WBGU

German Advisory Council on Global Change

Policy Paper

Opportunities in EU water policy: Making the most of the EU Water Resilience Strategy

14

Contents

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Summary

European water policy is changing rapidly: on 4 June 2025, the EU Commission presented a Water Resilience Strategy. It represents a realignment and re-networking of the EU policy field of water. This is necessary in view of the intensifying impacts of climate change, the already strained water situation and water emergencies in the EU. The EU Water Resilience Strategy contains some very good approaches, but needs to be supplemented further. Climate-resilient water management should become the guiding principle of EU water policy and of member-state water authorities and local associations in the implementation of the Water Framework Directive. Green water is key for this: farmers should become green-water caretakers. Furthermore, EU water policy must create more synergies between policy areas than has hitherto been suggested, and exert an integrative effect on other directives and regulations. Moreover, the WBGU recommends a common EU foreign policy on water and a commitment to new forms of governance at the international level.

The EU Commission's Water Resilience Strategy prioritizes the requirements of efficient EU water management and integrates them into EU policy areas (European Commission, 2025a). The pressure to act is considerable: member states are confronted with the effects of climate change, e.g. water emergencies that destabilize societies and ecosystems. To counter these impacts, the EU can no longer rely on existing knowledge alone, as current developments of precipitation are transcending the fluctuation margins of the past. This leads to planning uncertainty regarding water quantity and quality in water management.

Climate-resilient water management as a new guiding principle in EU water policy

The core of the EU Water Resilience Strategy 2025 is a new principle called 'Water Efficiency First': water consumption should be reduced and water use structured more efficiently – e.g. by means of water recycling – before additional water resources are made available. The WBGU proposes supplementing this principle with another guiding principle: climate-resilient water management, which is characterized by effectiveness and flexibility, local feasibility, multifunctionality, as well as social balance and participation. The WBGU proposes four criteria to guide action and decision-making when selecting and designing measures for climate-resilient water management. These measures are:

1. *effective and flexible:* The effectiveness of measures should be assessed with respect to their specific water-related aims and their contribution to restoring a climate-resilient landscape water balance. Various time scales are relevant here. Structures and processes in water management must be designed to be adaptable and rectifiable by all actors in order to do justice to the ongoing changes.
2. *locally feasible:* The local feasibility of measures should be assessed in a context-specific way, depending on available resources and capacity – also in long-term planning. Potential conflicts of interest, e.g. relating to land use, should be taken into account.
3. *multifunctional:* As far as possible, measures should be designed to be multifunctional and address the functions of water for both people and ecosystems. They should strive to achieve additional environmental, health, social and economic benefits.
4. *socially balanced and participatory:* Unintended ecological, social, health and economic consequences should be avoided by pursuing systemic and transdisciplinary approaches. Participatory planning is an important building block.

Implement the EU Water Framework Directive in a climate-resilient way

EU water law is advanced, but its implementation and enforcement are inadequate. Violations of the EU Water Framework Directive (WFD) are not sufficiently penalized. Green water, which is relevant for climate adaptation and plant growth, is not covered by the WFD as a protected resource. Similarly, the requirements of water-body protection have hitherto not been sufficiently integrated into other policy areas. Well-established, climate-resilient water management can advance the implementation of EU water law and thus reduce the implementation and enforcement deficit in the water sector.

In the context of its Water Resilience Strategy, the EU Commission will set priorities for the implementation of the WFD in a dialogue with the member states. In addition, it should issue a new Communication explaining how the guiding principle of climate-resilient water management proposed here can be integrated into the implementation of the WFD. The EU Commission should state that water authorities and self-organized associations can remedy the inadequate implementation of the WFD by implementing climate-resilient water management – and explain how this can be done. Self-organized water management in the member states can lead to faster implementation and a more efficient enforcement of water law. Experts from different disciplines and actors working in the field provide important input for planning decisions. Participation processes play a central role in the provision of water-critical and water-sensitive infrastructure, particularly in the public sector.

According to the EU Commission, the current funding gap for the implementation of existing water legislation is at least 23 billion euros per year. In order to close this funding gap, the European Investment Bank is to provide 15 billion euros by 2027 for the implementation of the water-resilience goals and measures, in particular for water access, pollution monitoring, and the resilience and competitiveness of the water sector in the EU (European Commission, 2025a). Although this additional financial framework is to be welcomed, it will need to be significantly expanded in scope and extended in duration in view of the challenges faced and their high level of urgency, since only a few measures will have an immediate impact.

Multiple benefits of integrating climate-resilient water management into other policy areas

The integration of climate-resilient water management into the Common Agricultural Policy (CAP), EU biodiversity policy and industrial policy – e.g. the Clean Industrial Deal – is important for the protection of blue and green water. It has multiple benefits for implementation and creates synergies in the financing of measures.

A climate-resilient approach to the landscape water and water balance is crucial to achieving cross-sectoral goals. Financial resources could be mobilized from the CAP to promote climate-resilient water management and, at the same time, achieve CAP targets. Farmers should simultaneously be seen as green-water caretakers and promoted in this role.

EU biodiversity policy can also be linked with water policy. For example, the Water Resilience Strategy provides for the integration of water resilience into the national implementation plans of the EU Nature Restoration Regulation. Green water should also be included here to flesh out the nature-based solutions already mentioned by the EU Commission (European Commission, 2025a).

The availability of water is essential for the implementation of the Clean Industrial Deal. Climate-resilient water management should be integrated here and taken into account in the financing mechanisms, which are yet to be developed. It is important to sensitize actors in industry to climate-resilient water management. The liberalization and privatization of water supplies involves risks and should be subject to critical scrutiny. The WBGU sees states as guardians of the availability and quality of water with the task of ensuring a secure public water supply.

Develop a common EU foreign policy on water

In addition to the EU Commission's proposals, a common EU foreign policy on water should be pursued that declares climate-resilient water management to be its guiding principle and incorporates it into future UN Water Conferences. In this way, it could provide a boost for global climate resilience in the water sector. The UN Water Conferences in 2026 and 2028 open up windows of opportunity for coordinating global long-term water governance.

The development of an International Water Strategy should begin with a soft law process. Existing and future conventions for the protection and management of water should also apply to green water; quantifiable targets and reporting obligations for both green and blue water should also be defined. Coordination with negotiation processes under international conventions (e.g. UNFCCC, CBD, UNCCD, Ramsar Convention on Wetlands) should be ensured. Finally, the WBGU recommends a Water Mapping Initiative in order to detect impending regional water emergencies with a planetary dimension at an early stage, and to inform decision-making processes. The Initiative should consist of a science platform and a panel of experts.

European water policy is changing rapidly

Water-related impacts of climate change such as heatwaves, floods, droughts and fires are causing increasing economic costs in the EU. Billions of people around the world are affected by water-related risks. If current trends continue, global water demand in 2030 will be 40% higher than the water supply (European Commission, 2025a). In this policy paper, the WBGU makes recommendations for realigning EU water policy and for supplementing and fleshing out the EU Water Resilience Strategy presented on 4 June 2025. Its success depends, among other things, on the implementation of the EU Water Framework Directive (WFD) and its integration into the Common Agricultural Policy (CAP) and the member states' National Restoration Plans under the EU Nature Restoration Regulation.

The EU Water Resilience Strategy gives the topic of water a high priority at the EU level. The Commission wants to identify pathways towards water security and resilience, and improve the integration of water into various policy areas and financing mechanisms. The EU Water Resilience Strategy names challenges and potential solutions relating to water efficiency, closing the water cycle, water scarcity, pollution and water-related risks. It also contains proposals on the digitalization of water management and climate adaptation. In particular, it proposes a new principle of 'Water Efficiency First', according to which water consumption should be reduced, water use made more efficient, and water recycling made possible – before additional water resources are tapped (European Commission, 2025a). The strategy also aims to protect water cycles, to restore them where they are broken, and to establish a clean, water-friendly circular economy (European Commission, 2025a, c: 2). In order to strengthen the implementation of existing water-related legislation, the European Commission envisages investments in nature-based solutions and new water technologies, among other things (European Commission, 2025a).

The WBGU supports these proposals which emphasize the relevance of the cross-sectoral integration of water policy, and of securing long-term funding of water-related measures. The EU Water Resilience Strategy is necessary and timely. After all, national, European and international water policy must adapt to ongoing and accelerated changes in the global water cycle in order to be able to respond to them quickly and comprehensively. Among other things, EU member states are increasingly confronted with the effects of climate change, such as extreme flooding and flash floods, droughts and water shortages. Extreme events, which can result in regional water emergencies, are increasingly pushing governments to their limits, as was demonstrated, for example, by the flash floods in Valencia in October 2024. This exacerbates the already tense water situation in the EU: water scarcity already affects 20% of the EU territory and 30% of the EU population every year (EEA, 2024a). The costs of inaction are high: water-related extreme events and poor water management have caused several hundred billion euros of damage in the EU (European Commission, 2025a, c; EEA, 2024a; Naumann et al., 2021).

The condition of water bodies is also a cause for concern. Only 39.5% of European surface water bodies had a good or very good ecological status in line with the WFD between 2016 and 2021 (European Commission, 2025f). Only 29% achieved a good chemical status in the period from 2015 to 2021 (EEA, 2024a: 9). Surface waters in Germany have a poor overall ecological and chemical status: only 9.3% are in good ecological condition and less than 1% in a good chemical state (European Commission, 2025e: 6).

Furthermore, because of climate change and its influence on the water cycle, it can no longer be assumed that water-related variables are stationary. Stationarity means that fluctuations move within a historically established spectrum of experience (Milly et al., 2008). The assumption of stationarity has long formed the basis for projections, planning and operation with regard to parameters that are important for water-management facilities (e.g. precipitation, groundwater-recharge rates, or flow regimes of watercourses). Today, non-stationarity is 'the new normal', as water balances will continue to change as climate change progresses. This leads to planning uncertainty in the water industry, which is affected by extreme fluctuations and sudden changes. Such situations pose challenges for safeguarding the quality of water and water bodies (WBGU, 2024).

In view of these existing challenges, which are likely to be further exacerbated in the future, there is an urgent need for climate-resilient water management in the EU.

However, the EU's new Water Resilience Strategy, with its 'Water Efficiency First' principle, needs to be supplemented and fleshed out: the form of climate-resilient water management proposed by the WBGU in 2024 could serve as a model for a reorientation of EU water policy and also integrate the 'Water Efficiency First' principle as an element. The WBGU has already set out what this guiding principle of climate-resilient water management should look like in its flagship report 'Water in a heated world' and in its policy brief 'Recommendations for international water governance'. This policy paper is based (in part verbatim) on this foundation and develops it further for the EU level (WBGU, 2024; 2025).

Water in the Clean Industrial Deal and the EU Climate Adaptation Strategy

A climate-resilient EU water policy was initiated as part of the European Green Deal and is also of great importance for the implementation of the Clean Industrial Deal and the EU Climate Adaptation Strategy.

The EU's Clean Industrial Deal (European Commission, 2025d) is a response to the challenges of climate change and geopolitical tensions, among other things. The EU Commission's cross-sector strategy builds on the European Green Deal and sends an important signal for the continuation of the industrial transformation. The focus remains on aligning European industry with the ambitious climate targets of the EU Climate Law (Regulation (EU) 2021/1119) in conjunction with strengthening competitiveness, security of supply and resilience (European Commission, 2025d). The Green Deal has already led to far-reaching revisions and additions to EU water law – e.g. the amendments to the Drinking Water (Directive (EU) 2020/2184), the Urban Wastewater Treatment (Directive (EU) 2024/3019) and the adoption of the Water Reuse Regulation (Regulation (EU) 2020/741; Box 1). The Clean Industrial Deal builds on this. For example, i.a. it names greater resilience regarding water as one of the strategic goals (European Commission, 2025d: 1). This is because the sustainable use of water is closely linked to the transformation of energy-intensive industries and the promotion of 'clean technologies', which are key elements of the Clean Industrial Deal (European Commission, 2025d). The WBGU believes that climate-resilient water management has a decisive role to play in the sustainable implementation of the Clean Industrial Deal.

Climate-resilient water management is also closely linked to the policy area of climate adaptation (see e.g. EU Climate Adaptation Strategy; European Commission, 2021b), in which the EU Commission aims to adopt a new Climate Adaptation Plan in 2026 (EEA, 2025). The EU Climate Adaptation Strategy already emphasizes the sustainable guarantee of fresh-water availability as a key water-related goal, and provides for measures to reduce water consumption, e.g. by means of drought-management plans and water-resource allocation (European Commission, 2021b). In addition, nature-based solutions are emphasized as being especially suitable for building resilience to water-related impacts of climate change due to their multiple benefits for people and nature, e.g. by simultaneously protecting the climate and water resources. A climate-resilient EU water policy therefore plays a key role in the Climate Adaptation Strategy.

EU water law is advanced; however, implementation and enforcement are often inadequate

Current EU water law is already a progressive body of regulations. It is based on the EU Water Framework Directive adopted in 2000 and its daughter directives (Directive 2000/60/EG). It aims to maintain a good water status and a sufficient water availability, and to minimize the effects of floods and droughts (Box 1). However, its implementation in the member states – and, as a result, their enforcement by member-state authorities – is inadequate. Across Europe, only three member states achieve more than 70% of the targets for their river-basin areas (European Commission, 2021a: 3). By 2027 at the latest, all surface waters within the EU are supposed be in good ecological condition. Like most member states, Germany is also struggling to reach this target (European Commission – Representation in Germany, 2025). The EU Commission, as the guardian of the treaties, is not doing enough to counteract these deficits – for example through infringement procedures.

The EU Urban Wastewater Treatment Directive was also revised in connection with the Green Deal. In addition to the goal of energy neutrality for wastewater treatment, the polluter pays and precautionary principles of EU environmental law were taken into account with a 'Zero-Pollution Action Plan' and producer responsibility (Box 1). Furthermore, the Water Reuse Regulation has been in force since June 2023. It aims to promote risk management and the safe use of treated water in the context of integrated water management – and to contribute to the promotion of the circular economy and adaptation to climate change (Box 1). Here too, however, it is crucial to take sufficient account of climate-resilient water management as recommended by the WBGU when specifying and implementing the strategy.

At the same time, EU water law has so far not been sufficiently integrated into other policy areas relevant to waterbody protection, such as agriculture, spatial planning, nature conservation and ecology, energy and transport, even though the recitals of the WFD open up the possibility of such integration. A corresponding coherence between policy areas is necessary, as the objectives of the WFD cannot be achieved through water-management measures alone. The existing system and objectives of the

WFD already provide a framework for climate-resilient water management that can be linked to other policy areas at the implementation level.

In order to take sufficient account of the new climate-change-related challenges and the limits of controllability, the concept of climate-resilient water management proposed here should be taken into account in the implementation of EU water law in the member states. The climate-resilient use of water should also be an integral part of the design and implementation of the Clean Industrial Deal, the CAP and the EU Nature Restoration Regulation. Furthermore, with a view to the UN Water Conference 2026, the EU should develop a common foreign policy on water, in which positive examples and governance recommendations are formulated for the international level. Climate-resilient water management proposed in the WBGU's flagship report should serve as a new overarching model for EU water policy.

Box 1

EU Water Framework Directive, EU Municipal Wastewater Treatment Directive and EU Regulation on Water Reuse

Although the EU Water Framework Directive (Directive 2000/60/EC, WFD) aims to achieve sustainable water use (sufficient quantity of water) and to minimize the effects of floods and droughts, up to now the WFD only covers inland surface waters, transitional waters (near coastal waters), coastal waters and groundwater as protected goods. The green water stored in soils (Box 2) is not addressed as a protected resource. The WFD's original aim was to do away with the previous patchwork of different water-related directives. However, this objective has been undermined by the adoption of several daughter directives, each with its own regulatory approach, which target different water sectors – groundwater, bathing water and drinking water. Together with the daughter directives, the WFD nevertheless pursues a systemic approach which is to be welcomed. The daughter directives, which address individual protected goods, are supplemented by the EU Urban Wastewater Treatment Directive and the EU Water Reuse Regulation.

The integrated approach of the EU Directive concerning urban wastewater treatment (Directive (EU) 2024/3019, EU Urban Wastewater Directive), which was revised in 2024, is aimed at both the manufacturers of products that pollute wastewater and the operators of wastewater-treatment plants – and therefore primarily at municipalities. First, it introduces extended producer responsibility, obliging the manufacturers of pharmaceuticals and cosmetics to contribute to the costs of a fourth treatment stage for the removal of trace substances; second, wastewater-treatment plants have an obligation to be greenhouse-gas and energy neutral; third, the member states must ensure that the disposal routes in sewage-sludge management comply with the waste hierarchy according to the Waste Framework Directive (Directive 2008/98/EC). This aims to improve waste avoidance, and the reuse and recycling of resources; fourth, there is an obligation to remove more nutrients such as nitrogen and phosphorus, which implements and serves the 'Zero Pollution Action Plan' and the sustainable protection of surface waters and oceans.

The EU Regulation on minimum requirements for water reuse (Regulation (EU) 2020/741, EU Water Reuse Regulation) lays down minimum water-quality and monitoring requirements for all EU member states to ensure that the treated water is safe for use in agricultural irrigation and other purposes. These requirements were specified by Commission Delegated Regulation (EU) 2024/1765 of 11 March 2024 in relation to technical specifications of the essential elements of risk management, in particular for the preparation of risk-management plans. The EU Water Reuse Regulation is a response to phases of water scarcity, which are becoming more acute as climate change progresses. One of its aims is to ensure that sufficient treated water is available for agricultural irrigation. However, when it comes to national implementation, the member states have considerable room for interpretation when specifying the requirements for treatment, monitoring and risk management. In this respect, there is a need to coordinate the development of member-state standards to prevent enforcement deficits and avoid jeopardizing the harmonization effect generated by the Regulation.

Establish climate-resilient water management as a new guiding principle

The WBGU proposes establishing climate-resilient water management as a new guiding principle and concept throughout the EU. This would help to overcome deficits in implementing and enforcing existing EU water law. It complements the presented Water Resilience Strategy with an overarching model for water management. In view of increasing extreme events and growing uncertainty due to the loss of stationarity, a model for climate-resilient water management can also pave the way for a successful EU water policy. As systemic, long-term water management, it favours advanced and flexible action with regard to changes in the water cycle, water availability and the demand for water. Due to the large number of sectors affected, the guiding principle positions water as a cross-cutting issue.

Principles of action for climate-resilient and socially balanced water management

The WBGU proposes seven principles of action for climate-resilient and socially balanced water management; these aim to form the basis of societal negotiation processes on its goals, values, principles and rules (WBGU, 2024):

1. safeguard water as a common good for people and nature by distributing and storing it according to the needs of people and nature;
2. design systems for the provision and use of water in such a way that uncertainties can be dealt with and changing conditions responded to dynamically;
3. focus on risk prevention rather than emergency response when planning water infrastructure and ensuring water quality;
4. jointly manage blue and green water across sectors in order to restore a climate-resilient, area-wide landscape water balance;
5. establish a permanent science-based discourse on problems and options for action in order to enable proactive and creative action in the face of increasing and lasting uncertainty;
6. value water and appreciate the value of water by ensuring that politicians, public institutions, companies and financial markets recognize the value of water and the systemic nature of water risks, and take this into account in their decisions;
7. accelerate the implementation of climate-resilient water management by promoting self-organization and decentralized governance structures.

Green water, i.e. water stored in soils, is of particular importance as it is key for maintaining, strengthening and restoring a climate-resilient landscape water balance, the most important objective of the proposed climate-resilient water management (Box 2). Examples of possible solutions for realizing this include the restoration of water-related ecosystems, e.g. river and meadow landscapes or peatland, measures to maintain soil moisture in agriculture and forestry, and water-sensitive urban development. In terms of climate-resilient urban development, the sponge-city approach has proved successful, and its application is to be supported in future by a dedicated EU coordination centre (‘sponge facility’; European Commission, 2025a: 4).

Requirements for the selection and design of measures

The overarching principles of action are also reflected in the four requirements for the development, selection and implementation of measures in the context of climate-resilient water management, which are explained below. The WBGU recommends that these requirements and the principles for action outlined in Box 2 be taken into account to supplement the new EU ‘Water Efficiency First’ principle, when specifying and implementing the EU Water Resilience Strategy and integrating it into the EU’s WFD in the long term. They can already be taken into account in the implementation and enforcement of the WFD in the member states. The following four requirements are key:

1. Assessment of water-related efficacy on different time scales

The efficacy of measures should be assessed in relation to their specific water-related objectives and their contribution to the restoration of a climate-resilient landscape

Box 2

Blue and green water

A distinction can be made between blue and green water resources (Fig. 1). Blue water comprises water in rivers, lakes, reservoirs and groundwater (Falkenmark und Rockström, 2006; Wang-Erlandsson et al., 2022). Green water refers to the soil moisture that is available to plants; when it rains over land areas, some of the water is absorbed and stored in the soil and is then available to plants. The water that does not seep away evaporates from the soil or from plant surfaces, or runs off and thus becomes blue water, which enables subsequent use downstream (Fig. 1; Falkenmark und Rockström, 2004). Soil moisture, which is absorbed and transpired by plants, is a critical factor for the preservation of ecosystems and biodiversity. The green water stored in soils and plants also plays an important role in maintaining, strengthening and restoring a climate-resilient landscape water balance, as it can, to a certain extent, naturally cushion extreme events. In view of the increasing variability of water availability, strengthening buffers in the landscape that can absorb, retain and release water is one of the most important prevention and response strategies in relation to climatic change.

However, prolonged dry periods and droughts over several years significantly alter soil moisture and contribute to soil degradation, and this can be exacerbated by changes in land use and climate. Reduced soil moisture not only poses a direct threat to ecosystems and causes yield losses in agriculture and forestry, it also impedes the seepage of precipitation for groundwater recharge. Green water therefore plays a key role for agriculture and forestry. Active management of green water, e.g. through measures such as unsealing, reforestation or ground cover to reduce evaporation, can have a stabilizing effect on the natural water balance. Local water availability can also be stabilized by the targeted decentralized collection of rainwater and seepage, which increase soil moisture and groundwater recharge.

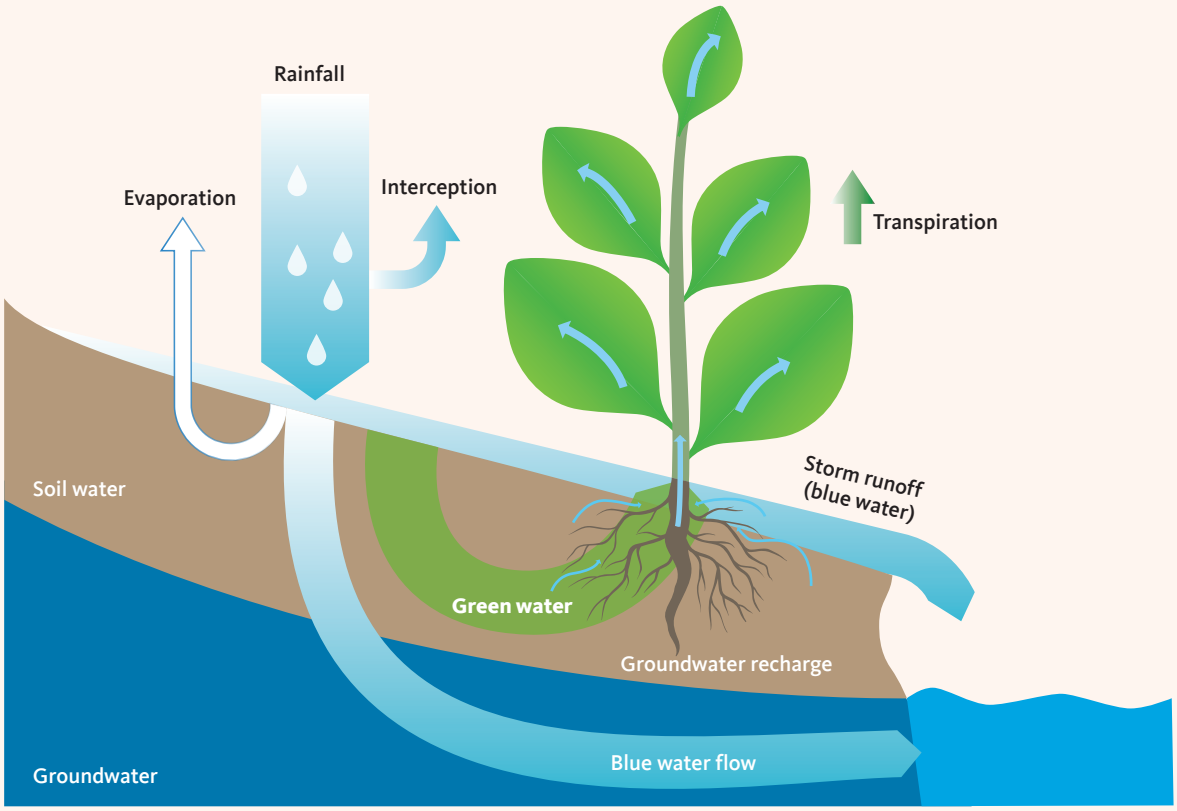

Figure 1
Division of precipitation into green and blue water. Thanks to its buffering function, green water stored in the soil plays a decisive role in maintaining, strengthening and restoring a climate-resilient landscape water balance.
Source: WBGU 2024: 32, modified according to Geertsma et al., 2009

water balance. This involves both quantitative (e.g. storage and retention of water) and qualitative (e.g. absorption and transformation of substances in the water) aspects of effectiveness. Furthermore, the efficacy of measures must be considered on different time scales – on the basis of current data, but also up to 2050 and beyond – since the efficacy of a measure can change continuously due to the loss of stationarity. For example, it may become impossible or less effective to implement specific nature-based solutions locally as a result of climate change. This can be counteracted if measures are planned and implemented in such a way that technical adaptation to the consequences of climate change (changed precipitation patterns, extreme events) is feasible during their service life. To achieve this, structures and processes in water management must also be designed to be adaptable and rectifiable by all actors. In addition, some measures, such as turning a pine monoculture stand into a mixed forest, only have an effect in the long term. These delays can be offset by a combination of short-term and long-term measures.

2. Feasibility analysis in the respective context

The local feasibility of measures should be assessed on a context-specific basis, taking into account the availability of technologies, financial resources and institutional capacities – also with regard to their long-term operation and the possible need for adaptation during their service lives. For example, the comprehensive expansion of blue-green infrastructure in Copenhagen as a measure against heavy rainfall events (WBGU, 2024: 162) can serve as a model for other cities and countries with a high income; however, there are limits to its transferability to countries with fewer technical and financial resources. The amount of land and resources required by measures also plays a key role, as this can conflict with other uses and conservation objectives, e.g. if additional land is required for agriculture or climate and biodiversity protection in the long term. Finally, the willingness of the actors involved to implement measures is also crucial. In agriculture, for example, it is important for politicians and society to value the role of farmers as green-water actors and to create corresponding financial incentives.

3. Stronger focus on potential multiple benefits

Where possible, measures should be designed to be multifunctional. This means that, on the one hand, they should address the various functions of water for people and ecosystems while, on the other hand, generating additional ecological, health, social and economic benefits. For example, the restoration of peatlands and other wetlands can protect biodiversity and provide a variety of ecosystem services. These positive effects of water-related measures on other sustainable development goals should therefore be targeted in planning, evaluated where possible and taken into account in the measure-selection process. Here, too, different time horizons and possible impact delays must be taken into account; different spatial levels need to be considered in an integrated manner.

4. Avoidance of unintended consequences

In addition to maladaptation, a range of other unintended consequences of water-related measures can arise. On the one hand, many measures are accompanied by several water-related impacts, which can result in conflicts of objectives and interests. For example, the construction of a new dam can increase the resilience of the regional drinking water supply in the short term, but, in the long term, it can significantly change the flow regime of the downstream watercourse and negatively impact water quality as a result of algal blooms caused by higher temperatures. On the other hand, measures can also have unintended ecological, social, health and economic consequences – for example the loss of local biodiversity due to the discharge of concentrates from seawater desalination into coastal waters. In order to avoid such unintended consequences, all impacts of measures should – where possible – be identified, evaluated and taken into account using a systemic and transdisciplinary approach. Participatory planning can help to incorporate and safeguard the perspectives, needs, concerns and inclusion of different actors.

Implement the EU Water Framework Directive in a climate-resilient way

If the principles of action and requirements for climate-resilient water management outlined above are taken into account in the implementation of existing EU water law, measures to improve climate resilience in the water sector can be established quickly and across the board. The new EU Water Resilience Strategy represents a window of opportunity for this, and can be supplemented and made more specific in this respect. The EU Commission has announced that it will prioritize the implementation of the Water Framework Directive (WFD) in consultation with the member states, with a focus on water quality and quantity (European Commission, 2025a). Determined action is urgently required in view of the implementation deficits in the member states. The EU Commission should push for an accelerated implementation of the WFD and monitor the implementation of the directive by member-state authorities more strictly. Green water should also be looked at in this context. In order to promote the consideration of climate resilience when it comes to specifying and implementing the Water Resilience Strategy and the WFD, the WBGU recommends:

An additional EU Commission Communication on the EU Water Resilience Strategy

The EU Commission can use the instrument of the Communication to explain how the WFD could be made more specific in line with the guiding principle of climate-resilient water management without the need for a legal amendment. The form of climate-resilient water management proposed here could thus be understood as part of the management plans and programmes of measures required by the member states under the WFD. Such an additional Communication would encourage the responsible actors in the member states – and give them an opportunity – to interpret and apply the WFD in terms of climate-resilient water management, and to organize water management accordingly. This applies both to plans and programmes to be updated and to the exercise of management judgement in individual cases of water-body use and development. The Communication should make it clear that the WFD has to date not been implemented and enforced well enough to achieve the objectives set out in the WFD, and that taking the principles and requirements of climate-resilient water management into account would make a decisive contribution to overcoming these deficits. In particular, it should be made clear how green water can already be protected and actively managed now in the sense of a climate-resilient landscape water balance, even if it will only be formally anchored as a protected resource in the WFD at a later date. It should also be explained how the principles and requirements of climate-resilient water management can be legally anchored in programmes of measures, management plans, and in the context of management assessment and the approval of water-related infrastructure in the member states.

Transdisciplinary learning processes and self-organized water management for accelerated implementation and efficient enforcement in the member states

The public sector plays a key role in the provision of water-critical and water-sensitive urban infrastructure for certain basic public services, such as the supply of drinking water or flood protection. However, climate change is advancing fast, causing rapid and unpredictable changes in the water cycle. It is therefore unlikely that government agencies alone will be able to implement comprehensive climate-resilient water management quickly enough. Furthermore, the local contexts for the implementation of the WFD are complex and require the participation of self-organized, often non-governmental actors, as well as the involvement of water and soil associations in which private and public actors are represented. Direct or indirect participation can increase the resilience of public infrastructure and also raise risk awareness among the private individuals, companies and administrations involved. The existing cooperation between the state and self-organized institutions could accelerate target achievement and improve effectiveness in the implementation of the WFD instruments and their enforcement in the member states – also in terms of climate-resilient water management. It should therefore

be encouraged. To ensure good cooperation between the state and non-state actors, as many specialist disciplines and actors working in the respective fields as possible should be involved in implementation before (planning) decisions are made. As part of the Climate-ADAPT initiative, the EU promotes and pools cross-cutting initiatives to enable cities, businesses and private individuals to promote measures to build resilient infrastructure and adapt existing assessment standards to water-related risks (EEA, 2024b). These efforts should be stepped up in the future and can serve as a model for others.

Firmly establish green water as a protected good in EU water law in the future

In the long term, the implementation of the WFD should focus more specifically on the protection and management of green water and thus increase resilience to droughts and floods. Making a "contribut[ion] to mitigating the effects of floods and droughts" is already an objective of the WFD, but this is not reflected in practice. Floods are addressed by the Floods Directive (Directive 2007/60/EC), and measures relating to dry periods can be found in the objectives of the Water Reuse Regulation.

The WBGU proposes that green water be recognized as a protected resource by the member states in the implementation and enforcement of the WFD and that water bodies should be managed accordingly. This would also indirectly establish the management of water stored in the soil as a subject of water law. Green water would thus be integrated into management plans and programmes of measures, as well as in individual decisions on water-body use. The comprehensive management of water resources (including soil-bound water) is also necessitated by the supra-regional importance of water exchange between the land and the atmosphere. Including green water as a protected good in European water law would ultimately do justice to the cross-media approach of environmental law – which takes equal account of soil, air and water. A form of governance for green water that builds on this would strengthen the EU's resilience to extreme events, in line with the EU Climate Adaptation Strategy and the EU Water Resilience Strategy.

Multiple benefits from the integration of climate-resilient water management into other policy areas

EU water law already takes account of the principle of integration (Art. 11 of the Treaty on the Functioning of the European Union). Recital 16 of the Water Framework Directive (WFD) stipulates that the protection and sustainable management of water bodies should be more closely integrated into other policy measures. Energy, transport, agriculture and fisheries policy, as well as regional and tourism policy, are explicitly mentioned. This integrative and cross-sectoral approach to water management has so far focused on blue water. It should also be applied to green water, as cross-border evaporation and precipitation patterns should be considered in addition to river basins (WBGU, 2024: 33). Coherence between policy levels and fields is a prerequisite for this.

In the WBGU's view, the key policy areas for the integration of sustainable, climate-resilient water management are EU agricultural policy, EU biodiversity policy and industrial policy. In this way, climate-resilient water management can achieve a number of multiple benefits:

1. reduction of climate-change-related risks and lower costs for damage prevention and remediation in these areas;
2. achieving the objectives of the EU Nature Restoration Regulation;
3. measures resulting from the mobilization of financial resources from the Common Agricultural Policy (CAP), the implementation of the EU Nature Restoration Regulation and the implementation of the Clean Industrial Deal.

Multiple benefits from integration into the EU agricultural policy

Farmers in EU member states are increasingly confronted with productivity risks due to droughts and other extreme events. Climate-resilient water management can reduce climate-change-related risks for agricultural actors, strengthen the resilience and productivity of the sector in the long term, and improve food security in the EU. At the same time, improving the buffer function of agricultural land is crucial for the comprehensive preservation, strengthening and restoration of a climate-resilient landscape water balance. This could reduce the risk of flooding as a result of heavy rainfall. In its Water Resilience Strategy, the EU Commission sees agriculture as an important ally in the sustainable use of water and ascribes a decisive role to the CAP in strengthening water resilience (European Commission, 2025a: 8).

Due to the at-times grave interventions of agriculture in the water balance, its importance in terms of area and its great susceptibility to water-related climate-change effects, there is considerable potential for multiple benefits from integrating EU water policy with EU agricultural policy. Resources such as land and water must be used skilfully in agriculture and in conjunction with other land areas, and climate-change-related intensification must be taken into account in order to achieve food, climate and biodiversity goals simultaneously. In its 'Vision for Agriculture and Food', the European Commission refers explicitly to the Water Resilience Strategy and emphasizes the need to respond to climate risks and protect healthy soils and clean water (European Commission, 2025b). Advanced management of water from precipitation, surface water, groundwater and soil moisture play a key role here. In order to promote the consideration of green water, make agriculture more climate-resilient and utilize its potential to strengthen a climate-resilient landscape water balance, the WBGU recommends the following:

Appreciate and promote farmers as green-water caretakers

Agriculture is particularly affected by changes in the water balance due to climate change and is the largest net water consumer in the EU as a result of crop irrigation (EEA, 2024a: 9). Agriculture is responsible for most of the pollution of surface and groundwater (EEA, 2024a: 5). To take account of this vulnerability and responsibility, climate-resilient agriculture should address both irrigation issues (with blue water) and measures to retain soil moisture (green water). The EU Commission also sees the promotion of healthy soils as crucial here (European

Commission, 2025a). In addition to adapted cultivation methods that maintain productivity in the face of fluctuating water availability, buffers for available water in the landscape should also be preserved and new ones created, e.g. by restoring near-natural watercourses, floodplains, hedges, forests and soils. As farmers are also green-water caretakers, they should be given more support and greater involvement in this role in future so that they can contribute to the protection of natural resources and the biodiversity of soils, grasslands, forests and aquatic ecosystems. In addition to intensifying the exchange of knowledge (European Commission, 2025a: 9 f.), creating and boosting positive financial incentives is also important in this context.

Mobilize funding from the CAP and reform agricultural subsidies

Closer integration between EU agricultural policy and EU water policy offers an opportunity to strengthen the resilience of both agriculture and the water cycle at the same time. Within the framework of the CAP and the related national Strategic Plans, the impact of agriculture on the water balance could be given greater consideration in the standards and subsidized measures (including the level of the respective subsidy). For example, non-productive fields, permanent grassland or agroforestry, which are promoted by the current ecological regulations, not only contribute to biodiversity and climate protection – they are also 'water-effective'. Some CAP funds could be used specifically for climate-resilient water-management measures. In the next CAP cycle from 2028, the CAP should also be reorganized into a common ecosystem policy (CEP), as recommended by the WBGU (2020). In a systemic approach, this should include not only agricultural land but also other areas, different levels of multifunctional use and protection, and various actors in rural development (WBGU, 2020). In addition, structures should be created in which farmers can test sustainable and water-friendly methods, while society partially assumes the risk of yield reductions. Possible regulation or pricing of actual water withdrawals and consumption on the basis of improved data should be supported, taking social equity into account. Rebound effects should be anticipated in the case of measures for a more efficient use of water and, if necessary, addressed through regulation.

Multiple benefits from integration into the EU Nature Restoration Regulation

EU biodiversity policy has gained in importance with the EU Nature Restoration Regulation (Box 3). Its goals can only be achieved if biodiversity policy is linked to a climate-resilient water policy. According to the EU Commission, water and climate resilience must be fully integrated into the National Restoration Plans that will be developed by 2026 (European Commission, 2025a: 4). In addition, there are water-related targets of the EU Nature Restoration Regulation and the EU Biodiversity Strategy that require restoration measures for coastal and freshwater habitats by 2030 (European Commission,2025a: 27).

Many restoration measures affecting river and meadow landscapes, peatlands, other wetlands and other ecosystem types can both restore damaged ecosystems and make a decisive contribution to protecting, improving or restoring a climate-resilient landscape water balance. At the same time, safeguarding the water requirements of ecosystems – in terms of both quantity and quality – in the long term requires the comprehensive establishment of climate-resilient water management. It can protect ecosystems from the effects of climate change and overexploitation and preserve valuable ecosystem services. When implementing the EU Nature Restoration Regulation, special attention should therefore be paid to measures that are also in line with climate-resilient water management. At the same time, restoration measures that involve the use of more green water (e.g. rewetting peatlands) should be taken into account in the implementation of the WFD, as they can also help achieve the objectives of the EU Nature Restoration Regulation. In addition, the WBGU recommends:

Box 3

The EU Nature Restoration Regulation as a lever for restoring a climate-resilient landscape water balance

The EU Nature Restoration Regulation (Regulation (EU) 2024/1991) came into force in August 2024 and is directly binding for all member states. Its purpose is to contribute to the recovery of damaged ecosystems by restoring them. The restoration is also intended to serve climate protection and adaptation to climate change. Specific targets are named for i.a. the restoration of terrestrial, coastal and freshwater ecosystems (Art. 4), urban ecosystems (Art. 8), agricultural ecosystems (Art. 11) and the restoration of the natural connectivity of rivers and the natural functions of associated meadows (Art. 9). The habitat types of terrestrial, coastal and freshwater ecosystems listed in Annex I of the Regulation include raised bogs, fens and wet forests. The implementation of the EU Nature Restoration Regulation thus represents a lever for the comprehensive restoration of a climate-resilient landscape water balance, because the ecosystem services of restored ecosystems are of crucial importance for this.

Resolutely implement natural climate-protection measures

Natural climate-protection measures, such as those provided for in Germany by the 'Federal Action Plan on Nature-based Solutions for Climate and Biodiversity', offer an effective opportunity to achieve multiple benefits for the policy areas of biodiversity and water (WBGU, 2024: 167). The restoration of a climate-resilient landscape water balance in the sense of a climate-resilient implementation of the WFD should explicitly include the restoration of alluvial forests and meadows and, where appropriate, gallery forests. Their ecological functions and ecosystem services are important for increasing the retention and storage function of water in the landscape and for providing settlement-free floodplains. In addition, measures for the sustainable use of peatlands should be promoted and implemented.

Promote the removal of barriers from river courses

In order to restore the connectivity of river courses and enable far-reaching ecological and water-related multiple benefits, barriers in river courses should be removed wherever this is expedient and possible. Not only the removal of larger structures (> 10 m, e.g. dams) plays a role here; the removal of smaller barriers (< 2 m) can also be significant. This is often less costly and may be more readily accepted by society (Belletti et al., 2020). The dismantling or removal of river barriers is especially important in view of the EU Biodiversity Strategy's goal of restoring 25,000 kilometres of free-flowing rivers by 2030 (compared to 2020), that is also laid down in article 9, paragraph 1 of the EU Nature Restoration Regulation. The restoration of the natural connectivity of rivers and the natural functions of the associated meadows is also provided for in the EU Nature Restoration Regulation and can make an important contribution to achieving the objectives of the WFD.

Consider the emergence of novel ecosystems in nature restoration and when assessing water quality

The possibility that novel ecosystems might develop should always be taken into account in restoration measures and specialist planning. The expected – and in some cases already observed – dynamics in the development of novel ecosystems should lead to a reflection on the legally regulated 'good ecological status' in the WFD. In the future, the WFD could be amended accordingly to take into account the importance of restoration for making ecosystems more resilient.

Multiple benefits from integration into the Clean Industrial Deal

The sustainable transformation of industry, which is the aim of the Clean Industrial Deal, also depends on the availability of a sufficient quantity and quality of water required e.g. for cooling processes. To strengthen the EU's water resilience, the EU Water Resilience Strategy states that water efficiency and reuse should be integrated into the practices of the most water-intensive industrial sectors (European Commission, 2025a: 9). Measures that strengthen a climate-resilient landscape water balance and stabilize water availability also mean multiple benefits for actors in industry. The WBGU therefore recommends the following:

Incorporate water-specific measures into the implementation of the Clean Industrial Deal

The WBGU believes that comprehensively integrating climate-resilient water management into the implementation of the Clean Industrial Deal could make a decisive contribution to mobilizing the financial resources for the necessary climate-resilient water-management measures. Awareness of the importance of climate-resilient water management for sustainable industrial transformation and long-term competitiveness should also be raised among all the actors involved, e.g. in industry.

Guarantee water-related basic public services and ensure state financing

Guaranteeing water-related basic public services is a key government task. In the WBGU's view, it is the state's responsibility to act as the main guardian of water availability and quality. Although private actors can be involved in performing this task, the state's responsibility for ensuring water availability and quality should be paramount. The example of the UK shows that the privatization of water supplies can lead to negative environmental and social impacts and high costs for consumers.

Basic public services require reliable and long-term financing structures; a new EU fund for water resilience – e.g. for investments in corresponding sustainable infrastructures and nature-based approaches – and the integration of water-related issues into existing financing mechanisms can contribute to this (European Parliament, 2025: para. 77 f.). According to the EU Commission, there is currently a funding gap of at least 23 billion euros per year for the implementation of existing water legislation. To reduce this funding gap, the European Investment Bank is to provide a total of 15 billion euros by 2027 for the implementation of water-resilience goals and measures (European Commission, 2025a). Although this additional financial framework from the EU Commission is to be welcomed, it must be significantly expanded in scope and

extended in duration in view of the challenges and high level of urgency involved, as only few of the measures will have an immediate impact.

The European Parliament (2025: para. 78) emphasizes that affordability for all households and any limited financial leeway of member states should be taken into account. Funding should also focus on measures that are orientated towards the common good. Private actors should be involved in the financing in accordance with their responsibility for the costs incurred or the benefits they derive from resilience-enhancing measures. Appropriate and comprehensive pricing of water as a resource can also improve the scope for financing. Reliable data on water use must be specifically generated wherever it has hitherto been lacking. Finally, economic and regulatory incentives to promote efficient water consumption are key, as they not only reduce overall consumption, but also facilitate long-term water-related basic public services.

Develop a common EU foreign policy on water

The EU Water Resilience Strategy emphasizes the global dimension of water as well as the importance of the 2030 Agenda and the vision of 'water security for all'. The Commission also sees the EU's proactive approach as an opportunity to build global, strategic alliances, particularly with regard to the UN Water Conference in 2026 (European Commission, 2025a). In the field of climate and biodiversity policy, the EU has already developed common foreign-policy positions and in this way successfully influenced international negotiations. Water, too, is a matter of common concern for humankind and therefore requires joint governance measures by all states. In order to shape international water-policy negotiations, the WBGU proposes agreeing on a common EU foreign policy on water (WBGU, 2025). This would enable the EU to advocate an International Water Strategy and thus give important diplomatic impetus to global climate resilience in the water sector.

The 2023 UN Water Conference put the topic of water on the international policy-making agenda. Two additional UN Water Conferences are planned for 2026 and 2028. The EU can make use of this momentum and should work towards establishing international negotiations in the longer term in order to enable globally harmonized water governance. To date, there is no institutional framework for this at the UN level. Accordingly, the WBGU proposes negotiations on an International Water Strategy that builds on existing international water-policy processes. To this end, it is important to clarify what impetus the EU could provide at international level in order to integrate the hitherto fragmented global water governance and strengthen global climate resilience in the water sector in the long term. The WBGU recommends that the EU – building on the EU Water Resilience Strategy – should advocate the establishment of an International Water Strategy and promote the introduction of a Water Mapping Initiative (including a science platform). Experience from the EU's new Copernicus Water Thematic Hub, which aims to process knowledge and bundle it for decision-makers, could be incorporated here (European Commission, 2025a: 16). Furthermore, the international community should agree on key criteria for climate-resilient water management as part of the International Water Strategy (Fig. 2). For the development of an International Water Strategy within the framework of future UN Water Conferences, the WBGU recommends:

Initiate dialogue between countries and formulate guiding principles for international water governance

In order to develop an International Water Strategy, a soft-law process should first be initiated to enable exchange and cooperation between states and other relevant actors. The goal for the global community of states 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. The starting point for formulating common guiding principles for international water governance should be the recognition that the protection of water resources is a common concern of humankind, flanked by the universal human right to water as part of the human right to a healthy environment that has already been recognized by the UN General Assembly. The International Water Strategy could then 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. The new Water Resilience Forum, which is to review the implementation of the EU Water Resilience Strategy every two years, can serve as a model here (European Commission, 2025a).

Harmonize the governance of green and blue water and strengthen existing conventions

International water governance overlaps with numerous policy processes that address blue and green water (e.g. UNFCCC, CBD, UNCCD, Ramsar Convention on Wetlands). 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 above-mentioned policy processes should be ensured (Fig. 3). At the same time, an International Water Strategy could provide an incentive for states to join the two existing water conventions under international law. A

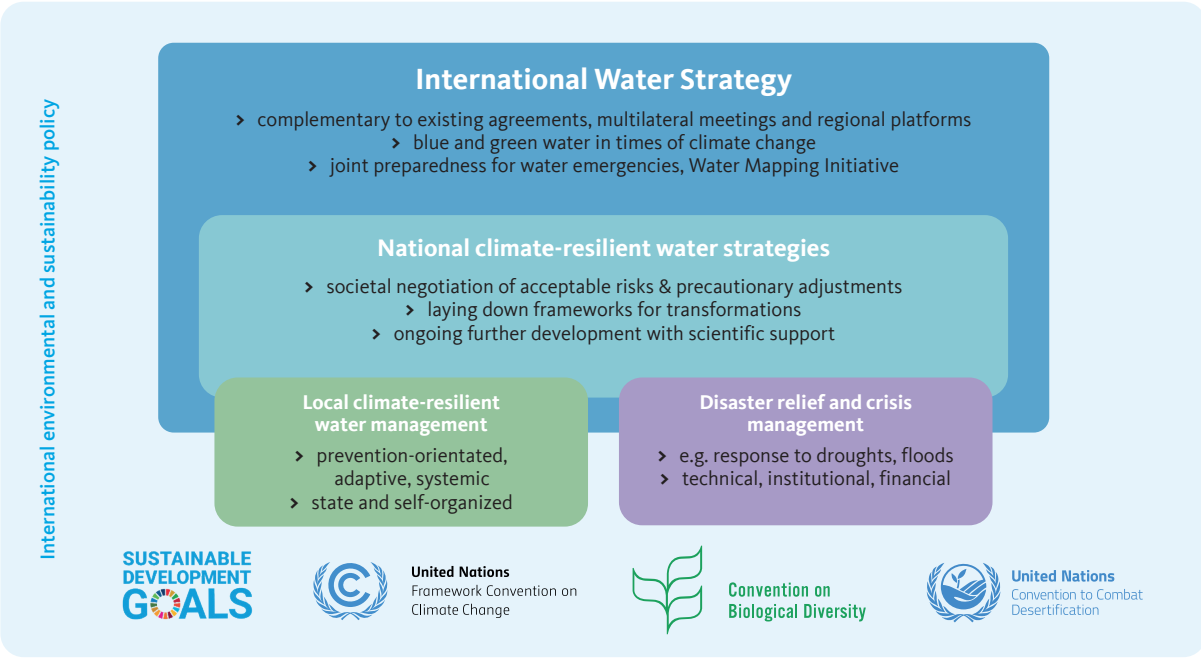

Figure 2
The International Water Strategy and national water strategies work together with local water management, which includes all relevant actors in addition to municipalities. National water strategies should be formulated coherently with the International Water Strategy and initiate local climate-resilient management measures.
Source: WBGU

platform for clarifying controversial issues regarding the interpretation of the conventions could contribute to this. The scope of application of both conventions should be extended to include the regulation of green water.

Establish a water secretariat at the UN level and set up regional platforms

A dedicated secretariat should be established at the UN level tasked with preparing future Water Conferences and monitoring the targets set. It could be led by the UN Special Envoy for Water. The expert panel of the proposed Water Mapping Initiative should advise the secretariat. Regional platforms for multilateral meetings could be set up to strengthen regional organizations. 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. Incentives for participation could be generated by processing scientific and technical expertise, as well as via additional water-specific cooperation and funding opportunities for implementing common goals.

Strengthen the integration of water into economic decisions at the international level

Integrating the protection of water resources into economic decisions is highly relevant. A basic prerequisite for this is to document the effects of economic activities on water resources, and to make water-related risks – caused e.g. by changes in water availability as a result of climate change – transparent for actors and investors. In recognition of an International Water Strategy, states should therefore work towards strengthening and further developing this transparency within the framework of corporate reporting and disclosure obligations, both nationally and internationally.

Align economic relations and trade policy with the objectives of the International Water Strategy

International economic relations and trade policy should promote sustainable water use and not exacerbate water scarcity in regions suffering from water stress (GCEW, 2023). Current practice is often not in line with this guiding principle. For example, export-oriented agriculture that is not compatible with the protection of local water resources is often subsidized. Another challenge here is that the effects of trade or investment agreements on water use and management (spillover) are not taken into account in trade agreements. In principle, fundamentally different options are conceivable for better integrating water-related impacts and risks into international trade policy, for example within the framework of the World Trade Organisation, regional trade agreements or investment-protection agreements.

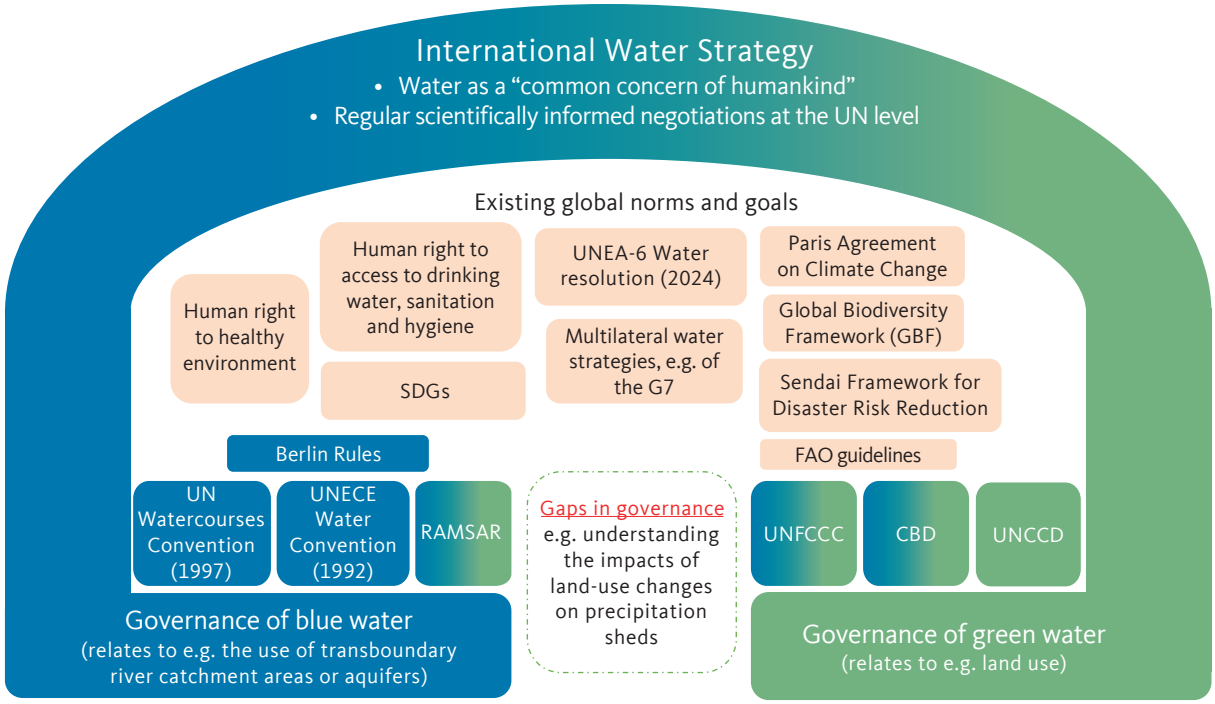

Figure 3
Procedurally, the International Water Strategy provides an institutional framework for the governance of blue and green water. In terms of content, it should refer to existing conventions and global standards.
Source: WBGU

Strengthen cooperation with low- and middle-income countries

The protection of water resources should be compatible with the other growth and development goals of middle and low-income countries. Closer international and bilateral cooperation on water-related issues can support low- and middle-income countries in achieving their development goals and a more sustainable use of water, as well as avoiding negative impacts of economic and trade relations on the availability, supply and quality of water. Support can be provided not only in the form of financial assistance but also, in particular, through partnerships for the development and implementation of new technologies or for capacity building.

Establishment of an international Water Mapping Initiative

The WBGU proposes setting up an international Water Mapping Initiative to identify impending regional water emergencies with a planetary dimension at an early stage (e.g. glacier melt in the Hindu Kush-Karakoram-Himalaya or extreme water scarcity in cities) and to use the results to inform decision-making processes. To this end, a science platform should bring together existing expertise and record region-specific changes (Fig. 4). 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 consequences of climate change, biodiversity loss and pollution (e.g. from IPCC and IPBES). A panel of experts should be set up to steer the science platform, e.g. to develop binding standards and indicators for water monitoring worldwide, evaluate existing findings and feed 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 be institutionally based at UN Water, while databases and scientific analyses should be hosted by internationally commissioned national research institutions. Ideally, funding should be provided by the G7 and G20, as well as on a voluntary basis by other states.

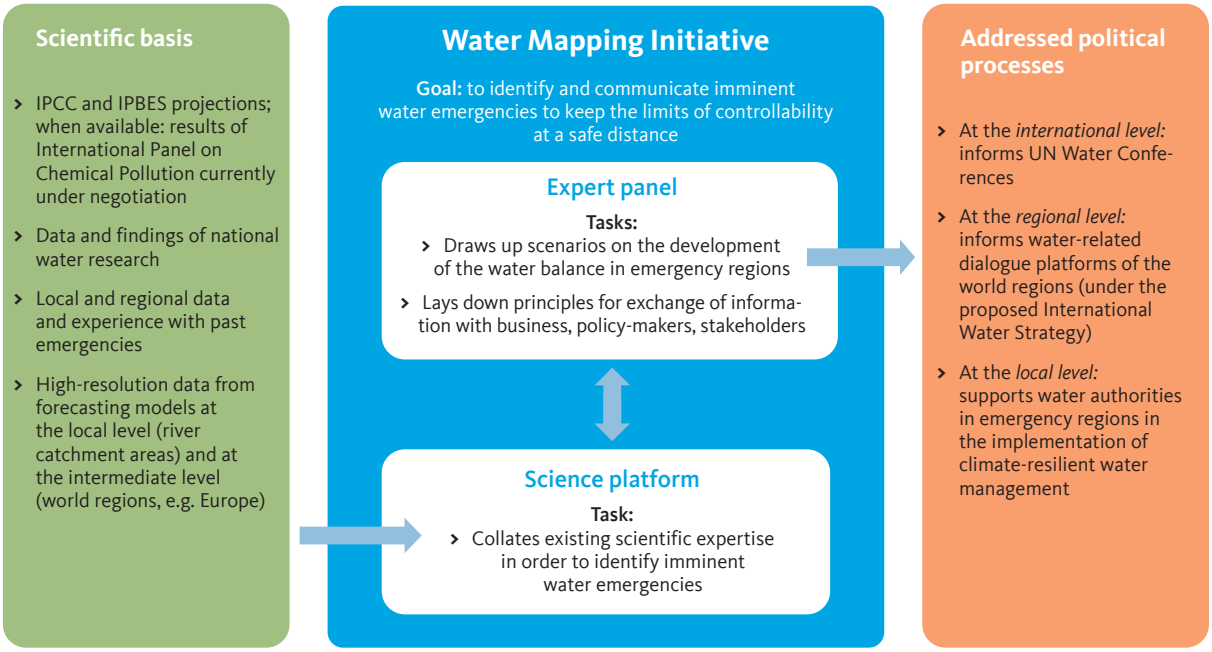

Figure 4
The Water Mapping Initiative consists of a science platform and a panel of experts. The science platform aims to detect impending water emergencies as early as possible by integrating scientific principles. On this basis, the expert panel would inform and support international, regional and local policy processes.
Source: WBGU

Conclusion

European water policy continues to change. The EU Water Resilience Strategy is giving it fresh and positive impetus. The pressure to act is considerable: the number of water emergencies caused by water use and climate change is rising not only worldwide but especially within the EU. These initial moves towards a new EU water policy offer an opportunity to gear it towards the principles and requirements of climate-resilient water management developed by the WBGU. The WBGU recommends integrating climate-resilient water management and green water as a protected good into existing EU water law. This integration – for example into management plans, programmes of measures and official management assessments – could take place without amending the Water Framework Directive (WFD) and be supported by a Commission Communication. More legal certainty would be created by amending the WFD. Furthermore, the WBGU proposes that climate-resilient water management and green water be integrated into other EU policy areas, in particular the Common Agricultural Policy, biodiversity policy (EU Nature Restoration Regulation) and industrial policy (Clean Industrial Deal). With regard to international water governance, the WBGU recommends that the EU develop a common foreign policy on water, centrally integrate climate-resilient water management here too, and in this way shape the 2026 and 2028 Water Conferences.

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Abbreviations

CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
FAO	Food and Agriculture Organization of the United Nations
G7	Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, United States of America)
G20	Group of Twenty (industrialized countries of the G7, ermerging economies of the O-5, EU)
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
Ramsar	Ramsar Convention on Wetlands
SDGs	Sustainable Development Goals
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UNEA	United Nations Environment Assembly
UNECE	United Nations Economic Commission for Europe
WBGU	German Advisory Council on Global Change
WFD	Water Framework Directive

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