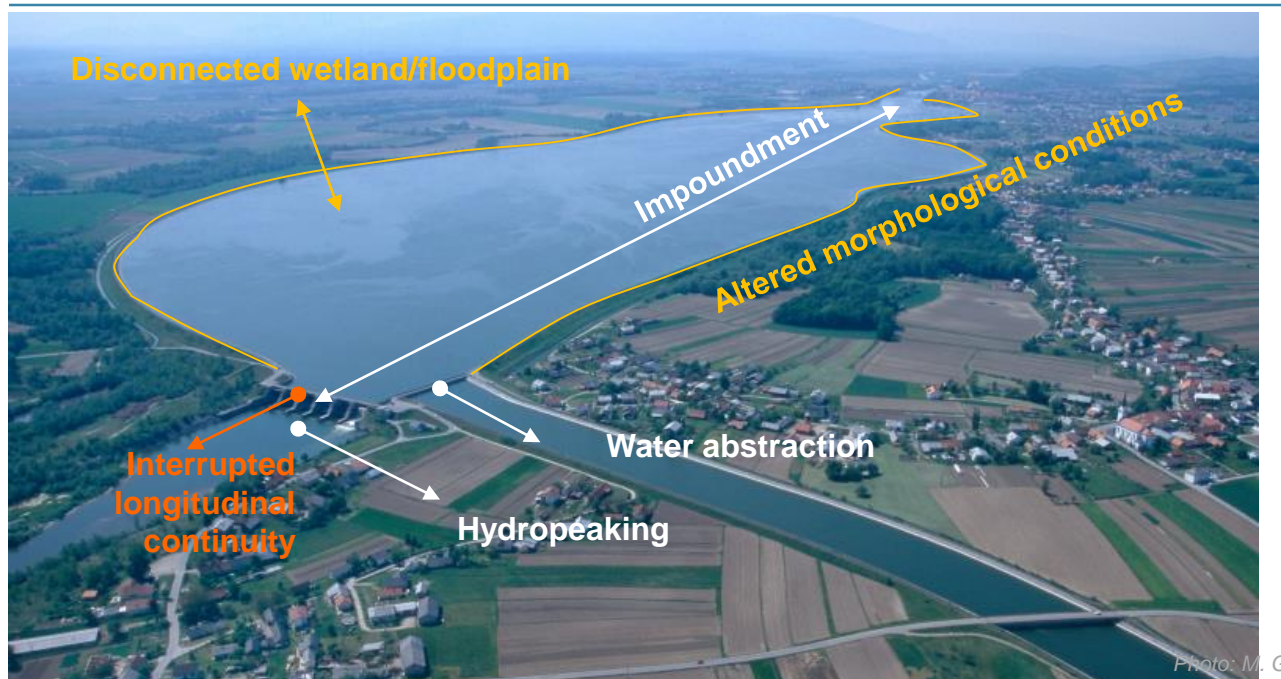


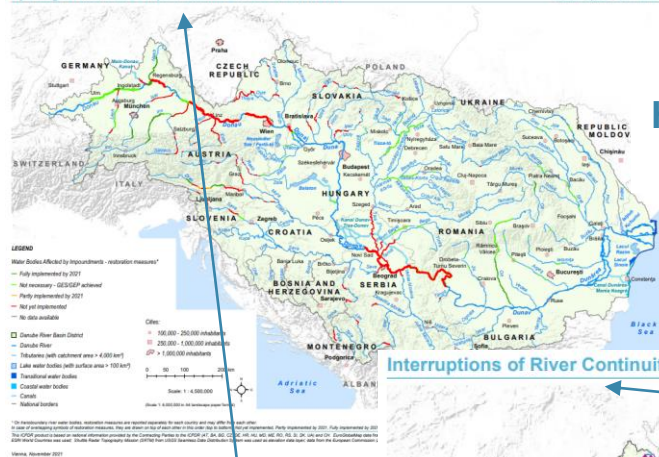
# Hydromorphological Alterations identified in DRBMP



| Hydromorphological pressure             | Criteria for significant pressure assessment              |
|---|---|
| <b>Impoundment</b>                      | Danube River: $l > 10$ km, Danube tributaries: $l > 1$ km |
| <b>Water abstraction</b>                | $Q_{res} < 50\%$ of $Q_{mean}$ annual minimum             |
| <b>Hydropeaking</b>                     | $\Delta h > 1$ m/day (or less in case of neg. effects)    |
| <b>Interruption of river continuity</b> | $h > 0.7$ m height (rhitral), $h > 0.3$ m (pothamal)      |
| <b>Morphological alteration</b>         | Morphological class $\geq 3$ (moderately altered)         |
| <b>Disconnected wetland/floodplain</b>  | $A > 500$ ha (basin-wide importance, reconn. potential)   |

Hydromorphological pressures identified in  
Danube River Basin Management Plan





## DRBMP Maps on Hydromorphological Pressures

### Interruptions of River Continuity for Fish Migration - Current Situation 2021

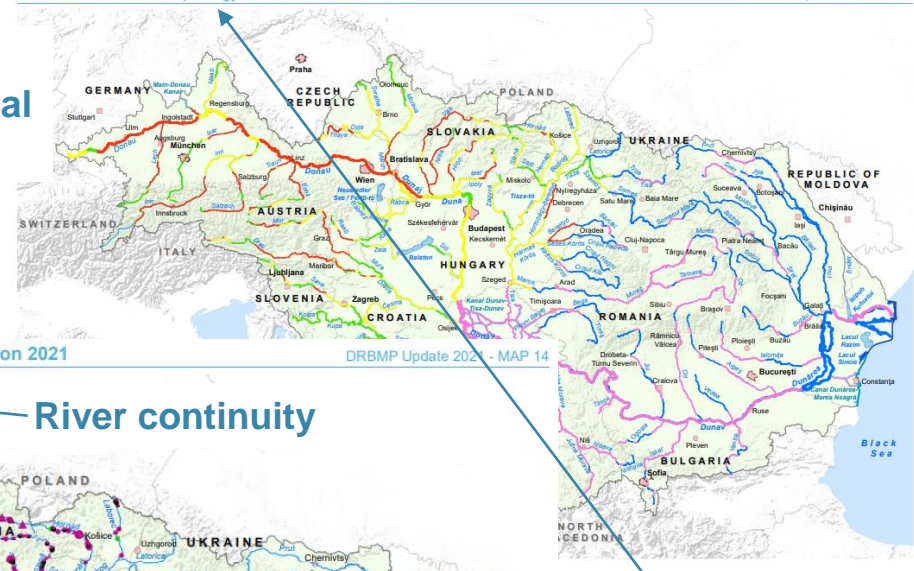
### Hydrological Alterations - Water Abstractions - Current Situation 2021



## Hydrological alteration



### Hydrological Alterations - Hydropeaking - Current Situation 2021



## River continuity

## Morphological alteration





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- 14 measures addressing hydrological alterations (water abstractions, impoundments, hydropeaking),
- 47 fish migration aids,
- 28 river restoration projects
- nearly 10,000 ha of floodplains/wetlands have been partly or totally reconnected.

- 204 measures related to improvements of impoundments, 46 to water abstractions, 32 to hydropeaking,
- 424 measures related to continuity interruptions,
- 222 measures related to morphological improvement,
- 23,399 ha foreseen for reconnection of floodplains/wetlands



This figure is a pre-proof of a paper accepted for publication in *Journal of the Royal Society Interface*.  
In case of overlapping continuity interruption symbols, they are drawn on top of each other in this order (top to bottom): Not implemented by 2027, Not yet determined, implemented by 2027, Already implemented by 2021, Not necessary for GSDGP, Not applicable.

# Ecological prioritisation approach – planning of priority fish passes on the DRB

Ecological Prioritisation Regarding Restoration Measures for River and Habitat Continuity

DRBM Plan Update 2021 - MAP 39

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## Overview of Key Measures to Avoid the Extinction of Danube Sturgeons and Necessary Supportive Actions



Picture: FAO-FIGIS

## DANUBE RIVER BASIN MANAGEMENT PLAN UPDATE 2021

### ANNEX 12

Overview of Key Measures to Avoid the Extinction of Danube Sturgeons and Necessary Supportive Actions



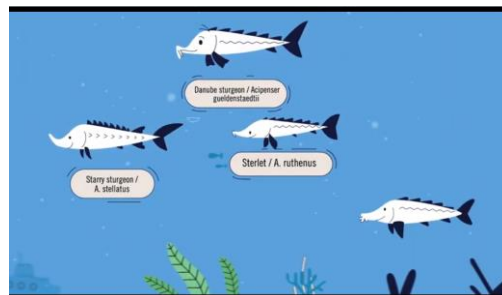
# We pass I and We pass II

## LIFE boat 4 sturgeons



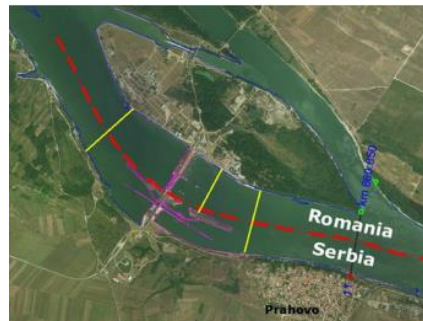
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of the Danube River

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### We Pass I (finalised 2021):

Database / Literature study on sturgeon migration behaviour / Migratory fish was caught, tagged, and released / Estimations of survival rate of migratory fish passing through turbines / Fish passes are technically feasible at the Iron Gate dams



### We Pass II (2021-2024):

Fish monitoring / modelling / Identification of migration options / Preliminary design and costs estimation



### LIFE boat 4 sturgeons (2022-2029):

Construction & operation of two ex situ facilities / Creation of a genetic autochthonous and diverse broodstock / reproduction, rearing & release / standardized population monitoring