







# **EUSDR Priority Area 4 "Water Quality" FLAGSHIP PROCESSES**

https://waterquality.danube-region.eu/

## Adaptation to climate change

Climate change is a crosscutting issue, which becomes a global challenge. EUSDR PA4 supports a number of related actions in which water availability and water quality are key issues to climate change adaptation (Action 6 of EUSDR PA4 Action Plan), and a number of international projects. Moreover, EUSDR PA5 "Environmental Risks" deals also with climate change issues.

This process is focused on sharing experience and best practices in climate change adaptation emphasising (green) water retention measures, which contribute to better water quality and water availability in the Danube Region. The implementation of the climate change adaptation measures should be considered in complex way. Therefore, when designing adaptation projects, the negative externalities associated with infrastructure projects on both ecosystem and human sides must be assessed simultaneously.

The challenges need to be addressed jointly with support at political level from top-down viewpoint, and horizontally by various stakeholders and EUSDR Priority Areas.

## Further information:

- https://www.interreg-central.eu/Content.Node/DEEPWATER-CE.html
- https://www.interreg-central.eu/Content.Node/FramWat.html
- https://www.optain.eu/
- https://www.interreg-danube.eu/approved-projects/danube-floodplain
- https://www.interreg-danube.eu/approved-projects/dridanube
- https://www.interreg-danube.eu/approved-projects/ides
- https://www.interreg-danube.eu/approved-projects/jointisza/outputs
- https://lifelogos4waters.bm.hu/en/home/
- https://waterquality.danube-region.eu/wpcontent/uploads/sites/13/sites/13/2019/09/Action\_Plan\_EUSDR-1.pdf





# Migratory fish

EUSDR PA4 in cooperation with EUSDR PA6 "Biodiversity" is active in increasing the knowledge base on migratory fish species, including sturgeon - the Danube endemic fish species. Migratory fish species can spawn only in the river without barriers, therefore this process will affect all countries on the Danube River.

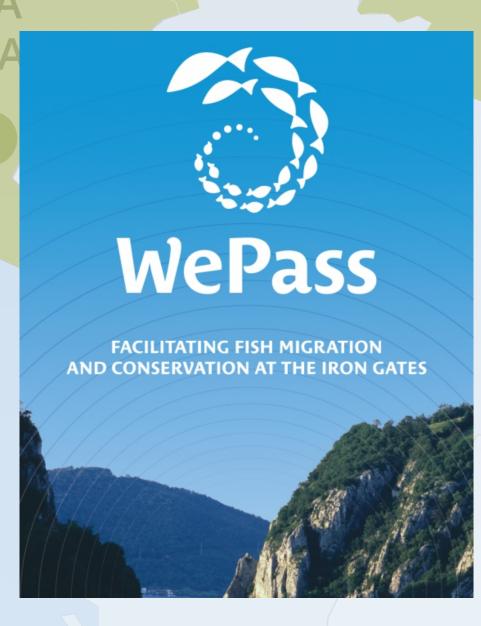
PA4 is looking for possibilities of re-establishing their migration routes through support of the international projects, e.g. the MEASURES project (to restore ecological corridors for migratory fish) or WePass I and II projects (to enable fish migration at the Iron Gates). Moreover, PA4 released a brochure "Promoting Measures to Enable Fish Migration in the Danube River Basin" summarising the current knowledge base. PA4 is carrying out a study on effects of noise and waves on fish species and preparing a fish migration restoration document for the Upper and Middle Danube Region.

The activities mainly concentrate on two major barriers for migratory fish species on the Danube River – Iron Gates in Romania/Serbia and Gabčíkovo Water Structure/Dunakiliti in Slovakia/Hungary. Migratory Fish Flagship Process will make an effort to facilitate construction of effective fish passes for migratory fish species.

### Further information:

- https://waterquality.danube-region.eu/promoting-measures-to-enable-fish-migration-in-the-danube-river-basin/
- https://waterquality.danube-region.eu/ship-noise-and-water-wave-measurementon-the-hungarian-section-of-the-danube/
- https://www.interreg-danube.eu/approved-projects/measures
- https://www.we-pass.org/
- Plans: Fish migration restoration document (2022)





## **Emerging substances**

EUSDR PA4 makes effort in the field of emerging substances as they represent a significant risk to the water environment. The flagship process contributes to close the knowledge gap on monitoring of hazardous and emerging substances in surface waters, biota and sediment, and provides updated information on the situation related to hazardous and emerging substances, such as pharmaceuticals, and microplastics in the Danube Region. The future challenge is not only to monitor the occurrence of hazardous substances in the waters and sediments, but also to investigate their impacts and impacts of their metabolites to humans and biota.

The established cooperation with the EU Baltic Strategy in hazardous substance issues is promising to solve the challenges jointly.

In 2019, PA4 prepared a study on the pharmaceutics occurrence in surface water and groundwater, which had positive impact on policymaking and development. As continuation to this activity, PA4 plans to organise a conference on pharmaceutics occurrence in water in 2026. In addition, PA4 supports "plastic and microplastic" topic via international

projects, e.g. Tid(y)Up, PlasticFreeDanube and MapRiverPlastic and via data collection on microplastics in the water.

#### Further information:

- https://www.interreg-danube.eu/approved-projects/tid-y-up
- https://plasticfreeconnected.com/
- https://www.cleandanube.org/?lang=en
- MapRiverPlastic project proposal
- https://www.interreg-central.eu/Content.Node/boDEREC-CE.html
- https://waterquality.danube-region.eu/analysis-of-wastewater-treatment-plants-along-the-hungarian-stretch-of-the-danube-river/
- Study: Occurrence of pharmaceuticals in the waters of the Danube region
- Brochure on plastic pollution of rivers in the Danube region

