



# Building water resilience: towards better implementation of ecological flows and water allocation in Europe

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GOVAQUA

# Ecological flows and water allocation: Two building blocks for water resilience

## Technical concept

- **Ecological flow (eflow)** is the amount of water required for the aquatic ecosystem to continue to thrive and provide the services we rely upon.
- **Water allocation** mechanisms define who is allowed to access water, how much may be taken and when, how it must be returned, and the conditions attached to the use of the water.

## Policy context

- The **EU Biodiversity Strategy 2030** calls on Member States to review water abstraction and impoundment permits to implement ecological flows in order to achieve good water status as required by the **Water Framework Directive**
- The **EU Climate Adaptation Strategy** specifically points towards the need to improve the use of water-permitting and allocation systems to mitigate climate-driven water scarcity and drought impacts
- Upcoming non-legislative **Water Resilience** initiative

# An increasing level of interest

PERSPECTIVES PAPER Global Water Partnership

**Sharing water**  
The role of robust water-sharing arrangements in integrated water resources management

**FOR INPUT**

Sharing water lies at the heart of integrated water resources management.

When planning to build or improve water infrastructure or to set the allowed levels of demand, climate change extremes, variability, and opportunity – which produce specific, efficient, and sustainable outcomes – an initial goal of focus needs to be considered. This paper offers an overview of this issue. It is related to a "first" document, with the Global Water Partnership (GWP) looking for input and feedback in terms of views and experiences in building and improving water sharing systems around the globe.

GWP understands the complexity of water management. The Network works with an initial to explore the needs, benefits, and consequences of managing water sharing arrangements, and to determine how best to manage them. Through a period of consultation and engagement through its February 2024, the paper will be formally included as a flagship contribution towards a shared global focus on the improvement of water sharing arrangements.

The Perspectives Paper was prepared by GWP Technical Committee Member Professor Mike Hayes from the University of Central Florida. It is shared under a Creative Commons Attribution 4.0 International License. For more information, visit the GWP website and the Open Access and Knowledge Commons about the role of water sharing systems in integrated water resources management.

www.gwp.org www.gwpinfo.org

UNECE

**HANDBOOK ON WATER ALLOCATION IN A TRANSBOUNDARY CONTEXT**

UNEP/WHO

European Commission

Technical Report – 2015 – 006

**Ecological flows in the implementation of the Water Framework Directive**

Guidance Document No. 51

European Commission

**Implementation of ecological flows in the EU**

Final report

09020200/2022/869340/SFRA/ENV.C.1

Framework Contract "Water for the Green Deal" - Implementation and development of the EU water and marine policies

Specific Contract "Support to the Commission on water quantity management – follow up to the Fitness Check of EU water law conclusions, EU Strategy on Adaptation to Climate Change and Common Implementation Strategy Work Programme for the water directives (2022-2024)"

Ecologic Institute, Fresh Thoughts Consulting GmbH, Milieu Consulting

October 2023

ADB GIWP WFP

**Basin Water Allocation Planning**

Principles, Procedures and Approaches for Basin Allocation Planning

Part of a series on strategic water management

OECD Studies on Water

**Water Resources Allocation**  
SHARING RISKS AND OPPORTUNITIES

OECD

European Commission

Technical Report – 2015 – 090

**Guidance document on the application of water balances for supporting the implementation of the WFD**

Final – Version 6.1 – 18/05/2015

European Commission

**Implementation of water allocation in the EU**

Final report

09020200/2022/869340/SFRA/ENV.C.1

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November 2023

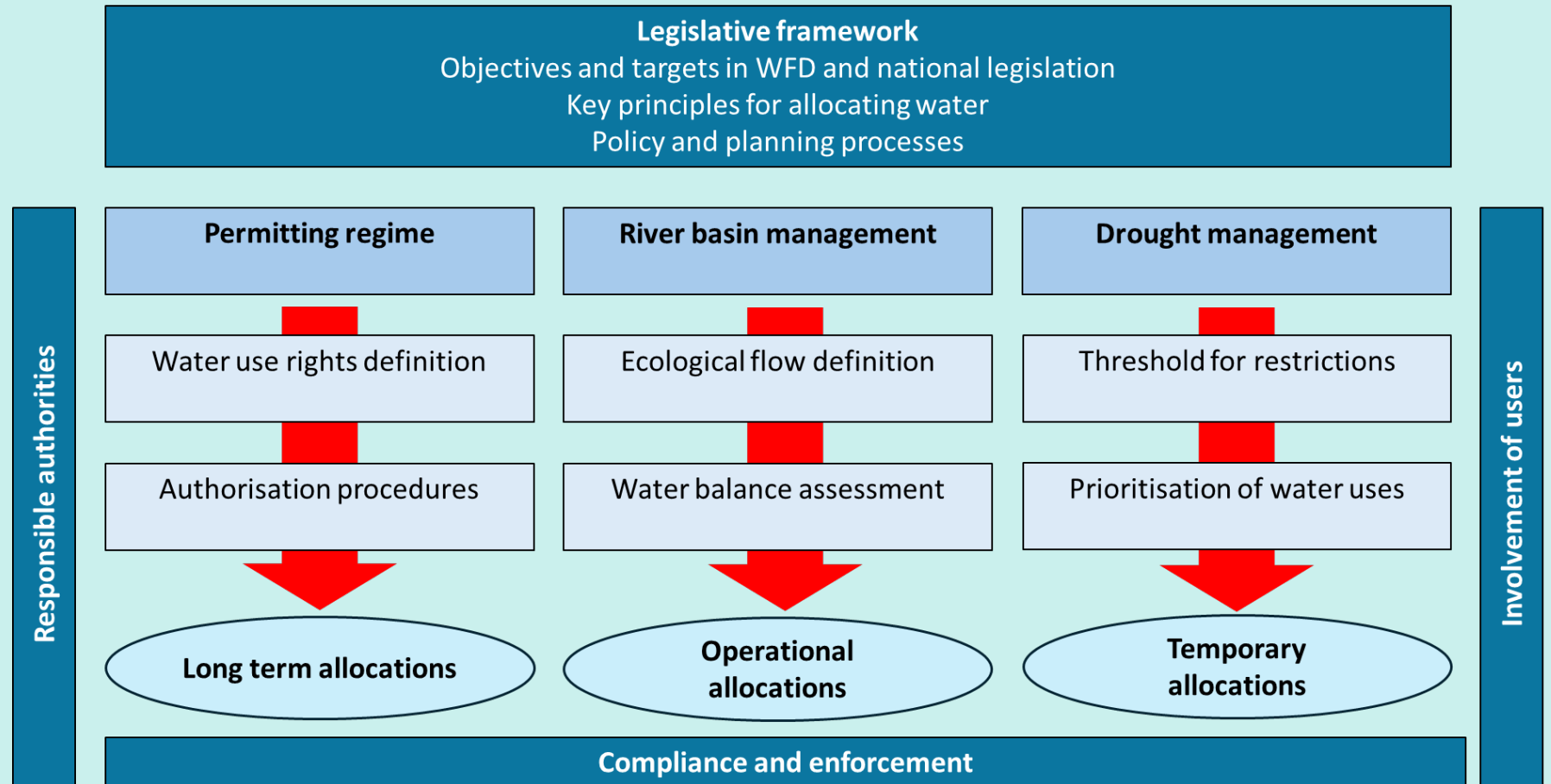


# GOVAQUA research on legal and regulatory approaches

- Reviews how legal and regulatory regimes for water allocation and ecological flows are designed and implemented in six European countries, identifying **implementation challenges** and **innovative practices**
- So far, national review of **six European countries**



# Legal and regulatory framework for water allocation and eflows

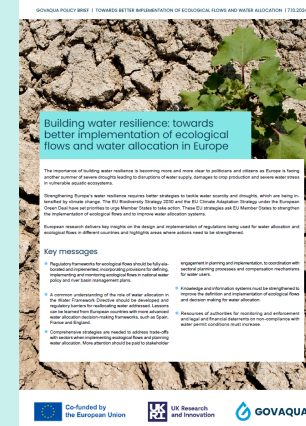


# Some observations

- In several EU countries, the **legal and policy basis for defining and implementing eflows is still not sufficiently elaborated**, with a lack of eflows provisions under national water acts and RBMPs, and a lack of regulatory mechanisms to revise the environmental conditions of water use permits
- **A common understanding of the role of water allocation in the Water Framework Directive (river basin management) should be developed** and regulatory barriers for reallocating water addressed.
- **Stakeholder engagement especially should be further institutionalised** in different steps of the regulatory framework for permitting, planning and enforcing eflows and water allocations.
- **Knowledge and information systems must be strengthened**: link between eflows and ecological response, surface water – groundwater interaction, increasing impact of climate change, robust water balances, etc.
- **Much stronger focus is needed on enforcement and deterrents on non-compliance**

# GVOAQUA: state of play and next steps

- **Summer 2024: Policy brief and deliverables presenting national reviews**



- **2025: reviews of good practice**

Good practice cases on ecological flows

Case 1.1 Priorisation of ecological minimum flows (Austria)

Case 1.2 Hands-off flows (England)

Case 1.3 Public access on ecological flow system (Spain)

Good practice cases on water allocation

Case 2.1 User based allocation in agriculture (France)

Case 2.2 Quantitative water management (PTGE/PGRE) (France)

Case 2.3 Conjunctive management of surface water and groundwater

**Any other suggestions welcome!**

# Thank you for your attention

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