



EURO-INBO 2022

Outcomes of the workshop

INBO 2022



River restoration: a European goal at the crossroads of several legislations



The "EUROPE-INBO" group of basin organizations for the implementation of the Water Framework Directive (WFD) was created in Valencia, Spain, in November 2003. It gathers European member organizations and observers from the International Network of Basin Organisations. It mobilizes European Basin Organizations and District Authorities to exchange on their practical approaches and experiences, identify operational problems, and to share difficulties and successes.

Each year since 2013, a participative workshop is organised back to back to the annual General Assembly of the EUROPE-INBO. It aims at exchanging experiences on a specific topic, directly linked to the implementation of the European Directives and regulations related to water and biodiversity.

In the context of the 20th EUROPE-INBO Conference, a workshop on "**River restoration: a European goal at the crossroads of several legislations**" was held on **September 26th 2022**. It gathered 60 participants that were able to benefit from experience feedbacks on strategies or case studies from various MS and directly contribute to the identification of recommendations regarding Biodiversity Strategy and WFD implementation.

After an introduction part that has set up the scene at European level and various Member States in dealing with how river restoration is currently implemented and what are the remaining challenges (see links to the presentations in Annex part), working groups have allowed for exchanges and identification of key points for river restoration. This document relies on the work done by the participants during these working groups, and on information from the presentations, combined with background information.

The present document summarises the **main outcomes and recommendations of this workshop**.



RIVER RESTORATION, A WELL-KNOWN CHALLENGE

Aquatic ecosystems under pressures

Europe's rivers, lakes and alluvial habitats are under **immense pressure**. Among the key pressures, fragmentation and hydromorphological changes remain in the top tier, as shown by the European assessments after two RBMP cycles.

Ensuring the restoration of watercourses is a necessary condition for achieving good ecological status under the European Water Framework Directive: "Member States [of the European Union] protect, improve and restore all surface water bodies". Preservation and restoration are oriented towards the "good ecological status" of surface water bodies, the majority of which are "watercourses".

A **survey** led across EU member states on river continuity restoration by the European Centre for River Restoration (ECRR) showed that a lot of countries are already implementing measures to restore river continuity like adding a fish passage or removing barriers.

These years of implementation highlighted some **crucial points** for the success of a river restoration project:

- the co-construction of actions with all stakeholders involved in the project: either farmers, citizens, industries, fisheries, hydraulicians, public authorities... The importance of working together at different scales was a common feedback between countries.

- the importance of a social science analysis to design sustainable projects.

There is still a need to harmonize different interests and legislations to bridge the gap between all users.

Current challenges

The recent European Union's **Biodiversity Strategy** for 2030 calls for greater efforts to conform to the Water Framework Directive. It establishes several targets for aquatic ecosystems, and **set the target to make at least 25 000 km of rivers free-flowing again by 2030**, by removing primarily obsolete barriers and restoring floodplains and wetlands. It also proposes establishing **legally binding rules** to reach these targets.

This was one of the reasons behind a proposal for a **European nature restoration law**, published in June 2022. It features restoration obligations for several types of habitat, including "rivers, lakes, alluvial habitats and coastal wetlands", and the need to identify and remove barriers that prevent the connectivity of surface waters.



A path upon a wetland near Annecy, France.

This new legislation as well as the rising topic of climate change brought back the necessity to preserve and restore aquatic ecosystems to the fore.

A NEW DIMENSION

The current context of **multiple crises** was a central point of the event: energy, biodiversity, pollution, and climate change. The restoration of rivers must therefore take this situation into account while considering all of the territory's uses and regulations.

Governance

Stakeholders' involvement remains a key to design successful integrated project. The idea is to have a co-construction with all users, which especially means incorporating **human and social sciences analysis**.

Different recommendations were also made depending on the type of stakeholders concerned by the projects:

-information and awareness are crucial for citizens, especially in an urban context.

-for decision makers, information and training are still needed.

More generally, tailored tools could be useful to answer multiple user's need.

Technical aspects

In the view of implementing the EU legislation, especially the Nature Restoration law, the participants raised some questions, amongst them: How will the share of 25 000 km of free-flowing rivers across EU members will be made? How to define a free-flowing river precisely? How to monitor the actions?

Some **technical points** have also been raised:

-even if the principles of free-flowing rivers are theoretically defined, **some metrics still need to be developed**. In this context, a CIS-ECOSTAT group is currently working on the subject.

-the need of **database** of barriers, of habitats, in the view of the new European nature restoration law. In France for example, even if the data already exist, some participants revealed that they encounter difficulties to access it in a centralized and reliable support.

-defining ways to **monitor** before and after the implementation of the projects is still problematical;

-the need of clarification between the concepts of "connectivity" and "continuity";

-all the **compartments of the ecosystem** have to be taken into account, not only hydrology and sediment. Ecology with for example fish communities are also important in the decision.

- ECRR noticed that water body is not the right **scale** for assessment, because it does not consider river functions. A whole basin approach is of high importance.

ECRR also introduced the difference between two concepts when removing obstacles: **prioritisation VS optimisation**. Prioritisation is about ranking barriers for removal based of the highest ecological outcome, whereas optimisation is selecting specific barriers for highest ecological gains with given resources. Several approaches exist.

A European guidance to help river restoration

As announced in the Biodiversity Strategy, the Commission has developed a guidance document to assist Member States in identifying and prioritising barriers that could be removed to help achieve the goal of restoring 25 000 km of rivers to be free-flowing.

The guidance document also aims to clarify the concept of free-flowing rivers, and to offer an overview of existing methods that could be adapted and used to support the planning of barrier removal to restore river connectivity, and of existing EU financing tools that could be used to fund the removal of barriers and the restoration of floodplains and wetlands.



Moreover, climate change was seen as a rising challenge which have to be incorporated into decision criteria.

In this context, the importance of **Nature Based Solutions** in river restoration projects can help to reach the objectives in a sustainable way.

The question of **carbon footprint** of river restoration has also being raised: how can the projects be less carbon emitter?

A last point was on invasive species and the necessity to prioritize actions taking into account this specific issue.

Simplifying regulation and funding

Regulation was an important topic discussed during the workshop.

Despite of the importance of **integrative management**, some legislations are still in conflict, such as water, agriculture and energy. There is then a need to better harmonize all these, and also to strengthen the link **from EU to regional and local**

level so the legislations and strategies could be feasible locally.

Simplify the **administrative burden** would also be welcomed to foster implementation.

Land planning and land use are important elements to consider when implementing a river restoration project.

For example, in France some land was purchased along the river, to allow the restoration of a space for its good functioning and mobility. This also emphasized the need to consider aquatic ecosystem in urban planning for example.

Some specific points were raised. Indeed, the Biodiversity Strategy proposes to remove primarily obsolete barriers, but this raises a lot of questions and sticking points, starting with the way to prove that a barrier lost its **purpose**. The question of the **barrier property** has also been raised: difficulties to

act on barrier removal if the owner is not known or the rights are not clear.

As for the **financing**, many tools already exist, both in France and at European level. But a lot of cross financing is leading sometimes to a loss of efficiency between projects.

A French example of payment for ecosystem services was given, consisting in working with farmers to restore nature. Farmers received subsidies for implementing practices such as plating hedges, covering soil all year, keeping ponds...

Also, socio-economic benefits have to be considered, and not only the costs of a project.

More than ever, the need of an **integrative management** for river restoration, and more broadly for water, is important. Linking all relevant policies and legislations to achieve a sustainable use of the resources was one of the most important point from this workshop.

This is what INBO promotes, and can help to implement at different scales.

RIVER RESTORATION : a European goal at the crossroads of several legislations

Aquatic ecosystems are under pressures

- ✓ Europe's rivers, lakes and alluvial habitats are under **immense pressure**.
- ✓ Ensuring the restoration of watercourses is a necessary condition for achieving good ecological status under the European Water Framework Directive

Biodiversity Strategy for 2030

- ✓ Establishes several targets for aquatic ecosystems, and **set the target to make at least 25 000 km of rivers free-flowing again by 2030**
- ✓ It also proposes establishing **legally binding rules** to reach these targets.

A lot of countries are **already implementing measures** to restore river continuity like adding a fish passage or removing barriers.

Europe-INBO 2022

September 26th 2022 - September 29th 2022 - Annecy, France

The current context of **multiple crises** was a central point of the event: **energy, biodiversity, pollution, and climate change**.

A new dimension for River restoration

Governance

- ✓ Co-construction with all users, which especially means incorporating **human and social sciences analysis**.
- ✓ **Information and awareness** are crucial for citizens
- ✓ **Information and training** are still needed for decision makers

Technical aspects

- ✓ **Some metrics** still need to be developed
- ✓ The need of **database** of barriers, of habitats
- ✓ All the **compartments of the ecosystem** have to be taken into account
- ✓ Difference between 2 concepts when removing obstacles: **prioritisation VS optimisation**

Regulation and funding

- ✓ Need to strengthen the link **from EU to regional and local level**
- ✓ Simplify the **administrative burden**
- ✓ Consider **land planning** and land use
- ✓ For the **financing**, many tools already exist. A lot of cross financing is leading sometimes to a **loss of efficiency between projects**



Europe-INBO
workshop

ANNEX : Workshop presentations

- [EURO-RIOB 2022](#)
- WORKSHOP

-[Introduction of the workshop](#) – Yannick POCHON, INBO

-[Links between river restoration and other policies in France and in the Rhône Mediterranean basin](#)
– Benoit TERRIER, Rhône Méditerranée Corse Water Agency

-[Free-flowing rivers and restoration of river connectivity from theory to operational approaches](#) –
Bart FOKKENS, ECRR

-[LIFE CONNECTS, towards restored ecosystem services in rivers](#) – Karin OLSSON, LIFE CONNECTS

-[Debating about prioritization: implementing dam removals top-down or bottom-up?](#) – Saija
KOLJONEN, SYKE

-[La restauration hydromorphologique des rivières méditerranéennes: restaurer la mobilité des rivières pour lutter contre les inondations](#) – Mathieu DUPUIS, EPTB AUDE SMMAR

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