



# River restoration EU water and nature policies

Free-flow conference – 15-16 April 2024  
Session A2

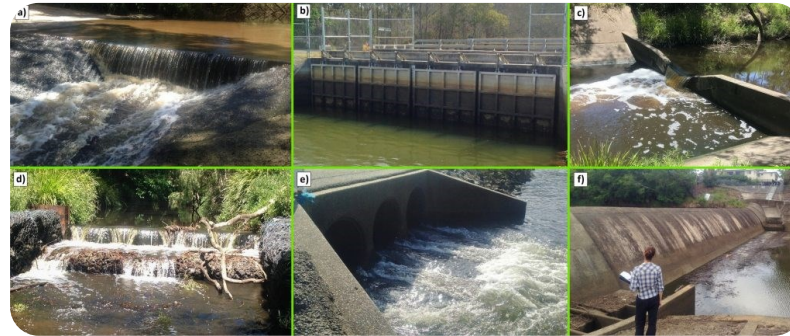
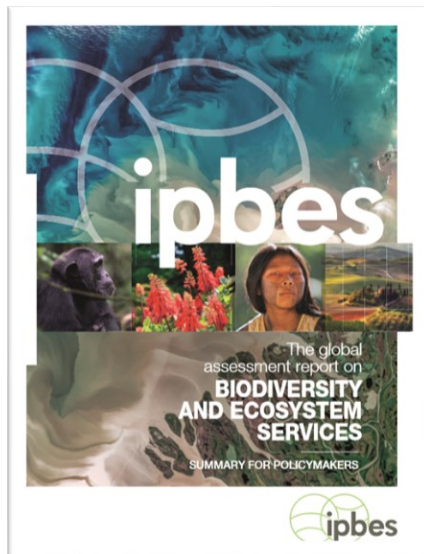
*DG ENV – Unit C1 Sustainable  
Freshwater Management*

# Restoring freshwater ecosystems

*“Inland waters and freshwater ecosystems show among the highest rates of decline”*

*“More than 85% of the world’s wetlands have been lost – IPBES Global Assessment 2019*

*“Freshwater species populations suffered an 84% decline” – WWF Living Planet Report 2020*



Cause: multiple pressures including **river fragmentation** causing:

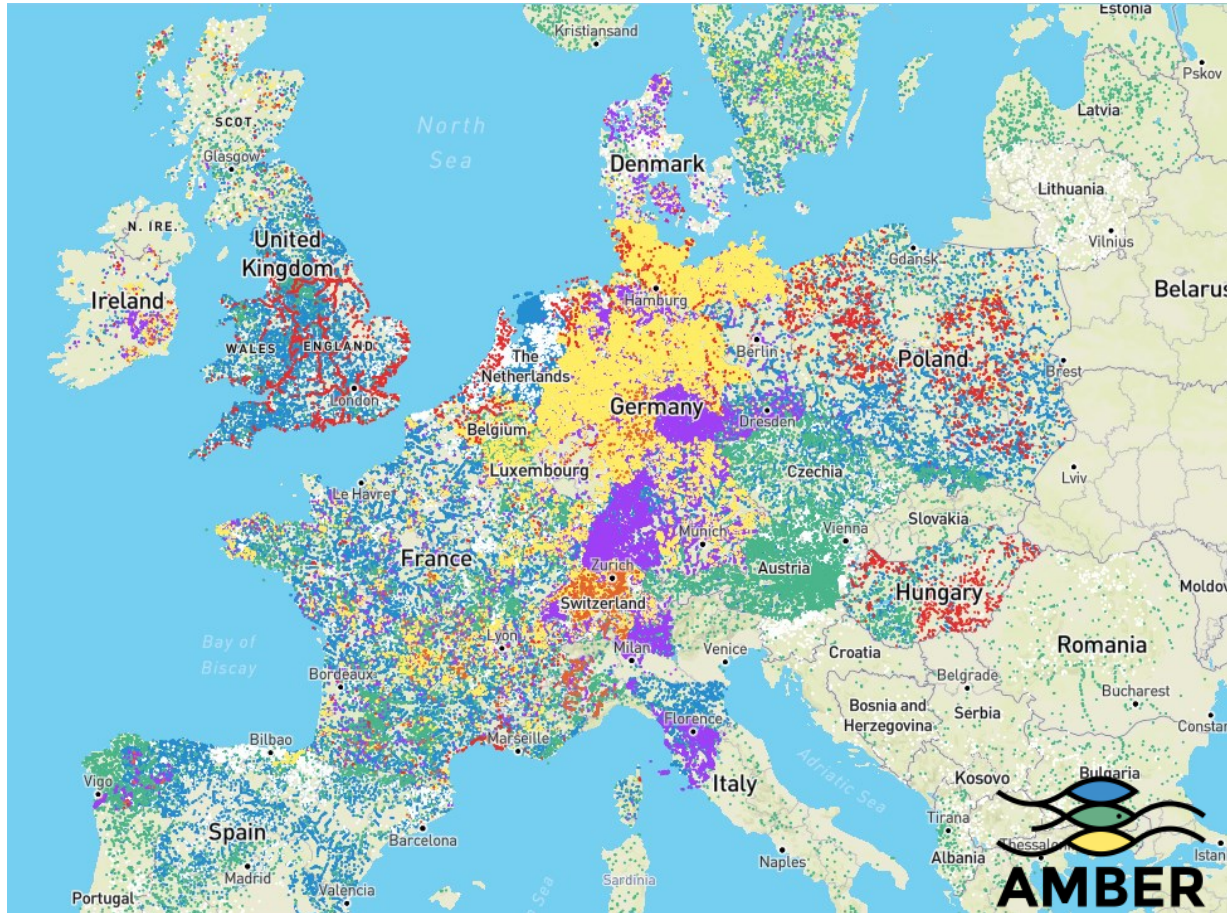
- Modification of flow
- Barrier to migration and sediment transport
- Deterioration of habitats
- ...

Impacts on ecosystem services

- Resilience to climate change
- Water supply
- Flood protection
- Recreational activities
- Protection of coastal zones
- Nature protection
- ...



# Fragmentation of European rivers



- 1 million barriers
- ~ one barrier every 2 km
- > 85% of all barriers small
- Many obsolete and not in use



# Main EU policies on freshwater ecosystems

**Habitats Directive  
(1992)**



**Eel Regulation  
(2007)**



**Water Framework Directive  
(2000)**



**Biodiversity Strategy for  
2030 (2020)**



# Habitats Directive (92/43/EEC)

- Protect species and habitat types:
  - Favourable Conservation Status
  - Sufficient habitat, of sufficient quality for habitats and species to flourish
- Include several freshwater habitats:
  - “River, lakes, alluvial and riparian habitats” - 32 habitats strongly dependent on their associated water courses



# Eel Regulation (1100/2007)

- Critically endangered (IUCN Red List)
- Framework for eel recovery and sustainable use
- Requirements:
  - Eel Management Plans to address main pressures:
    - fishing
    - barriers to migration up and down stream
    - pollution
  - Measures to address fragmentation and improve river habitats



# Water Framework Directive (2000/60/EC)

- Integrated approach to water management
- River basin district approach
- Objectives:
  - good status for all EU waters by 2015, latest by 2027
  - no deterioration
- River Basin Management Plans



# Water Framework Directive (2000/60/EC)

- Ecological status:
  - Expression of the quality of the structure and functioning of aquatic ecosystems.
- Annex V WFD - quality elements as indicators to classify status:

## Biological quality elements

- Aquatic flora
- Benthic invertebrate
- Fish fauna

## Hydromorphological supporting quality elements

- Hydrological regime
- River continuity
- Morphological conditions

## Physico-chemical supporting quality elements

- General
- Specific pollutants






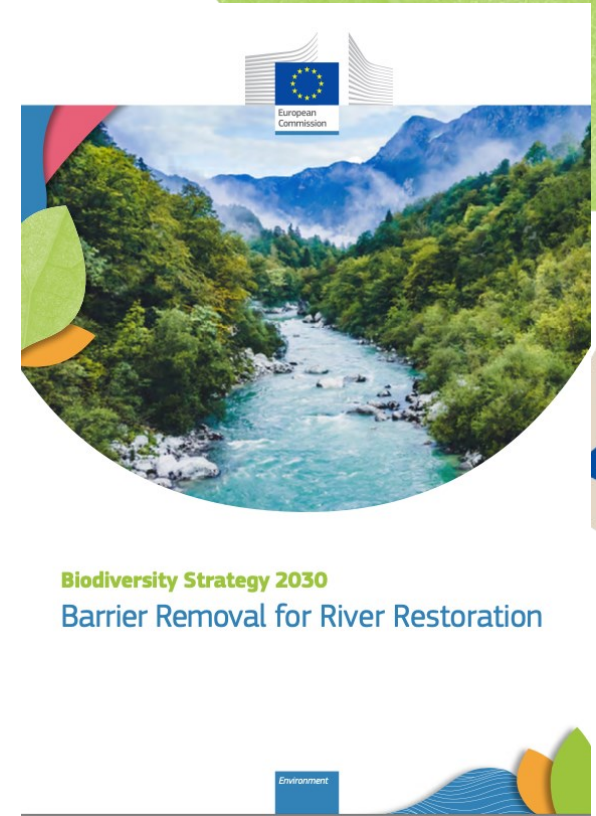
# Water Framework Directive (2000/60/EC)

- Good ecological status
  - hymo conditions not explicitly defined
- Recognition that some barriers are needed
  - mitigation measures
- River continuity required insofar as necessary to support the achievement of good ecological status
  - not necessarily removal of barriers



# Biodiversity strategy for 2030

- Restoration of freshwater ecosystems:
  1. Increased efforts to **restore freshwater ecosystems and the natural functions of rivers** – WFD objectives to be met by 2027
  2. Restore **at least 25,000km free flowing rivers** by 2030 
    - Removal of primarily obsolete barriers
    - Restoration of floodplains and wetlands
  3. Restore and preserve **ecological flows** – WFD objectives to be met by 2027



# Free-flowing rivers...

- ...but how exactly do we measure 25 000 km of free-flowing rivers?
  - Source to sea?
  - What barriers exactly?
  - How about lateral barriers?
- Core group free-flowing rivers established:
  - Methodology in the making



# Next steps

- Crucial to focus on WFD implementation:
  - 3<sup>rd</sup> RBMPs assessment ongoing
- Habitats Directive, Eel Directive ...
- Continue efforts to deliver on the Biodiversity Strategy
  - and on the targets of the Global Biodiversity Framework (CBD)
- Tools to help advancing towards targets





# Thank you



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