

Danube Floodplain

Reducing the flood risk through
floodplain restoration along
the Danube River and its tributaries

About the Danube Floodplain Project

The Danube Floodplain Project aims to reduce flood risk through floodplain restoration along the Danube River and its tributaries. The project brings together experts from 10 countries and 22 organisations. The main project target groups are ministries, river basin authorities, practitioners and stakeholders.

Duration of the project: 06.2018 – 11.2020
Project co-funded by the European Union
(ERDF, IPA funds).

Main goal

Improvement of transnational water management and flood risk prevention while maximising the benefits for biodiversity conservation.

Expected change

Improved knowledge about water management which integrates benefits for the ecosystems, society, economy and flood protection throughout the Danube Basin.

Outcomes

- *Danube Basin Wide Floodplain Restoration and Preservation Manual*, addressed mainly to practitioners;
- *Danube River Basin Sustainable Floodplain Management Strategic Guidance* summarizing the key findings of the Manual, but targeting a wider audience; and
- *Danube River Basin Roadmap* comprising agreed next steps towards realising floodplain projects.

The Danube

- is the second longest European river (2850 km), flowing through 19 countries, and affecting the lives of 81 million people;
- it has a 801 500 km² catchment area;
- has lost 80% of its wetlands and floodplains since the end of the 19th century; and
- with the loss of its floodplains, has cost us a huge water purification capacity.

The Danube River Basin

- provides habitats for 5000 animal species and 2000 plant species;
- is a source of drinking water for approximately 20 million people;
- provides a range of ecosystem services, including biodiversity conservation, water purification, flood prevention, healthy fisheries and tourism;
- is an important transportation route;
- plays a central role in recreation and tourism - provides a significant economic boost to waterfront areas; and
- its land use is highly diversified; including a wide range of agricultural practices, forestry, mining, natural areas, settlements and industries.

Added value of floodplains

Floodplains provide excellent habitats, particularly for birds; which use them as natural migratory corridors and nesting sites.

They play an important role in controlling floods by storing, and thereby dissipating the energy of high water discharges.

Floods are a natural phenomenon. They can, however, turn into disasters causing widespread damage - especially where natural floodplains have been cut off from their rivers.



With floods becoming more serious and frequent due to climate change, their negative impacts in Europe are expected to increase considerably in the future. The climatic shifts will leave society even more vulnerable to these increasingly common incidents.

During 1980-2016, the total reported economic losses caused by weather and climate-related extremes in the European Economic Area (EEA) amounted to approximately (in 2016 Euro values) (EEA Report, 2017).

EUR 436 billion



A low estimate of the Danube floodplain's value is approximately €500 per hectare (without flood control). This figure compares favourably with the average annual income from agricultural land in Eastern Europe, which has been estimated at approximately €450 per hectare (excluding agricultural subsidies) (IEEP, 2010).

More sustainable, nature-based solutions are needed to reduce the impact of floods and preserve dynamic water ecosystems.

Catchment-wide natural water retention solutions enable us to mitigate the impacts of both floods and droughts. However, the benefits of floods should not be underestimated. Water is necessary for both the ecosystem and human society. Improved water supply is good for vegetation, but also for human uses such as fisheries or extensive agriculture production.

Nature-based solutions for floodplain restoration can help

- integrate flood protection, economic and ecological advantages;
- widen the opportunities of floodplain management and its uses;
- make the area more attractive for sustainable tourism;
- allow a higher habitat and species diversity;
- mitigate the effects of extreme weather events;
- prevent channel deepening; and
- achieve good water quality.



The project will choose floodplain areas and interventions along the Danube River and its tributaries which will integrate the most beneficial ecological and flood protection advantages.

Feasibility studies will be conducted at five pre-selected pilot areas along Danube River tributaries. Measures will be assessed, and new flood risk management options will be elaborated in order to promote the best possible interventions for the ecosystems and human society.

Selected pilot areas of the Danube Floodplain Project

