



River restoration in the EU Green Deal and EU Water Policy

National Seminar on River and Wetland Restoration
Norway 1 November 2023

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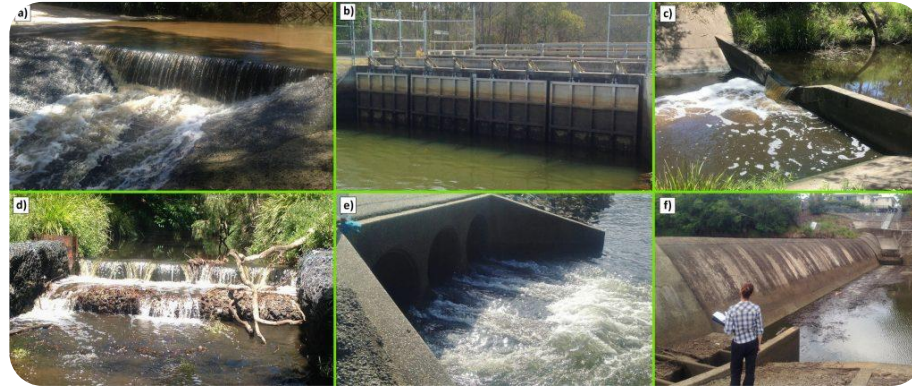
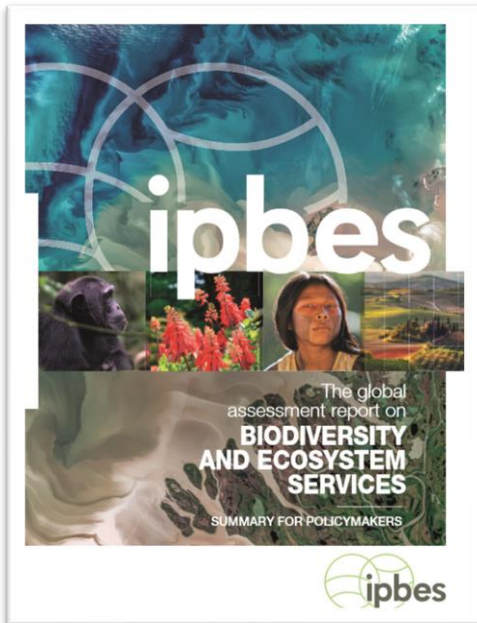
*DG ENV – Unit C1 Sustainable
Freshwater Management*

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”

“Freshwater species populations suffered an 81% decline”



Cause: multiple pressures including river fragmentation causing:

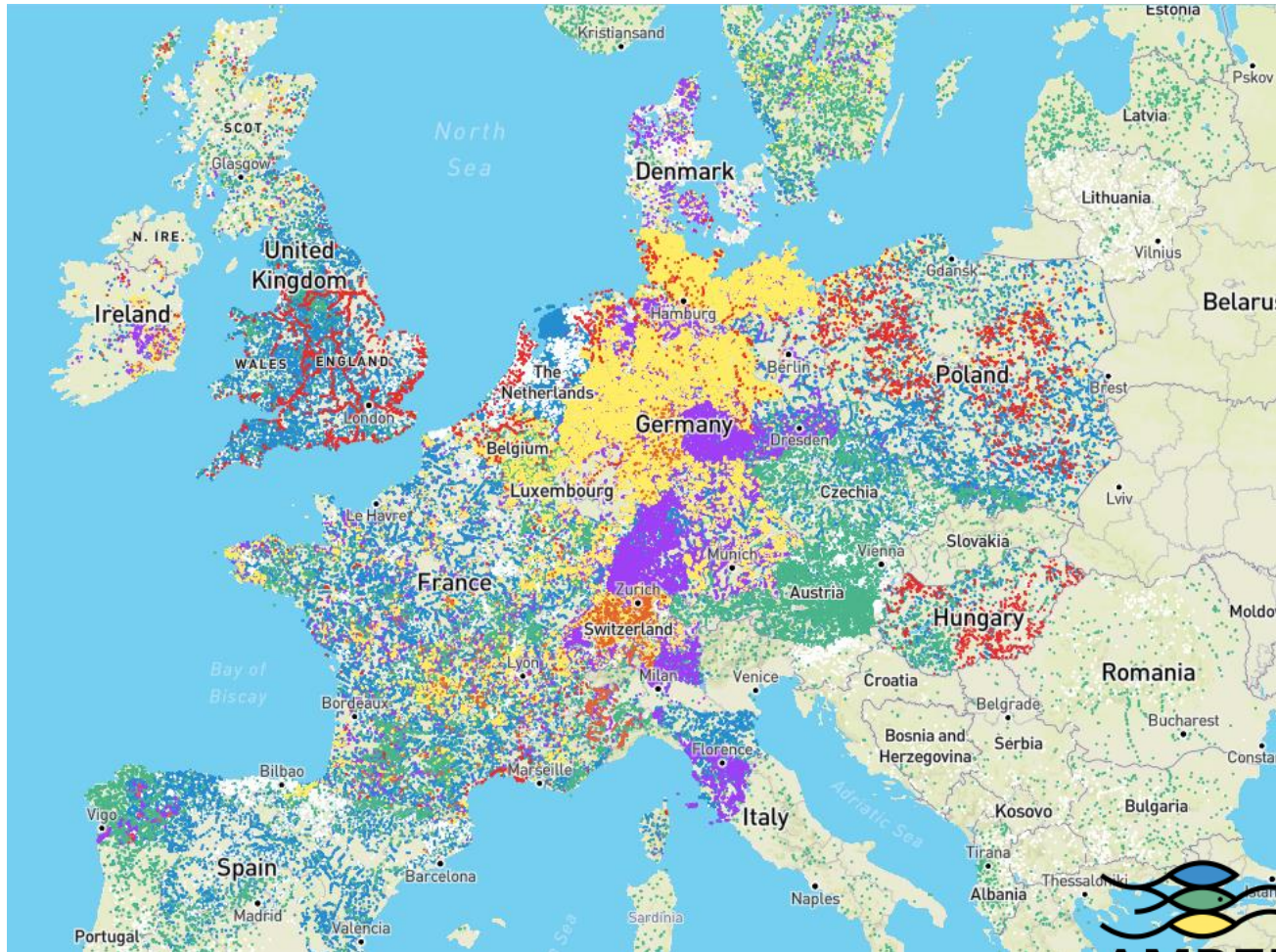
- Modification of flow
- Barrier to migration and sediment transport
- Deterioration of habitats
- ...

Impacts on ecosystem services

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



Fragmentation of European rivers



- Total number of barriers estimated to 1 million
- Almost one barrier every 2 km
- More than 85% of all barriers small
- Many of these barriers obsolete and not in use

Impacts on:

- fish migration
- sediments movement
- hydromorphology processes

Main EU policies on freshwater ecosystems

**Habitats Directive
(1992)**



**Eel Regulation
(2007)
Pan-European
action plan for
sturgeon (2018)**




**Water Framework Directive
(2000)**

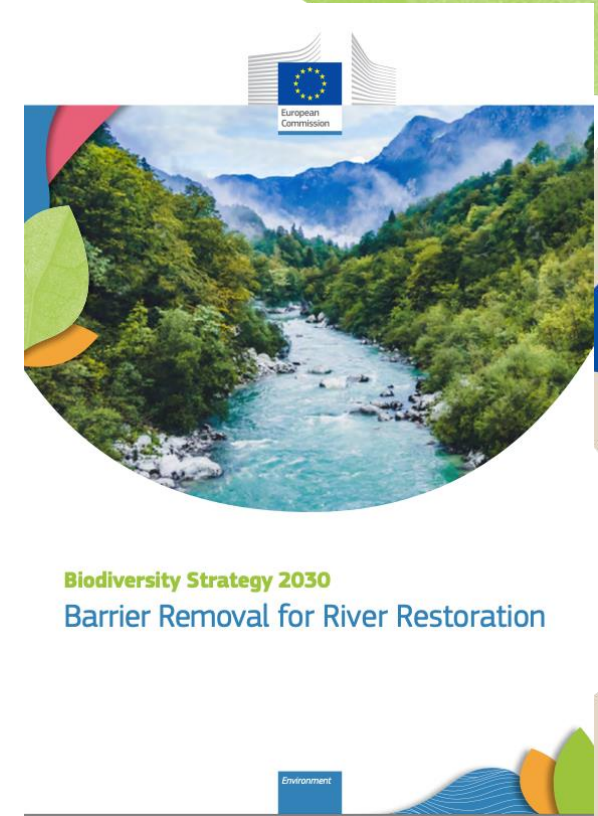


**Biodiversity Strategy for
2030 (2020)**



Biodiversity strategy for 2030

- 30% of EU land and sea protected, 1/3 of which under ‘strict protection’
 - **Freshwater ecosystems** included
- Restoration of freshwater ecosystems:
 - Increased efforts to **restore freshwater ecosystems and the natural functions of rivers** – WFD objectives to be met by 2027
 - **Restore at least 25,000km free flowing rivers** 
 - Removal of primarily obsolete barriers
 - Restoration of floodplains and wetlands
 - **Restore and preserve ecological flows** → Member States review water abstraction and impoundment permits – WFD objectives to be met by 2027



Guidance on barrier removal

- Aim : provide technical guidance to help Member States identify sites and help mobilise funding, to reach 25,000 km of free-flowing rivers by 2030 at EU level
- Main aspects developed in the guidance :
 - Definition of free-flowing rivers → need to make this **definition operational**
 - Interplay of this target with the Water Framework Directive and Habitats and Birds Directives
 - Summary of knowledge currently available in Europe
 - Actions and steps needed for connectivity restoration
 - Guidance on data collection, tools and strategies for connectivity restoration at the river basin scale
 - Summary of existing EU financing tools

Definition

- 25 000 km of free-flowing rivers - intuitively easy BUT
 - no established consensus as to what criteria would define a free-flowing river
 - no ready-to-use indicator to measure free-flowing rivers
- Definition proposed:
 - a *free-flowing river* is one that supports connectivity of water, sediment, nutrients, matter and organisms within the river system and with surrounding landscapes, in all dimensions, and is not impaired by anthropogenic barriers and is not disconnected from its floodplain when a floodplain is present
 - natural impediments (e.g. woody debris, waterfalls, beaver dams) – not considered barriers



In practice

Proposed focus

- barriers to longitudinal and lateral connectivity of river systems
- concentrate primarily on ‘obsolete barriers’
- other complementary measures to restore floodplains and wetlands

Proposed actions

- undertake or maintain efforts to remove artificial barriers, **both transversal and lateral**, where such opportunities exist
- develop, in parallel, a **set of harmonised criteria**, under which river stretches could be defined as free-flowing and thus be counted towards the 2030 goal.

Site selection and prioritisation

Methodologies exist to help prioritise sites for barriers removal

- Tend to focus on longitudinal continuity and removal of transversal barriers:
 - to be modified, adapted or completed to also address lateral connectivity for floodplain and wetlands restoration

General principles

- seek synergies with existing legislation or strategies (e.g. protected areas and migratory species' migration routes)
- consider existing uses, maximising co-benefits and avoiding significant adverse effects on sustainable uses
- Improve data collection – in parallel – to fill gaps in knowledge



Further support

Barrier removal guidance document:

- Defines free-flowing rivers BUT
- Calls for:
 - Making the definition operational
 - Develop a **set of criteria/methodology** to define a free-flowing river

Sub-group of ECOSTAT working group established
(FFR core group)

Nature Restoration Law

- Continuing ecosystem degradation and biodiversity loss across the EU
- Voluntary targets of the 2020 EU Biodiversity Strategy: not met
 - **Protection needs to be strengthened but is not enough**
 - **A reinforced approach is needed -> restoration**

Need for a proposal for legally binding targets for nature restoration



Nature Restoration Law

Aims to achieve large scale restoration efforts:

- by **complementing and building on existing policy framework**:
 - Nature Directive, WFD, MSFD,...
- by focusing on the **synergies between climate change and nature policy**
- by proposing a set of **specific restoration targets**



Nature Restoration Law

Specific restoration targets

Protected
Habitat Types
(Annex I HD)



Habitats of
protected
species (BHD)



Marine
Habitats
(beyond HD)



Urban
ecosystems



River
connectivity



Pollinators



Agro-
ecosystems



Forest
ecosystems



Groups of habitat types (Annex I & II)

1. **Wetlands (inland & coastal)**
2. Forests
3. Grasslands and other pastoral habitats
4. **River, lakes, alluvial and riparian habitats**
5. Heath & scrub
6. Rocky and (Coastal) & dunes

1. Seagrass beds
2. Macroalgal forests
3. Shellfish beds
4. Maerl beds
5. Sponge, coral and coralligenous beds
6. Vents and seeps
7. Soft sediments (above 1000 meters of depth)



River connectivity – Art. 7

Identify and remove barriers that prevent the connectivity of surface waters to contribute to...

→ ..the targets for riverine habitats & ecosystems

→ ...the objective of restoring at least 25 000 km of free-flowing rivers in the EU by 2030

“Components” of the exercise

1. Inventory
2. Identification of barriers to be removed according to...
3. MS plan and timetable set out in National Restoration Plan
4. Other measures to complement removal



Expected timeline

Council

- General approach – ENVI Council June 2023

European Parliament

- Plenary vote - July 2023

Trilogues

- Negotiations ongoing under Spanish Presidency
- Final trialogue on 9 November 2023



Thank you



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