



“River management in a climate change context: challenges and opportunities”

18th October 2023

Hotel Meliá Oceanic



Workshop Agenda

Introduction (45'):

- General introduction - INBO
- OFB
- Impacts of Climate Change on Rivers (Biodiversity, Ecosystems Services, Resources...) – Mr. Bart Fokkens
- River management and climate change in Spain → Impacts, consequences, examples of actions - Ms. Tania Silva & Mr Emilio Real Llanderal

Working session # 1 – River management and climate change nowadays

- Restoration of the stream in the intermittent Cerknica Polje (Slovenia) – Ms. Irena Likar
- Multiple benefits of reopening rivers in Oslo – Mr Anders Iversen
- Participatory discussion time – 30'
- **Break : 15:40 → 15:55**

Working session # 2 – Adapting river management to climate change

- Monitoring and evaluating actions in rivers in a climate change context – Ms. Marlène ROLAN-MEYNARD & Mr. Stéphan JOURDAN
- Management of temporary rivers - Ms. Alejandra Tierno Cinque
- Participatory discussion time – 30'
- **Conclusion : end → 5 PM**



Main objectives of this workshop

- Promote works and exchanges on current subject of interests at European level
- Presentations in different climatic contexts + time for discussion and debate

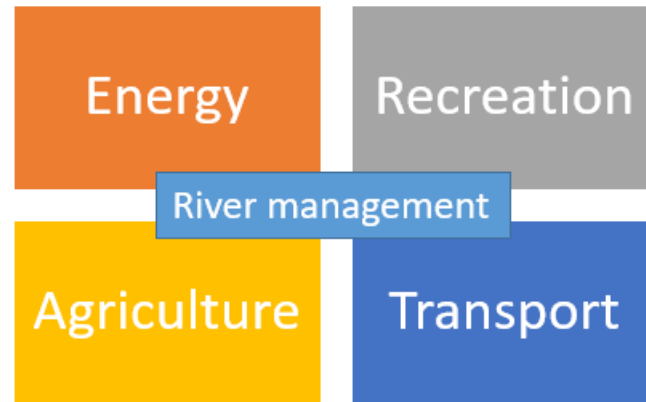
• Preparatory works with ECRR, OFB and Network representatives



Rivers, at the heart of several regulations and uses



Regulation and policies

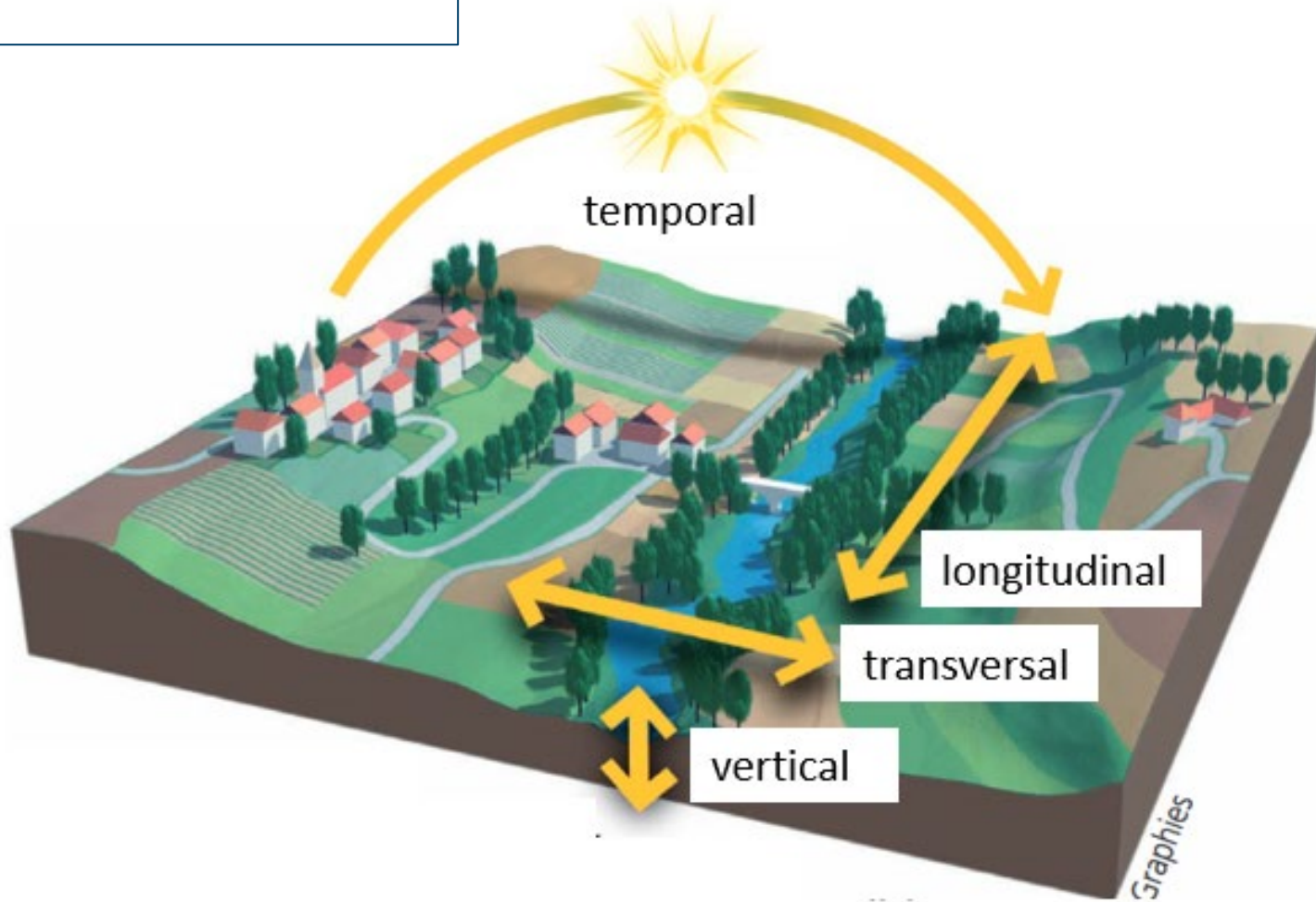


Uses and sectors

The four-dimensional nature of river ecosystem



4 dimensions to be taken into account



Nature Based Solutions (NBS)

- Approaches that promote the protection, sustainable management and restoration of ecosystems
- Benefit both biodiversity and human well-being
- IUCN have developed a standard for the verification and design of NBS

Natural Water Retention Measures (NWRM)

- Multi-functional measures
- Enhance and preserve the water retention capacity of aquifers, soils, and ecosystems
- Using natural means and processes



- River Restoration: a European goal at the crossroads of several legislations

WFD

Ensuring restoration of watercourses is a necessary condition for achieving good ecological Status

Biodiversity for strategy 2030

Establishes several targets for aquatic ecosystems, and set the target to make at least 25 000 km of rivers free-flowin again by 2030

The current context of multiple crises was a central point of the event:

- ✓ Climate change
- ✓ Energy
- ✓ Loss of biodiversity
- ✓ Pollution



Workshop-2022 – Annecy (France)

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 remove 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
- ✓ ECRR also introduced the difference between 2 concepts when removing obstacles: **prioritisation VS optimisation**

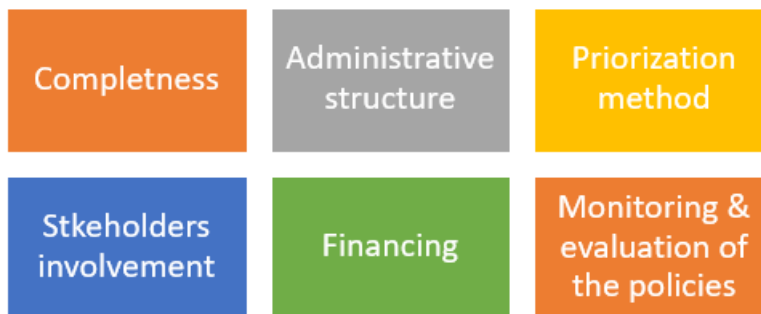
Regulation and funding

- ✓ To strengthen the link **from EU to regional and local level**
- ✓ Simplify the **administrative burden**
- ✓ **Land planning** and land use are important to consider
- ✓ 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

This webinar was organized jointly by INBO and the **European Centre for River Restoration (ECRR)**. It celebrated the launch of the publication of a study on the development and present status of **8 National River Continuity Policies from Austria, Finland, France, Germany, Lithuania, Norway, Slovakia, Spain**. The following aspects of the results of the study have been presented and discussed:



The **EU Biodiversity Strategy 2030** needs complete policies with effective implementation to protect nature and restore eco-systems.

Webinar

Improving National River Continuity Restoration Policies for European Ecosystem-based River Management

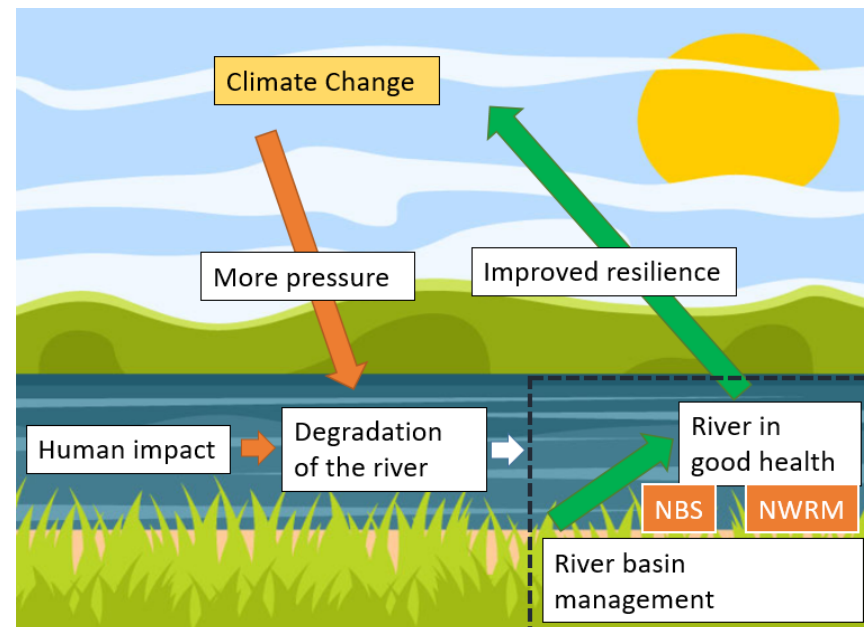
Tuesday 27 June 2023, 10:30 – 12:00 am CEST
Simultaneous interpreted in English, French and Spanish
Organized by the European Centre for River Restoration and the International Network of Basin Organisations, with the STOWA foundation for applied water research

Replay available



River management and climate change

- Climate change causing or enhancing new pressures on rivers and causing difficulties for water resources management
 - How to manage rivers in a climate change context?
 - How can rivers in good health help to adapt to climate change?
 - What regulatory and other technical tools are available, what is missing?



“River management in a climate change context: challenges and opportunities”

- A variety of presentations in different European countries
- 2 working sessions with participatory time
→ split group
- Minutes of the presentations and work will be produced and shared



Thank you for your attention and enjoy
exchanging ...





EUrOPE-INbO 2035



1. **Energy**
 2. **Transportation**
 3. **Healthcare**
 4. **Education**
 5. **Environment**

6. **Infrastructure**
 7. **Urban Planning**
 8. **Public Services**
 9. **Community Development**
 10. **Quality of Life**

11. **Water Management**
 12. **Waste Management**
 13. **Smart City Solutions**
 14. **Renewable Energy**
 15. **Artificial Intelligence**

16. **Water Quality**
 17. **Water Quantity**
 18. **Water Distribution**
 19. **Water Conservation**
 20. **Water Recycling**

21. **Water Pollution**
 22. **Water Security**
 23. **Water Governance**
 24. **Water Innovation**
 25. **Water Research**

26. **Water Policy**
 27. **Water Law**
 28. **Water Economics**
 29. **Water Diplomacy**
 30. **Water Ethics**