home to around 2,000 vascular plants and 5,000 animal species, including over 40 mammals, around 180 breeding birds, 100 fish species, and numerous reptiles and amphibians. The Danube is an ecological corridor of fundamental importance for biodiversity on the Continent. Its backbone is formed by the river and its floodplain, riparian zones, and islands.

The islands are not only beautiful to look at: they are vital components of an intact river ecosystem. As flagship habitats for river morphology and river dynamics, the conservation and restoration of riverine islands is essential. When their near-natural state is maintained, islands are often the only remaining sanctuaries for species which are characteristic of dyna-

mic and intact wetlands, like the Little Ringed Plover. More than 80% of this species breeds on the WILDIsland of the Danube; islands and their shallow waters provide perfect spawning areas for characteristic fish species; furthermore, vital pristine stands of softwood trees (of the FFH habitat type 91E0*) may still be found; This makes their preservation crucial, especially since conservation of softwood forest stands in all biogeographical regions of Europe is insufficient to poor.

Protecting near-natural islands helps strengthen habitat networks all along the Danube. Yet because the Danube is the world's most international river, only a transnational approach can be effective in restoring and maintaining habitat connectivity. The unique LIFE WILDIsland initiative has been created to develop the necessary Green Infrastructure across national boundaries.

Ecological corridors are functional zones of passage that link other, smaller natural zones and serve a group of species dependent on a single environment. The corridor thus connects different populations and allows for the migration of species among them. The need for ecological connectivity is becoming increasingly urgent due to the effects of climate change.



The WILDisland initiative

The journey from inventory to Danube-wide conservation

In 2011 and 2013, Danube-wide monitoring expeditions determined the outstanding value of the islands for sustaining biodiversity. A follow-up inventory of all islands in the Danube WILDisland Habitat Corridor – the first of its kind – was carried out within the Interreg DANUBEParks-CONNECTED project. It counted 900 islands with a total area of over 138,000 ha, of which 385 may be characterized as “near-natural”, and 147 with an area of 14,000 ha which remain largely untouched by humans. Moreover, the islands host some of the most pristine and well-preserved stands of alluvial softwood forests, a habitat of European conservation concern.

Over time, most (90%) of the Danube floodplain forests have been given over to agriculture, infrastructure, or industry. The remaining forests continue to recede due to pressure from hydrological alterations, introduction of non-native tree species and changes in forest composition, fewer old-growth stands, removal of deadwood, and overall fragmentation. Islands often represent the last remnants of intact riverine habitats and natural wilderness in the heart of Europe.

The LIFE WILDisland initiative thus aims to:

- Strengthen ecological connectivity and preserve the natural wilderness
- Promote river dynamics and an intact sediment regime
- Demonstrate good practice for cross-sector and cross-border cooperation
- Identify, label and subsequently preserve the WILDislands and their natural heritage by garnering the necessary support from relevant policymakers, sectors, and land managers.

The WILDisland project was launched in 2021 in order to fully implement the Danube WILDisland Habitat Corridor.



The LIFE funding instrument

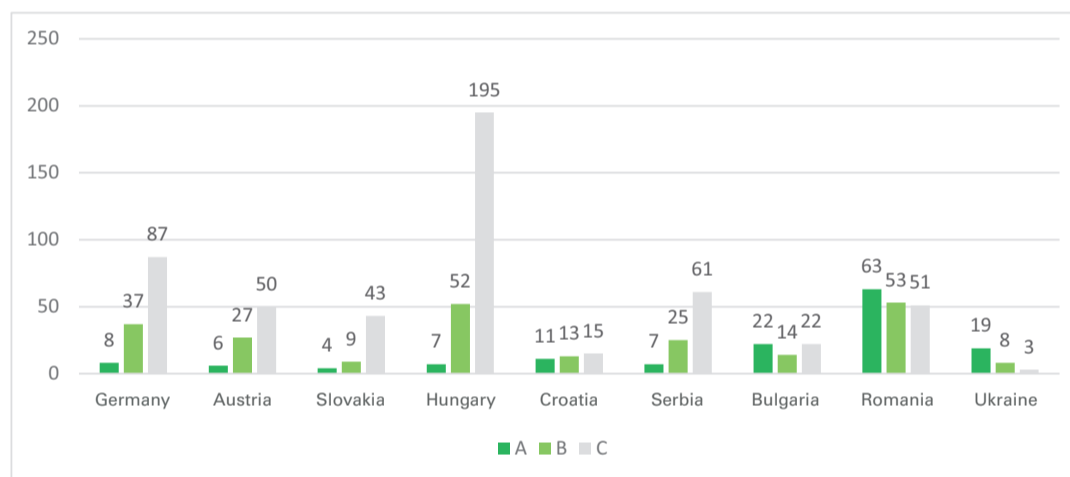
The LIFE programme is the EU’s funding instrument for environmental and climate action. Its general objective is to contribute to the development, implementation, and up-dating of EU environmental and climate policy and legislation by co-financing projects with added value for Europe.

The LIFE Nature and Biodiversity sub-programme seeks to protect and restore nature in Europe and to halt or even reverse biodiversity loss. It supports projects that contribute to the implementation of the EU Birds and Habitats directives, and in particular the development and management of the Natura 2000 network. It also supports the objectives of the EU Biodiversity Strategy for 2030.

For more: cinea.ec.europa.eu/life_en



Number of islands per country



Categories: A: most natural | B: valuable natural | C: human altered islands

LIFE WILDisland

Jointly for the Danube WILDisland Habitat Corridor!

DANUBEPARKS initiated the Danube WILDisland Habitat Corridor project to encourage Danube-wide cooperation in the preservation of a total of 147 islands. The aim is to strengthen ecological connectivity, maintain 14,000 ha of wilderness, give new life to bodies of water, and restore wetlands.

Project duration: 2021 – 2027
Funding mechanism: LIFE Nature
Total budget: EUR 14.2 million
 (64% EU contribution)

Find out more at:
www.wildisland.danubeparks.org

Lead partner

Nationalpark Donau-Auen, Austria, **NPDA**

Associated partners

Alsó-Duna-völgyi Vízügyi Igazgatóság, Hungary, **ADUVIZIG**
 Bratislavské regionálne ochranné združenie, Slovakia, **BRÖZ**
 Danube Delta Biosphere Reserve Authority, Romania, **DDBRA**
 Duna-Dráva Nemzeti Park Igazgatóság, Hungary, **DDNPD**
 Duna-Ipoly Nemzeti Park Igazgatóság, Hungary, **DINPI**
 Fertő Hanság Nemzeti Park Igazgatóság, Hungary, **FHNPD**
 Hrvatske šume Ltd., Croatia, **HR Forests**
 Javna ustanova “Park prirode Kopački rit”, Croatia, **JUUP KR**
 Persina Nature Park Directorate, Bulgaria, **PNPD**
 Regia Națională a Padurilor, Romania, **ROMSILVA**
 Uniper Kraftwerke GmbH, Germany, **Uniper/DWK**
 VERBUND Hydro Power GmbH, Austria, **VHP**
 Javno Preduzede “Vojvodinašume”, Serbia, **Vsume**
 via donau Österreichische Wasserstraßen-Gesellschaft mbH, Austria, **viadonau**

Co-financing

Ministry for Agriculture, Hungary
 Federal Ministry for Agriculture, Regions and Tourism, Austria
 NÖ Landesfischereiverband, Austria
 Energy Efficiency and Environmental Protection Fund, Croatia
 Fischereivereinerband II, Austria



1 Mouth of Ussel river

Implementing the "Masterplan for the Bavarian Danube"

Actions:

- embankment removal
- sidearm reconnection

Responsible partner:

UNIPER



2 Ingolstadt

Creating a new strictly protected island

Actions:

- side branch restoration
- formation of a new island

Responsible partner:

UNIPER



3 Langau-Abwinden

The largest WILDIsland restoration action

Actions:

- embankment removal
- side-restoration, dredging

Responsible partner:

Verbund



4 Schwalbeninsel

Initiating a WILDIsland landscape

Actions:

- embankment removal
- groyne adaptation

Responsible partner:

viadonau,
Donau-Auen National Park



GERMANY

SLOVAKIA

AUSTRIA

CROATIA



9 TÁTI islands

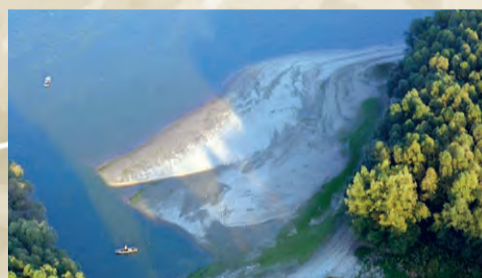
Improving habitat conditions of soft-wood riparian forests

Actions:

- invasive tree species management

Responsible partner:

Duna-Ipoly National Park Directorate



10 Korpadi islands

Opening of groynes for island conservation

Actions:

- groyne opening
- sidearm dredging

Responsible partner:

ADUVIZIG, Duna-Dráva National Park Directorate



11 Debrina island

Island restoration on the borderline

Actions:

- natural forest rejuvenation
- invasive species management

Responsible partner:

Duna-Dráva National Park Directorate



12 Kopački rit

Forest restoration in the Special Zoological Reserve

Actions:

- transformation of plantations
- planting of native softwood forests

Responsible partner:

Nature Park Kopački rit,
Hrvatske šume



Project summary:

- 15 project partners, 8 countries
- 14,2 Mill. € for island conservation and restoration
- Total number of islands restored: 34
- Total area improved (hydrology and forest management): 1,267 ha
- Total length of bodies re-dynamized: 48,192 m
- WILDIsland Corridor established, coherent management for 147 "A" category islands (natural islands)



5 Sap
Connecting for conservation

- Actions:**
- side arm reconnection
 - reforestation measures
 - Land purchase in SCI Ključovské luhy/ SCI Dunajské luhy

Responsible partner:
BROZ



6 Vénéki islands
Alien species management within strictly protected riparian forests

- Actions:**
- invasive species management

Responsible partner:
Fertő Hanság National Park Directorate



7 Klišská Nemá
First ecological groyne adaptation in Slovakia

- Actions:**
- groyne adaptation and dredging
 - natural forest rejuvenation
 - land purchase in SCI Dunajské luhy

Responsible partner:
BROZ



8 Erebe islands complex
Complex measures restoring five islands

- Actions:**
- side arm restoration, groyne adaption
 - invasive tree species eradication

Responsible partner:
Fertő Hanság National Park Directorate



MOLDOVA

16

UKRAINE

15



16 Danube Delta
Restoring softwood riparian forests

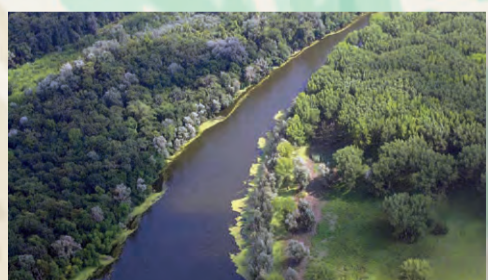
- Actions:**
- forest management actions

Responsible partner:
ROMSILVA



10

12



13 Gornje podunavje
Hydrological restoration on a large scale

- Actions:**
- side arm reconnection, dredging
 - forest management

Responsible partner:
Vojvodinašume



ROMANIA

14

BULGARIA



14 Palets island
Managing the largest Bulgarian island, acting for other WILDIslands

- Actions:**
- invasive species management

Responsible partner:
Persina Nature Park Directorate



15 Danube Delta
Dynamizing "cut-off meanders"

- Actions:**
- main channel and cut-off meander restoration

Responsible partner:
Danube Delta Biosphere Reserve Authority



Preserving and restoring the Danube WILDisland Habitat Corridor

Of the 912 Danube islands, around 147 are characterized as “natural.” Another 385 “near-natural” islands have great potential for restoration. The LIFE WILDisland project entails the restoration of 34 islands; the hydromorphological improvement of 48 km of waters; and the restoration of the hydrological regime on around 1,267 ha of wetlands. Working together with forestry operations, 12 pilot forest restoration sites will be established to improve natural wetland forest stands. In sum, over 70% of the LIFE WILDisland project budget will be invested in specific conservation measures.

Restoring WILDislands with waterway

Since antiquity, the Danube River has been a primary route for trade and travel. In recent centuries, its 2,415 navigable kilometres have been utterly changed by river regulation and river engineering measures – and the wild island habitats have suffered as a result. Yet awareness of the importance of river restoration for the sake of conservation is growing, as is the consensus that all benefit when Danube habitats such as WILDislands are preserved. To this end, the navigation sector is carrying out projects which integrate ecological components into waterway infrastructure.

Several activities within the framework of LIFE WILDisland are the result of cross-sector cooperation. In Austria, viadonau and the Donau-Auen National Park administration are joined in a large-scale pilot restoration project to create a WILDisland landscape by removing embankments along 2 km of the river (project site 4, see map). In Slovakia and Hungary, collaboration between nature conservation organizations (Duna-Dráva National Park Directorate and BROZ) and the waterway sector (ADUVIZIG) is enabling the first-ever adaptation of groynes in order to optimize waterway infrastructure (project sites 7 and 10). Restoring dynamic processes and reconnecting former side branches is also an important measure when restoring the quality of WILDisland habitats. Such activities will be carried out by BROZ in the Dunajské luhy Protected Landscape Area of Slovakia (site 5), and in the Fertő Hanság National Park in Hungary (site 8).

Taken together, these collective actions serve to restore river dynamics and improve habitats by allowing natural hydromorphological processes to prevail. These measures are made possible by an integrative management approach that incorporates the interests and needs of nature conservation, flood protection, and navigation.

WILDisland forest restoration

Commercial forestry alters the composition of species and changes the structure of forests. The intensive planting of poplars in what were once natural wetland forests has had a negative impact. In order to enhance biodiversity, ecological value, and the general health and resilience of forest ecosystems to biotic and abiotic factors, existing poplar plantations are more and more frequently being converted to more stable, mixed forests composed of autochthonous species. Planned measures include the replacement of non-native tree species by native ones (Black and White Poplar, Willow, Oak, Ash, Elm, Grey Alder), and non-invasive follow-up management.

Thirteen forestry pilot measures to restore the valuable softwood forests on an area of just under 352 ha will be implemented in six countries, and will be carried out on the Middle and Lower Danube (project sites 5, 6, 7, 8, 9, 11, 12, 13, 14, 16) by Danube Protected Area administrations (BROZ, Fertő Hanság National Park Directorate, Duna-Ipoly National Park Directorate, Duna-Dráva National Park Directorate, Nature Park Kopački rit, Persina Nature Park, Danube Delta Biosphere Reserve Authority) in close collaboration with state-owned forest companies (including Hrvatske šume, Vojvodinašume and ROMSILVA).



WILDIsland

restores river dynamics

WILDIsland stepping stones restored with the hydropower sector

The many dams built on the Danube have changed the natural river dynamics and how sediment is transported. Dams also prevent the migration of fish both upstream and downstream. In the river stretches impacted by hydropower, the natural and dynamic WILDIslands can no longer be formed and reformed as they would be if the Danube were allowed to flow freely.

LIFE WILDIsland has enlisted the support of hydroelectric power companies VERBUND and UNIPER in restoring the wild islands on the Upper Danube. Both have committed to carrying out several best-practice island restoration

activities. Nearing realization are pilot measures near the mouth of the Ussel and in Ingolstadt (project sites 1 and 2), both of which are defined as priorities within the "Key Project 5" of the Bavarian Danube Masterplan.

The largest restoration measure within the framework of LIFE WILDIsland will be realized by VERBUND, an Austrian electricity supplier. An ambitious pilot project just downstream of the Asten-Abwinden hydropower dam shall revitalize the landscape by allowing natural river processes to create the dynamic riverine landscape favoured by alluvial softwood forests (project site 3). The planned actions will result in the creation of a new natural island. Once established, it will be designated as a new Natura 2000 site to ensure its long-term protection.



WILDIsland sediment management

The Danube's natural islands originate in – and are continuously shaped by – the river's dynamic processes and an intact sediment regime. Yet the building of dams has changed the sediment balance in the Danube to the detriment of wild habitats; river regulation has deeply altered the natural state of the river. LIFE WILDIsland is thus implementing measures to improve the water regime of some of these islands by way of dredging. Former side branches have also been reconnected, for example in the Gornje podunvalje Special Nature Reserve by Vojvodinašume (project site 13) and on the Lower Danube by the Danube Delta Biosphere Reserve Authority (site 15). And for the first time, the Danube Delta is the site of dedicated sediment management for former meanders.



WILDisland

Best practice for EU Green Infrastructure

One key goal of the EU Biodiversity Strategy for 2030 is to legally protect at least 30% of the EU's land areas, and to strictly protect around a third of areas already protected in the EU. The LIFE WILDisland project can help realize this goal by ensuring that step by step, Europe's only remaining WILDislands are given protected status. Because around 25% of the Danube's wild islands are not yet Natura 2000 sites, the LIFE WILDisland project aims to designate new Natura 2000 sites as well as strictly protected islands.

In order to protect the Danube WILDislands in a long term and sustainable way, a non-intervention management approach is most appropriate. It is well suited to raise awareness of the importance of allowing riverine dynamics to unfold naturally.

The EU Nature and Biodiversity Directors have identified the WILDisland programme as best practice for EU Green and Blue Infrastructure. As a flagship initiative, LIFE WILDisland has in fact been a catalyst for the development of island corridors along other major rivers in Europe. Since the start of the project period, experience and know-how has been transferred to other biogeographic regions, with increased coopera-

tion among the various Danube Protected Areas as well as partner initiatives along the Rhine, Sava and Elba rivers.

The WILDisland project shall also develop a transnational strategy for the establishment of the Danube WILDisland Habitat Corridor along with strategic partner organizations such as Ramsar, IUCN, ICPDR, and the EUSDR. The WILDisland Ramsar Regional Initiative should serve as an important tool for the long-term conservation and management of the Danube WILDisland Habitat Corridor, even after the LIFE project has concluded.

WILDislands for nature, biodiversity and people

The pristine allure of the Danube islands has always been a source of fascination. Protecting them ensures that future generations will also cherish their natural beauty. The LIFE WILDisland initiative is raising awareness of the importance of an intact Danube habitat corridor. Follow us on our journey to ensure that the WILDislands remain a valuable habitat for flora and fauna, and a source of life for the people, cultures, and even economies along the Danube.

Follow us and witness this amazing journey... jointly for the Danube WILDisland Habitat Corridor!



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