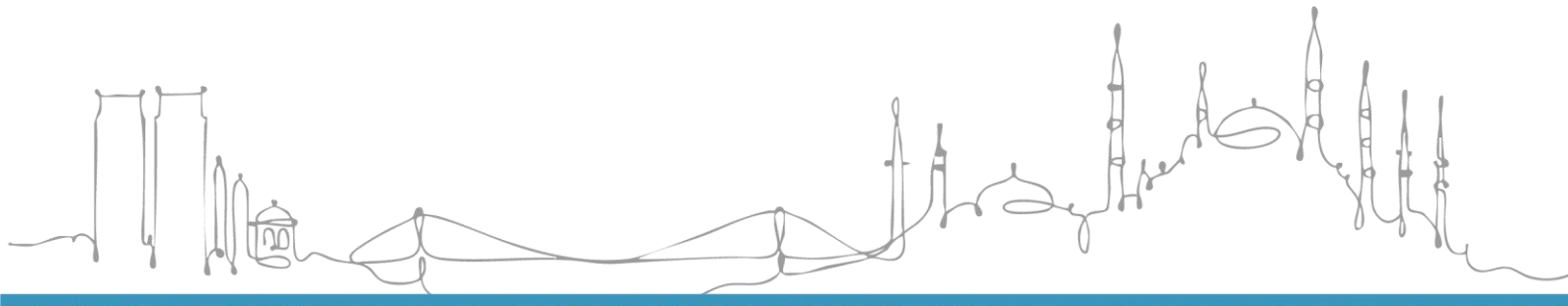
ISTANBUL INTERNATIONAL WATER FORUM

5th ISTANBUL INTERNATIONAL WATER FORUM

"Strengthening Water Resilience: Innovation to Action"

5-6 May 2026 | Istanbul, Türkiye

CONCEPT NOTE



TURKISH WATER INSTITUTE SUEN TÜRKİYE SU ENSTİTÜSÜ

ISTANBUL INTERNATIONAL WATER FORUM

Theme: Strengthening Water Resilience: Innovation to Action

In an era of accelerating climate change, water scarcity, and growing socio-economic challenges, the world faces an urgent call to strengthen water resilience. Increasing pressures on water resources are forcing us to rethink how we value this strategic resource. The 5th Istanbul International Water Forum (IIWF), organized under the theme ***"Strengthening Water Resilience: Innovation to Action"***, will address the pressing global water challenges and explore ways to transform knowledge and innovation into practical solutions, focusing on dialogue, technology, finance, agriculture, health, and the interlinkages across sectors. The Forum will serve as a high-level platform to share experiences, best practices, and innovative approaches towards achieving **water resilience** and **water efficiency**.

Building on Türkiye's vision to promote water dialogue and sustainable water management, the Forum emphasizes the importance of bridging science, policy, and implementation to achieve water resilience that supports life, health, and development. Bringing together high-level representatives, decision makers, academicians, scientists, experts, and practitioners from around the world with a multidisciplinary perspective, the Forum will highlight the vision to transform innovation into practice and cooperation into shared progress.

Istanbul, where continents meet and civilizations have long been shaped by water, provides an inspiring setting for this global dialogue. For centuries, the city has served as a meeting point between cultures, ideas, and trade routes, a place where water has not only sustained life but also connected peoples and histories. Today, Istanbul continues to reflect this bridging spirit, linking innovation with policy, science with diplomacy, and local action with global vision. Istanbul stands as a powerful reminder that cooperation, solidarity, and shared resilience are built through connection, across sectors, borders, and generations.

The Forum will be structured around four interlinked sub-themes that together reflect a holistic vision of water resilience. ***Water Dialogue for Resilience*** will focus on enhancing cooperation, inclusivity, and capacity development on the path toward the UN 2026 Water Conference. ***Finance Mobilization and Innovation for Climate-Resilient Water Management*** will explore new financing models, technology-driven approaches, and circular pathways for efficient water management. ***One Water, One Health: Integrated Management of Risks*** will focus on a holistic approach for health, wastewater, WASH, and preparedness to water related disasters. Finally, ***Beyond Trade-offs: Advancing the Water-Energy-Food-Ecosystem Nexus*** will highlight integrated perspectives that connect different sectors.

By gathering diverse actors across disciplines and regions, the 5th IIWF aims to deliver forward-looking insights and practical recommendations to contribute to water-related events particularly the UN 2026 Water Conference, the 11th World Water Forum in 2027 and the IWRA XX World Water Congress to be hosted in Istanbul in 2027. The outcomes of the 5th IIWF will also contribute to the UNFCCC COP31 to be held in Antalya, Türkiye in 2026.

Sub-theme 1. Water Dialogue for Resilience

Water is not only a vital resource but also a bridge that connects people, sectors and civilizations. Water is a powerful instrument for cooperation. In a world where water challenges are increasingly common, resilience cannot be built in isolation. Building water resilience requires technical solutions as well as continuous dialogue, mutual understanding, and trust. Dialogue as a long-term process enlarges the space for collective action and joint progress. Resilience emerges when dialogue transforms differences into opportunities and shared challenges into shared benefits.

The sub-theme "Water Dialogue for Resilience" aims to answer the following questions: How can we ensure that water cooperation becomes an accelerating force to ensure sustainable development in the face of climate change? How can water dialogue at all levels help address the most significant water related challenges? What lessons from successful case studies on water dialogue can be applied to water resilience? How can countries join forces to build stronger water resilience? Approaching water as a resource that unites rather than divides, this theme draws on Türkiye's long-standing experience in advancing water cooperation and fostering constructive engagement in water dialogue.

From basin-wide cooperation to regional initiatives, from multi-stakeholder partnerships to international activities, dialogue must be sustained. The ultimate goal is to translate dialogue into action that strengthens resilience in the face of climate change, population growth, and water stress. Within this framework, the three sessions under the sub theme **"Water Dialogue for Resilience"** will explore complementary dimensions of dialogue and capacity-building for water resilience.

Sub-theme 2. Finance Mobilization and Innovation for Climate-Resilient Water Management

Increasing droughts, floods, and water quality challenges necessitate not only a focus on water infrastructure but also its transformation to become climate resilient. While around 40 percent of the world's people are affected by water scarcity, floods threaten to destroy water infrastructure facilities. Therefore, climate resilient water management has been more urgent than ever. Climate resilient water management includes an integrated approach to planning, governing and operating water systems that strengthens their capacity to adapt to and recover from climate related shocks, such as droughts floods and extreme water events and hydrological variability. In this context, water-related investments should seize the opportunity to demonstrate their contribution to climate objectives (mitigation, adaptation, resilience) in order to mobilize related funding.

Under the sub-theme **"Finance Mobilization and Innovation for Climate-Resilient Water Management"** the objective is to present a vision for moving from theory to concrete action by exploring financial instruments, innovative mechanisms, and enabling policy options for climate-resilient water projects.

In basin management, digital and technology-driven innovations such as AI-driven decision-support systems and remote early warning capacities against climate risks while maximizing water-use efficiency and strengthening the effectiveness of investments, contribute to resilient water management understanding. Integrating water into the circular economy also plays a critical role in achieving climate-resilient water management. The "from waste to resource" approach, reduces pressure on water resources while generating new streams of economic value.

Three sessions that will be organized under the sub-theme "Finance Mobilization and Innovation for Climate-Resilient Water Management" will highlight the key tools and strategies to bridge the financing gap for climate-resilient water management, opening a discussion on how finance, technology, and circular economy approaches can jointly strengthen water resilience through an integrated and forward-looking perspective. Despite the water sector being essential for both sustainable development and climate resilience, financing for achieving Sustainable Development Goals (SDG) 6 remains markedly insufficient at the global level. Countries are facing growing challenges in securing adequate funding due to ageing infrastructure, increasing demand, and the mounting impacts of climate change.

The sub-theme will also address the following questions: What are the obstacles to achieving a more equitable balance of risk and return among financing institutions and beneficiaries for climate-resilient water management? How can countries implement adaptive climate smart strategies together? What innovative approaches can countries adopt to develop climate resilient water infrastructure at the bilateral level?

Sub-theme 3: One Water, One Health: Integrated Management of Risks

Water lies at the heart of the One Health framework, linking the health of people, animals, and ecosystems through resources and risks. Water is a connecting system that transports nutrients, contaminants, and pathogens across cities, industries, and agricultural systems. Building resilience in this context requires an integrated approach that bridges infrastructure, environmental and health policies.

Adapting WASH services to growing climate pressures is a central public health priority. Reliable access to safe water, sanitation, and hygiene protects lives and supports community resilience. Within this vision, wastewater surveillance has emerged as a transformative tool for early warning and response to infectious diseases and antimicrobial resistance. Strengthening surveillance capacities therefore enhances cross-sectoral collaboration and preparedness.

To endure floods, droughts, and infrastructure disruptions, systems must adopt risk-informed, inclusive, and flexible approaches. Groundwater, as a natural buffer during dry periods, must be safeguarded through sustainable management practices. Integrating nature-based and conventional infrastructure solutions also reduces flood risks and strengthens adaptive capacity. Disaster management demands integrated frameworks that encompass preparedness, response, and recovery. Building resilience in water systems through the "One Water, One Health" approach is therefore not only a technical necessity but a strategic imperative for protecting health, ecosystems, and sustainable development.

The sub-theme **"One Water, One Health: Integrated Management of Risks"** aims to promote holistic and coordinated approaches that safeguard public health and environmental integrity. Sessions under the sub-theme will explore the following aspects: how water-related risks can be managed through the integration of WASH, wastewater surveillance, water resources protection, and disaster preparedness. Emphasis will be placed on strengthening institutional and technical capacities, fostering cross-sectoral collaboration, and advancing the One Water-One Health vision as a key element of climate resilience and sustainable development.

Sub-theme 4: Beyond Trade-offs: Advancing the Water–Energy–Food–Ecosystem (WEFE) Nexus

The interdependence between water, energy, food, and ecosystems is becoming increasingly complex under current pressing challenges. Fragmented policies and sectoral priorities in these fields often turn gains in one area into losses in another. Yet achieving sustainable development goals and climate resilience requires managing these elements not in competition, but in harmony. The WEFE nexus approach offers a strategic framework to address these interactions holistically, aiming for the efficient, equitable, and environmentally sound use of resources.

Under the sub-theme "**Beyond Trade-offs: Advancing the Water–Energy–Food–Ecosystem (WEFE) Nexus"** the ultimate objective is to underline the importance of efficient water use at all levels, taking into account the water, food, energy, environment nexus, including in the implementation of national development programmes. Sessions under the sub-theme will explore, how water can act as the catalyst in achieving the Sustainable Development Goals (SDGs) using the WEFE nexus systems approach? What scenarios best balance competing demands under climate variability? How can co-benefits from nexus-based cooperation be identified and distributed?

WEFE nexus approach integrate processes generating environmental, economic, and social benefits simultaneously. Moving **from silos to synergy,** the focus is on fostering coherence across sectors through joint planning, data integration, and digital innovation**.** Advancing the Water-Energy-Food-Ecosystem Nexus can be possible through digital technologies, including remote sensing and AI-based decision-support systems in order to enhance the effectiveness and strengthen evidence-based governance capacity.

Transforming agriculture through circular, climate-smart, and ecosystem-based practices will be central to achieving nexus resilience. At the same time, building **water-wise cities** will showcase how urban systems can combine efficiency, green infrastructure, and adaptive governance to ensure sustainable and livable environments.

Ultimately, the systemic strengthening of nexus approach and a future where nature and technology act as joint drivers of transformation will be highlighted in three sessions under this sub-theme. This vision positions resource conservation, guided by innovation, not merely as an obligation for separate sectors but as a shared basis for efficiency, prosperity, and resilience.