

Policy Brief

Recommendations for international water governance

Exacerbated water-related challenges are observed worldwide and can result in regional water emergencies with a planetary dimension. To maintain a safe distance from the limits of controllability, it is essential to reposition international water governance. The UN Water Conferences planned for 2026 and 2028 are of central importance for the further development of international water law. In its report “Water in a heated world” the WBGU proposes developing an International Water Strategy with the long-term goal of a water agreement under international law. A Water Mapping Initiative should be set up and a climate-resilient, socially balanced water management should be established.

The WBGU recommends that international water governance should be further developed through a new International Water Strategy that builds on existing targets, content and measures of international water law. Existing processes on water should be consolidated in the form of an exchange and by way of a coordination platform. To institutionalize the UN Water Conferences and ensure regular exchange, a UN Water Secretariat should be established and tasked with their preparation. The long-term goal should be a binding agreement under international law.

Set new impulses with an International Water Strategy

Set up a Water Mapping Initiative and identify regional water emergencies

A Water Mapping Initiative consisting of a science platform and a panel of experts should be launched. It should identify imminent regional water emergencies and use these results to inform decision-making processes. This requires the merging of long-term global water data series, including high-resolution spatial and temporal data from observations and forecasting models at the local, regional and global level. At the international level, the expert panel should inform the UN Water Conferences.

To maintain a safe distance from the limits of controllability, what is needed is a climate-resilient, socially balanced water management regime with a long-term view that combines thinking about blue and green water and is able to react flexibly to changes. Planning and decision-making processes must be adjustable, and infrastructure measures must be designed in a more decentralized and adaptive way. Real-time information and projections under various climate scenarios on water availability and demand form the basis for monitoring and adjusting management methods. An integrated landscape and water-balance approach should be pursued. Self-organization in local and regional water management should be promoted.

Establish climate-resilient water management

Towards a globally harmonized water governance

Water crises are exacerbated worldwide by climate change. The UN Water Conference 2023 has put the topic on the international policy-making agenda. Two additional UN Water Conferences are planned for 2026 and 2028. This momentum should be used to institutionalize such negotiations in the longer term and enable a globally harmonized water governance. So far, however, there is no institutional framework for this. Accordingly, the WBGU proposes negotiations on an International Water Strategy, building on existing international water-policy processes (Figures 1, 3).

This strategy should first be initiated as a soft-law-process that enables exchange and cooperation between states and other relevant actors. The aim should be, on the one hand, to find agreement on regulations for the transboundary management of blue water (surface water, groundwater). On the other hand, with regards to green water (soil moisture), data gaps should be filled and practical knowledge shared. It is recommended that topics such as drinking water, education, research and cooperation be addressed first. More conflictual topics should also be addressed step by step. After 2030, the process should lead to a legally binding framework.

For the development of an International Water Strategy within the context of future water conferences the WBGU recommends:

- › **Formulate guiding principles for international water governance:** The starting point should be to recognize the protection of water resources as a common concern of humankind, flanked by a universal human right to water as part of the human right to a healthy environment.
- › **Agree reporting obligations and quantifiable targets:** The strategy could define reporting obligations on voluntary commitments (e.g. as part of the Water Action Agenda of 2023). Quantifiable targets and reporting obligations enable monitoring and a comparison between states. Such soft norms can serve as catalysts for subsequent binding regulations.
- › **Harmonize and mutually integrate the governance of green and blue water:** International water governance overlaps with numerous policy processes that address blue and green water (e.g. UNFCCC, CBD, UNCCD, Ramsar). Both green and blue water should therefore be included in the targets of an International Water Strategy and in indicators of national measures. Coordination with the mentioned policy processes should be ensured (Figure 1).
- › **Strengthen existing conventions and further develop their content:** An International Water Strategy could provide an incentive for states to join the two existing international water conventions. A platform for clarifying controversial issues on the interpretation of the conventions could contribute to this. The scope of application of both conventions should be extended to also include the regulation of green water.

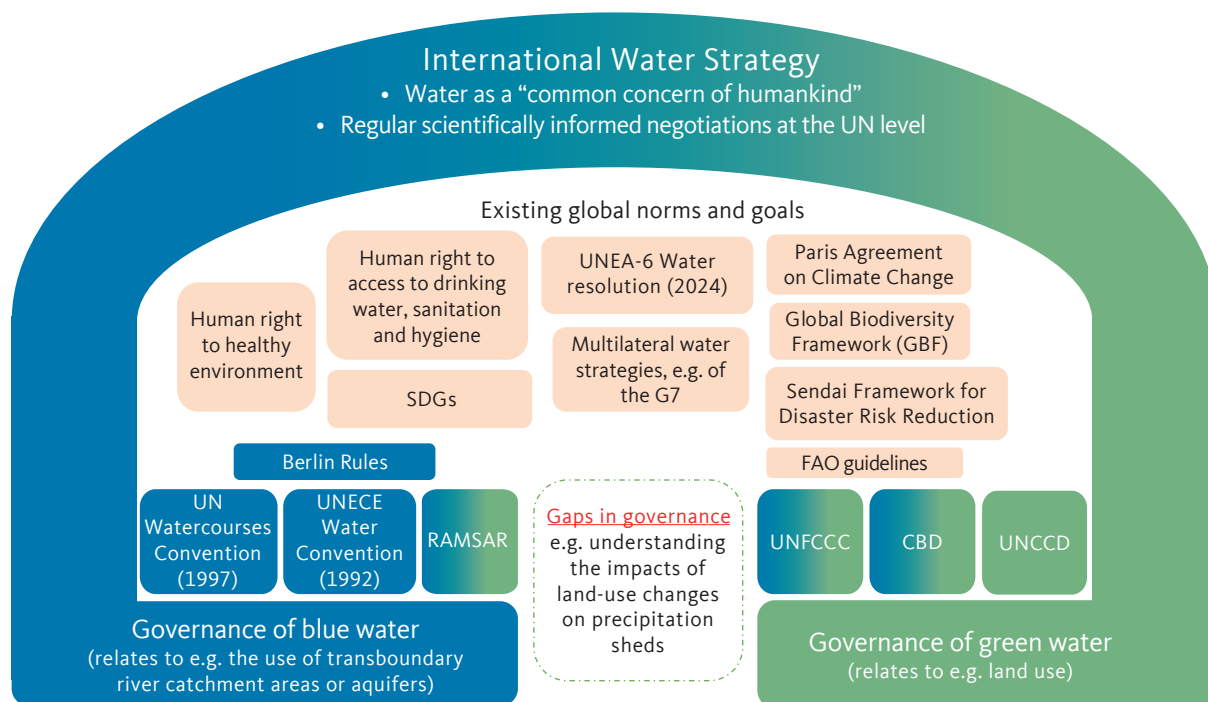


Figure 1

Procedurally, the International Water Strategy provides an institutional framework for the governance of blue and green water. In terms of content, it should refer to existing conventions and global standards.

Source: WBGU

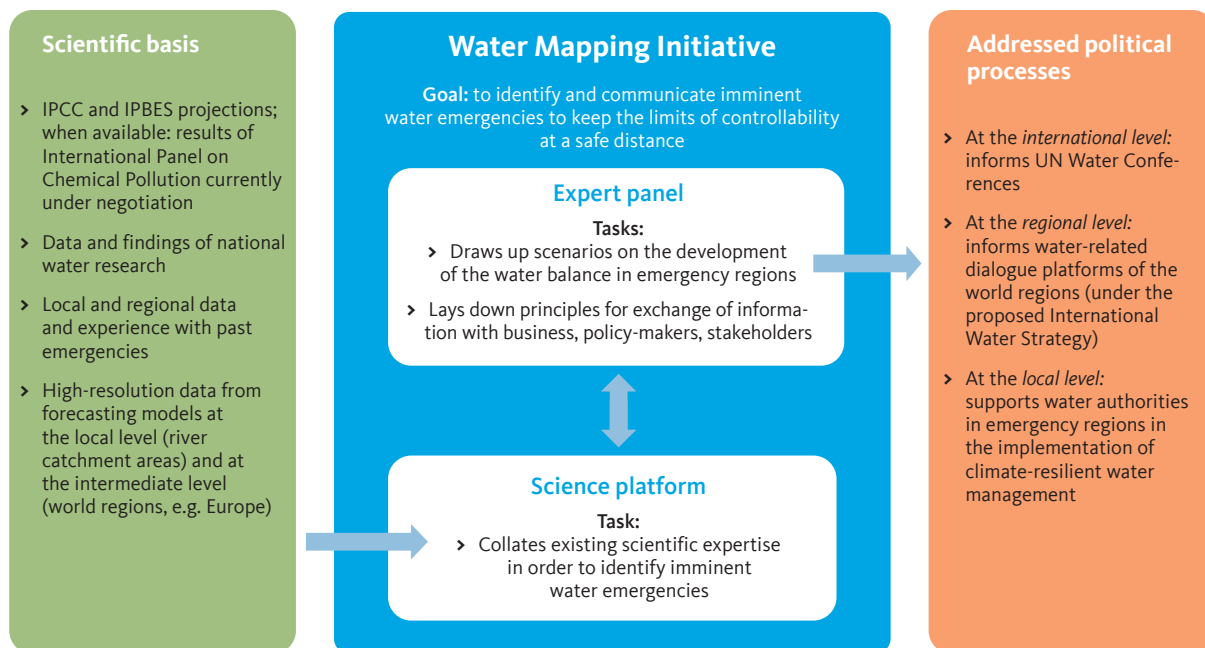


Figure 2

The Water Mapping Initiative consists of a science platform and a panel of experts. The science platform aims to recognize imminent water emergencies as early as possible by integrating scientific principles. On this basis, the panel of experts would inform and support international, regional and local policy processes.

Source: WBGU

- › **Incentivize participation:** This could be achieved through a mechanism that provides scientific and technical expertise and offers additional water-specific cooperation opportunities and financing options for the implementation of common goals.
- › **Establish a secretariat at UN level:** A dedicated secretariat should be established at UN level. It could be headed by the Special Envoy for Water. The expert panel of the proposed Water Mapping Initiative should advise the secretariat. Main tasks would be the preparation of international conferences and monitoring of set targets.
- › **Establish regional platforms:** To strengthen regional organizations, regional platforms for multilateral meetings could be set up. In this way, goals and measures for regional water strategies could be formulated. The Sendai Framework for Disaster Risk Reduction can serve as a model.
- › **Mobilize financing:** Water-related risks should be made more transparent and revenues of public and private investors stabilized. Intermediaries and local cooperation platforms should be strengthened.

Ensure scientific cooperation at all levels

The WBGU proposes setting up an international Water Mapping Initiative to identify imminent regional water emergencies with a planetary dimension early-on (e.g. melting glaciers in the Hindu Kush-Karakoram-Himalaya or extreme water scarcity in cities) and use these results to inform decision-making processes (Figure 2).

To this end, a science platform should bring together existing expertise and record regionally specific changes. This includes long-term data series, monitoring and observation data at all levels (local to global) as well as the integration of findings on the impacts of climate change, biodiversity loss and pollution (e.g. by IPCC and IPBES). To steer the science platform a panel of experts should be established that, for example, develops binding standards and indicators for water monitoring worldwide, evaluates available findings and feeds the results into political processes. The panel informs the UN Water Conferences and water-related dialogue platforms of the world regions and supports water authorities in the implementation of climate-resilient water management.

The science platform and the panel of experts should institutionally be based at UN Water. The databases and the scientific analysis should be hosted by internationally commissioned national research institutions. Ideally, funding should be provided by G7 and G20, and by other states on a voluntary basis.

Make water management adaptable and climate-resilient

In light of advancing climate change and in order to maintain a distance from the limits of controllability, it is necessary to link water management more closely with climate adaptation measures. The international community should agree on key criteria for climate-resilient water management as part of the International Water Strategy:

- › **Pursue an integrated landscape and water-balance approach:** Climate protection and biodiversity conservation, food security and strengthening natural buffers in the water balance should be integrated. A climate-resilient landscape water balance should be strengthened and the green water stored as soil moisture taken into account.

- › **Enable action, planning and decision-making under uncertainty:** Infrastructure measures should be planned in a more decentralized and adaptive way. Structures and processes in water management should be designed in a way that includes all actors and is correctable. Collaborative learning and decision-making processes should be established and transboundary forums for cooperation created.

- › **Consider diverse criteria when selecting water management measures:** These include the short-term efficacy and long-term effect on the landscape water balance, the feasibility, potential multiple benefits as well as avoiding maladaptation and other unintended consequences. Real-time information and projections under various climate scenarios on water availability and demand form the basis for continuously monitoring and adjusting management methods.

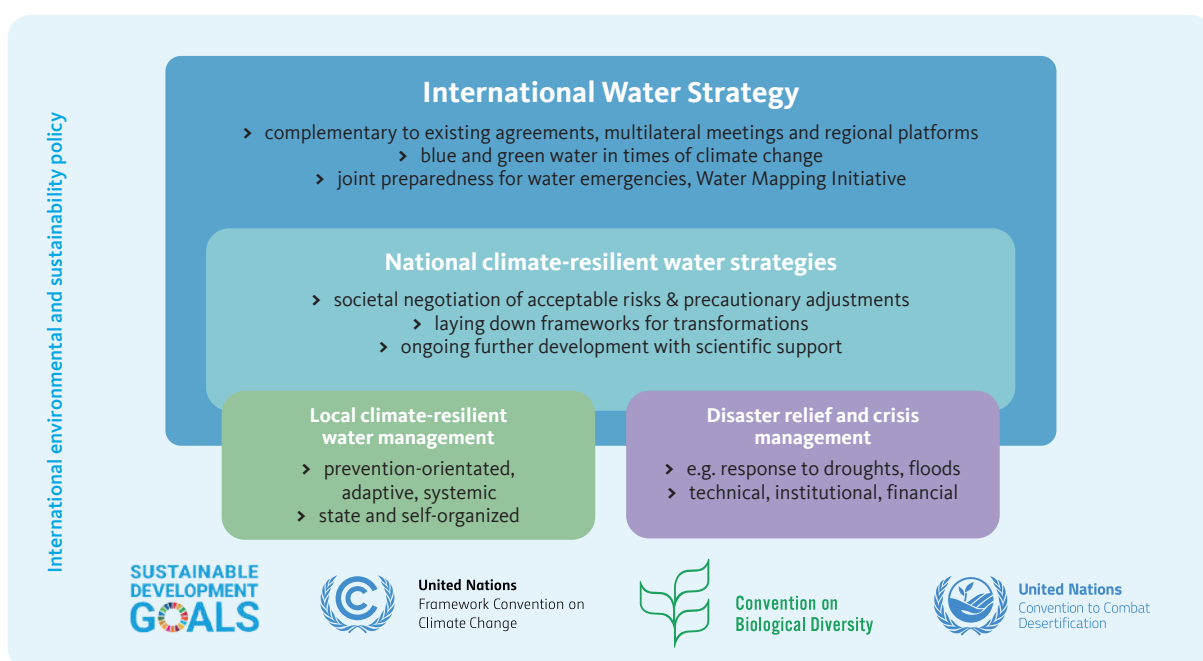


Figure 3

The International Water Strategy and national water strategies interact with local water management, which includes all relevant actors in addition to municipalities. National water strategies should be formulated coherently with the International Water Strategy and initiate local climate-resilient management measures.

Source: WBGU

This Policy Brief summarizes statements from the WBGU report 'Water in a heated world' (2024). The report is available free of charge at www.wbgu.de/water.

The WBGU

The German Advisory Council on Global Change (WBGU) is an independent scientific advisory body to the German Federal Government that was established in 1992 in the run-up to the Earth Summit in Rio de Janeiro. The interdisciplinary WBGU develops recommendations for action and research for policy-makers on the basis of scientific analyses.

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Policy Brief No. 1, 2025
ISBN 978-3-946830-44-3
March 2025