



**BIOEAST THEMATIC
WORKING GROUP
FRESHWATER**

FEEDBACK ON THE CALL FOR EVIDENCE

EUROPEAN WATER
RESILIENCE STRATEGY

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– EUROPEAN WATER RESILIENCE STRATEGY

The European Water Resilience Strategy is a critical initiative that aligns with urgent water management needs across the EU. The BIOEAST region faces significant challenges in freshwater management due to severe droughts, destructive fires, and recent floods. Freshwater is critical for the region's agriculture, biodiversity, and economy as the BIOEAST [Stakeholder Manifesto](#) is reflecting.

The BIOEAST Thematic Strategic Research and Innovation Agenda (SRIA) developed by the [BIOEAST Thematic Working Group Fresh Water Based Bioeconomy](#) highlights the **Water-Soil-Climate Nexus**, which presents a holistic, integrated approach to water security, ecosystem restoration, and bioeconomy development. Our feedback aims to bridge policy gaps, align research priorities, and promote innovative governance models for sustainable water management.

Key Priorities from the Thematic SRIA

1. GOVERNANCE & IMPLEMENTATION: DECENTRALIZED WATER MANAGEMENT

- Establish **Local Water Boards** and local water planning level as a bottom-up governance model to ensure community-driven water planning, risk analysis, and restoration projects.
- Foster cross-border cooperation within the Danube River Basin, integrating macro-regional strategies with the EU's Water Resilience Strategy
- Encourage **multi-sectoral dialogue between policy makers, industry leaders, scientists, and local communities** to ensure policy coherence.
- It is necessary to introduce an assessment of the hydrological and climatic impacts of public policies and the impacts of land use on changes in the water cycle.
- A valuable solution is **integrating existing partial information systems into the Integrated Water-Soil-Climate Information and Monitoring System**.

2. RESTORATION & PROTECTION OF THE WATER CYCLE

- Implement **nature-based solutions such as rainwater harvesting, wetland restoration, and decentralized water retention** to mitigate extreme weather and restore small water cycles.
- Adopt regenerative agriculture and soil health improvement techniques to enhance water retention and mitigate drought impacts.
- **Landowners, co-owners, farmers, and local communities—both urban and rural—should actively participate in the preparation and implementation of measures.**
The AKIS advisory system can provide support, and a broad network of local and regional advisory centers is essential for large-scale adaptation efforts.

WATER SOIL CLAIMED NEXUS APPROACH

Thematic SRIA for Europe

3. WATER EFFICIENCY AND CIRCULARITY IN THE BIOECONOMY

- Promote a circular economy approach by **integrating wastewater treatment, nutrient recovery, and sustainable aquaculture into the bioeconomy**.
- Develop innovative irrigation techniques and climate-resilient aquaculture species to adapt to water scarcity.
- The activation of a **new sector within national economies, supported by a system of international and interregional financial solidarity**, will enable the evaluation and financing of ecosystem services related to soil and landscape. This emerging sector will serve as a strategic tool for enhancing the country's water retention capacity while synergistically advancing multiple policy agendas. As part of the circular bioeconomy, it will significantly **boost rural development by engaging local communities, farmers, and forest managers in rainwater retention, soil rehydration, anti-erosion measures, biomass management, and the sustainable care of landscape structures**

Recommendations for the Commission

To ensure the European Water Resilience Strategy effectively addresses the growing challenges of water scarcity, pollution, and climate-related disruptions, **it is essential to integrate systemic, nature-based, and cross-sectoral approaches**. The Water-Soil-Climate Nexus, as highlighted in the BIOEAST Thematic SRIA, provides a **holistic framework that aligns with EU priorities, emphasizing decentralized water management, restoration of small water cycles, and circular bioeconomy principles**.

Given the macro-regional significance of freshwater governance, particularly in Central and Eastern Europe and the Danube River Basin, the Commission should **strengthen policy coherence, foster multi-stakeholder engagement, and support research and innovation ecosystem**. The following recommendations outline key strategic actions that can enhance water resilience, ecosystem restoration, and sustainable economic development within the framework of the European Water Resilience Strategy:

- **Strengthen the integration of the Water-Soil-Climate Nexus within the European Water Resilience Strategy to ensure a cross-sectoral, systemic approach.**
- **Support financial instruments and incentives for nature-based solutions and water governance models, such as the Carbon and Water Bank Certification System.**
- **Expand EU regulatory frameworks, such as the Water Framework Directive, to explicitly incorporate land rehydration and local-scale water cycle restoration.**
- **Facilitate research, innovation, and capacity-building, particularly in the BIOEAST macro-region, to develop water-smart bioeconomy models.**

By embedding these elements into the European Water Resilience Strategy, the EU **can enhance water security, support climate adaptation, and foster a sustainable bioeconomy while ensuring resilience against future water-related crises**.