

## Recommendations

- Establishment of Flood Risk Management Plans as integrated sub-plans to River Basin Management Plans.
- Implementation of new solutions based on the new EU Strategy on Adaptation to Climate Change, including especially recommendations of European Commission
- Implementation of an ecosystem-based approach – navigating the course towards clean, healthy and productive seas with the conclusions for current situation of water bodies in Europe: “Our environment, our natural jewels, our seas and oceans, must be conserved and protected.”
- Implementation of the environmental DNA (eDNA) based methods in biodiversity monitoring, conservation and ecological status assessment for quick practitioners’ adaption.

The study was commissioned by the **BIOEAST** Thematic Working Group on Freshwater and performed by Agnieszka Napiórkowska-Krzebietke.

The study will contribute to the **BIOEAST Strategic Research and Innovation Agenda (SRIA)** being developed in 2022.

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Read the full study on the **BIOEAST** website



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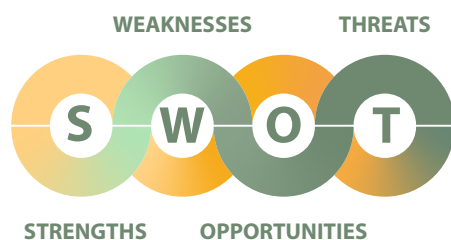
# BIOEAST #5 THEMATIC STUDIES

SURFACE WATERS – MAINTAINING AT LEAST GOOD WATER QUALITY AND BIODIVERSITY

## What is the study about?

The main objectives of the study are to analyze the current situation of the ecological status/potential and chemical status of surface water bodies and groundwater bodies in the eleven **BIOEAST** countries, describe the macro-region's potential, tools, risks and barriers, and to suggest a possible opportunity of implementation plan for the freshwater based bioeconomy in the respective value chains. The thematic study provides in particular:

- an overview on freshwater ecosystems and available current legal documents related to the national and European Union levels;
- an analysis of the current networking potential in each country – main institutions and leaders, including identification of responsibilities, potential instruments and political, economic and legal barriers, contact info and the areas of networking;
- an analysis of SWOT (Strengths, Weakness, Opportunity, Threats) for the **BIOEAST** macro-region, to facilitate the transition from the stage of „Understanding the Nexus“ to „Nexus Doing“ in order to strengthen resilience, and as well maintain the good water quality status.



## SWOT analysis for the BIOEAST macro-region



### STRENGTHS

- Defined pressures on surface water bodies: relations 'driving force-pressure-status-impact'.
- Revised types of water bodies, and majority of assessment methods and classifications.
- Enlargement the analysis of pressures and implement results from models, projects and research.
- Governance and public consultations
- Active involvement of stakeholder groups.
- International monitoring network of a river convention.
- Improved effectiveness, and completion level in monitoring and ecological classification.
- Ensured natural water retention and green infrastructure measures in some countries.



### WEAKNESSES

- Methodological gaps in monitoring, assessment, criteria, classifications, and some national methodologies for surface water bodies.
- Lack of complete monitoring of groundwater and all substances causing risk.
- Water quantity-related problems.

- Pollution sources – gap assessment for diffuse pollutant loads.
- High share of water bodies with unknown status (especially ecological status/potential or chemical status of surface water bodies).
- High share of expert judgment instead of scientific research.
- Failure to meet the objectives of the WFD for most surface water bodies.
- No clear distinction between droughts and water scarcity, or even lack of drought management plan in some countries.



### OPPORTUNITIES

- Positive EU legislation
- Restoration missions and actions with positive results



### THREATS

- Political instability, lack of coordination and cooperation within pursuit of a common goal.
- Financial crisis (e.g. lack of funds), land proprietary, technical, legal and natural conditions issues as reasons for non-implementation of measures.
- Changes in environmental variables.