

Initial suggestions for the EU Water Initiative: What tools the existing policy framework offers to combat climate extremes and what EU action is still needed

Europe has just endured what Ursula von der Leyen referred to as "the summer of truth" in her State of the European Union speech. August was the warmest month ever recorded, wildfires ravaged landscapes in France, Spain and even temperate Belgium, while major rivers like the Danube and the Rhine shrank to historically low levels, disrupting energy supply and transport. Despite that, the political response overlooks that these symptoms are not resulting from climate change alone; they are manifestations of a Europe that has been dried out as a result of water mismanagement.

As climate breakdown drives more frequent and intense extreme weather events, like intense heat and prolonged periods without rainfall followed by intense rainfall events, the EU must urgently address the issue of its poor watershed resilience by embracing restoration and protection of the natural water-storage features of landscapes as the first line of defence against wildfires, droughts and floods.

This brief outlines the underlying causes of this summer's extreme events (and the ones we can expect this autumn), the tools that EU water policies already offer to address them and what further action is needed.

Summer of truth: Wildfires and drought expose decades of water mismanagement

Climate change has already warmed Europe 2.5 degrees above pre-industrial levels. Rising air and sea temperatures alter the water cycle, leading to greater frequency and intensity of extreme phenomena, such as prolonged periods without rainfall as well as torrential rains. The costs of weather and climate-related extremes have escalated in recent years, resulting in more than €208 billion in asset losses between 2021 and 2024 (representing more than a quarter of the losses between 1980 and 2024).

However, the impacts Europe has experienced this summer cannot be explained only as results of climate change. They are also the consequence of an increasingly fragile water cycle, fuelled by long-standing mismanagement of our water. For centuries, humans have drained wetlands and straightened rivers to make water pass more rapidly. Together with peatland degradation, forest and floodplain loss, soil degradation and soil sealing, Europe has progressively lost a substantial part of its natural capacity to capture, store and slowly release rainfall. There is no EU wide figure that quantifies this loss, nor any coherent EU strategy to restore it. Scientists call this out as a significant gap.

Our landscapes are no longer capable of absorbing and storing water at the scale needed to buffer climate extremes. Landscapes that have lost their natural capacity to capture, hold and retain water are more vulnerable for wildfires and less able to resist intense heat and prolonged periods without rainfall. If this underlying cause of the problem is ignored, the business-as-usual political responses will result in mal-adaptation and loss of resilience.

Since 2010, water abstraction has increased across nearly all sectors, reaching around 200 billion m³ freshwater abstracted annually. Almost a quarter of treated water is lost during distribution, which has prompted calls for improved water efficiency. Reducing water abstraction to volumes that do not exceed available resources should be a priority in line with the Water Efficiency First principle. However, while there is great potential for water savings – up to 40% of total abstractions could be saved according to the European Topic Centre on Biodiversity and Ecosystems – these measures mainly reduce pressure on the water system; they do not **recreate the landscape's capacity** to store water when it is abundant and release it when it is scarce.

Traditional “water sowing and harvesting” systems in Spain, consisting of unlined mountain channels (pesqueras) that spread water across the slopes, allowing it to soak into the ground and be released slowly to springs and creeks. One area documented by the Spanish Geological and Mining Institute showed that a single restored channel infiltrated up to 1.4 million m³ of water into the hillside aquifers in the 2023–2024 hydrological year. In comparison, the village's drinking-water supply reservoir has a capacity of 200,000 m³.

Reference: Ana Fernández Ayuso, Héctor Aguilera Alonso, Carlos Marín Lechado et. al., Itinerarios de Siembra y Cosecha del agua.

Globally, 60% of precipitation is stored as “green water”, the water available to plants via rainfall, soil moisture and evaporation. This is a powerful water reserve that is often overlooked in favour of manmade solutions like reservoirs. Improving the natural water-retention of the landscape therefore represents a crucial investment in water storage that researchers warn is rapidly drying up and that must urgently get a higher political priority as a strategic water reserve, something which scientists, international organizations and environmental NGOs call for as a crucial element to improve Europe's preparedness for climate change.

The existing policy framework already offers Member States drought management tools

Following this summer's extensive droughts, questions have arisen whether the EU is doing enough. The existing EU water acquis already provides Member States with multiple tools to address water scarcity and drought and to ensure sound water balances at the river basin level, but they are not yet fully used. Freshwater and coastal ecosystems are at the heart of the triple climate, nature and pollution crisis. Ramping up the implementation of the policies that protect them will not only improve Europe's hydrological resilience but water resilience more broadly as the issue of quantity and quality are intrinsically linked. Low water flows for example, can result in higher concentration of pollutants, while floods can spread pollutants. At the same time, as weather extremes put more pressure on water resources, it is becoming more important than ever to protect the quality of freshwater by controlling pollution at source.

The assessment of good quantitative status for groundwater bodies under the **Water Framework Directive** (WFD) includes ensuring not only that the rate of abstraction does not exceed available resources, but also that terrestrial ecosystems that depend on the groundwater body are not damaged (WFD Annex V, 2.1.2).

Good ecological status for surface waters requires Member States to ensure there is enough water in rivers to sustain healthy aquatic biology (what is referred to as sufficient ecological flows).

While the WFD does not enter into water allocation decisions in the Member States, it does require that a system of controls on abstraction and impoundments be set up and for permits to be periodically reviewed and revised to ensure that all water bodies can reach good status (Articles 11(3)(e) and 11(5)). In practice, this requires Member States to make a scientific assessment of the available water in the river basin (district) and allocate water abstraction permits to water users in a way that ensures that abstraction remains sustainable in the short and the long term. In preparing River Basin Management Plans, Member States should identify significant water abstraction pressures affecting the ability of reaching good status (annex VII(A)(2) and CIS Guidance document No. 3). WFD Article 9 also includes a requirement to develop and use economic instruments, such as water pricing, which together with metering can help incentivise efficient water use.

Unfortunately, these tools are not yet fully implemented. The European Commission has for example found that Member States tend to ignore the assessment of groundwater-dependent ecosystems, potentially overestimating the quantitative status of groundwaters, and in other words risking to over-promise water to public and private users, resulting in over-abstraction. Many Member States are still not managing water abstraction properly, be it because of insufficient monitoring (Cyprus, Malta, Portugal), illegal water use (Spain), or water allocation based on outdated climate scenarios (Spain) and historic abstraction rights that have not been reformed and revised (Spain).

Drought Management Plans were identified as key policy instruments to combat drought already in 2007 and Member States were recommended to set up specific Drought Management Plans to supplement the WFD River Basin Management Plans, by 2009. However, in the third River Basin Management Plans, only nine Member States reported having distinct Drought Management Plans that map areas at risk and determine alert levels, foresee warning systems and clarify upfront water allocation priorities during a prolonged drought.

Significant work has been developed and is ongoing on stepping up implementation to tackle water scarcity and drought in the framework of the **Common Implementation Strategy** (CIS) of the WFD, in particular in the working group on water scarcity and drought, including, in the current work programme 2025-2027:

- New guidance on Drought Management Plans (currently being finalised)
- Review of existing Technical Guidance on Water Scarcity & Drought Indicators
- Input to JRC on EU Drought Risk Atlas & Drought Impacts Database 2.0
- Summary report on water security, including water allocations
- Overview of methodologies to set water efficiency targets

The next challenge is now to make sure that the guidance and best practice identified is integrated into the sectoral policies at EU and national level.

The **Nature Restoration Regulation** provides an existing binding framework for translating water resilience into ecosystem restoration at landscape and river-basin level and explicitly requires National Restoration Plans to connect with implementation of the WFD and Floods Directive. The Regulation is designed to contribute, among other things, to the EU's objective of climate change adaptation (Article 1) and requires Member States to "identify synergies with climate change mitigation, climate change adaptation, land

degradation neutrality and disaster prevention and prioritise restoration measures accordingly" (Article 14(9). The potential of restoration measures to support adaptation should be outlined in a specific section of National Restoration Plans (Article 15(3)(t)). The articles on restoration of freshwater habitats under Article 4, river connectivity and natural functions of floodplains under Article 9, and restoration/rewetting of drained peatlands under agricultural use under Article 11(4) are particularly relevant.

Flagship actions under the Water Resilience Strategy, like the **Sponge Facility** and the **Green and Blue Corridors initiative** are promising avenues to increase water retention on land and support the restoration of ecological settings and infrastructure to restore the water cycle. However, to be effective, they need to be more than a compilation of case-studies and should address governance and financing gaps (including ensuring funding under the Multiannual Financial Framework (MFF)) and provide technical assistance and training.

What further EU action needed

Retaining more water in the landscape, through healthy soils, wetlands and forests that can catch, slow, sink and spread rain when it falls, goes beyond traditional water management, and requires a cross-sectoral approach. The Water Framework Directive already provides the broad basis for this. However, the Commission's reckless plans for a **targeted revision of the WFD**, responding to calls from the Critical Raw Materials sector, not only risks undermining core environmental objectives of the WFD, but also delaying implementation. A stable WFD is needed to maintain a safety net for water protection, ensure legal certainty for economic actors and water administrations, it provides the foundations for water resilience. Member States have also highlighted that it is flexible enough to accommodate new critical raw material projects and have called for a European Implementation and Consolidation Year, including primarily focusing on implementation of existing legislation.

Investments and policies that help retain more water in the landscape must become a priority for the EU, and is demanded by multiple stakeholders, including NGOs and professional associations, local authorities and financial service providers. This should be done through protecting and restoring water courses and freshwater ecosystems such as wetlands, peatlands, riverine and coastal ecosystems in natural areas, agricultural land, forested land, and urban areas.

The upcoming **Climate Resilience Framework** would be the obvious place to make nature the first line of defence against climate disasters, but the focus on nature-based solutions seems to be missing in the preparatory work for the legislative proposal expected in October. However, the 100 most vulnerable territories to be identified in the upcoming European Climate Resilience Framework as announced in the 2026 State of the European Union address could inform where to focus efforts to scale approaches for more water retention in the landscape.

The new **Water Initiative**, announced by Ursula von der Leyen in her State of the EU speech on 16 September could be – if well-designed – a helpful add-on to existing water protection policies that could strengthen European water resilience by supporting actions that retain more water in the landscape to increase water infiltration in soils and groundwater. To do so, it must take the WFD as a basis and exclude any revision of the legal text. **Some directions where the new Water Initiative could focus on are outlined below.**

Policy drivers for upscaling sponge landscapes:

Policy options to achieve this include setting up incentives for Member States to set-up **sponge landscape targets** at basin level to retain water where it falls, building on examples which exist at the national and regional levels (such as sponge targets in Flanders), and from the [EU guidance for climate-resilience landscapes](#) currently developed by DG CLIMA (which needs a political driver to be translated into action). Targets could secure existing and new wetlands, riparian zones along rivers, and shaded areas with high water-retention capacity, which help preserve key ecosystem services, minimise the effects of drought, floods and wildfires, act as sources for ecosystem recolonisation and resilience post-disaster (for instance [after wildfires](#)), building on areas identified for restoration in National Restoration Plans under the Nature Restoration Regulation. Selection of the locations should draw from both a preventing and curative approach, for instance drawing from the 100 most vulnerable areas to be identified in the upcoming European Climate Resilience Framework; the areas identified at high risk of flooding in Flood Hazards Maps in the Floods directive; the water bodies used for drinking water abstraction (WFD Article 7(3)), and the areas which have suffered from major floods, wildfires or drought in the past.

Flanders' Blue Deal – area-based sponge targets. Flanders' renewed Blue Deal (approved in July 2025) moves beyond isolated flood or drought control measures towards restoring the natural water-retention capacity of landscapes. Through locally defined “sponge targets” (*sponsdoelen*), catchments are expected to establish measurable objectives and targets for additional infiltration, reduced drainage and increased storage capacity. These objectives are implemented through local Blue Deals and area coalitions involving municipalities, farmers, water managers, nature organisations, businesses and other stakeholders. The approach therefore links flood-risk reduction with drought resilience and landscape restoration, while adapting measures to the hydrological characteristics of individual catchments.

The Water Initiative could also **build on and accelerate the relevant actions under the Water Resilience Strategy**. For instance, the “**Sponge Facility**” can advance innovative financing mechanisms to unlock barriers to the development of sponge landscape. It could drive the involvement of multi-sectoral partners such as the insurance sector, building on the example of [Bristol's journey to become a Wetland City](#) and [the Dutch city building \(and adapting policy\)](#). It could also elevate the “**Green and Blue Corridors initiative**” to support the restoration of ecological settings and infrastructure including rivers, wetlands, and coastal restoration to restore the water cycle with a source-to-sea approach” by fostering actions to increase river connectivity across entire basins. Finally, it could also accelerate the uptake of the **methodology for the setting of water efficiency targets**, another deliverable of the Water Resilience Strategy.

To support the upscaling of and boost political appetite for nature-based solutions to capture, retain and store water in the landscape, a **European assessment of water-retention capacity** (or Sponge capacity) should be developed – building on existing tools like the [Water Retention Indicator](#) and work [planned by the EASAC](#). This would allow the EU to both understand the scale of what has been lost in terms of sponge capacity and move towards a measurable objective for recovering this natural water-retention capacity, through the Sponge Facility that the WRS committed to, supported by evidence on where investment in “sponge” landscapes can deliver the greatest benefits for water resilience alongside conventional water-supply and grey-infrastructure measures.

Helping farmers adopt landscape water resilience:

Farmers need to be supported in implementing practices that increase water retention and decrease erosion both by **advisory services** and by **coordinating the actions of different farms across a landscape or river basin**. The latter would decrease the burden placed on individual farmers, both technically and administratively, and multiply the positive effects of their practices by scaling them. This was supported by the conclusions of the EU CAP Network Thematic Group on Improving Water Resilience in Rural Areas through the CAP, which highlighted both the need for farmers to be better equipped to increase water retention on their land and the necessity to act at the landscape level, beyond individual farm action. This recommendation is a highlight of the Study on climate change adaptation in agriculture in the EU, focus on water management, commissioned by the European Commission.

Hungary launched its Water into the Landscape programme in 2025, in response to increasing drought and hydro-meteorological variability. The programme aims to retain water locally by identifying agricultural areas suitable for controlled inundation, allowing voluntary participation by landowners, and improving the infrastructure needed to retain and move water through the landscape. The OECD describes Hungary's approach as a paradigm shift towards enhanced water retention, including natural water-retention measures and nature-based solutions.

Despite the environmental benefits for water, biodiversity and climate adaptation of such **collaborative actions**, only four Member States have used this tool for such a purpose in the current CAP (Article 77 Regulation 2021/2115). The next CAP doesn't include this scheme, although it has been moved to the overarching NRRP proposal (Article 74, COM(2025) 565 final), likely making this tool even less used. The new Water Initiative should therefore actively promote such collaborative actions involving farmers and other stakeholders for water resilience projects.

Promoting such landscape-level action could take the form of creating roles of **catchment officers to advise farmers** on how to do natural water retention on their land and coordinate their actions across a common river basin. This can build on the example from Sweden, where positions of catchment officers were created in 2018 by the Swedish Authority for Water and Marine Management to advise farmers to improve and speed up the implementation and amount of voluntary nature-based solutions in the agricultural landscape, also helping with the administrative burden that often follows landowners when, and if, they want to implement measures on their land.

The **post-2027 CAP proposal** offers a number of tools to protect, maintain and promote water resilience. The European Commission should put particular emphasis on the implementation of these tools as it advises Member States in the development of the agriculture chapter of their future NRPPs, especially given the increased flexibility Member States will have in designing how they comply with the Regulation. This would be further strengthened by ensuring dedicated funding for such tools, within the broader environmental scheme toolbox, is re-introduced in the co-legislative process. Amongst the tools proposed in the post-2027 CAP proposal **the new transition payments of up to €200,000** per farmer is an interesting innovation as it will help farmers convert to more water resilient practices and productions in water stressed regions. It is only directed at farmers though, thus not enabling collaborative action for landscape-level transition. It will be key for the Commission to enable the articulation between farm-level action and landscape-level action.

Measures targeting abstraction:

The WFD already requires Member States to define sustainable abstraction levels at catchment scale and integrate these levels into relevant water management and permitting procedures. However, as Member States are not yet fully using these tools, **the Initiative could contribute to incentivise or require Member States to undertake water allocation reforms where needed (in line with OECD guidance on this)**. The efficiency gains, to be achieved through the implementation of the water efficiency targets, should be translated into a reduction of abstracted volumes, where needed. This would be a driver for the uptake of innovation and technologies, which currently have limited demand.

Autumn of floods and more extreme events

The impacts of climate change manifests through the water cycle. The extreme heat of the 2026 summer has resulted in record-warm ocean temperatures, adding fuel to natural weather systems. The World Meteorological Organisation has warned that the 2026-2027 El Niño will likely be the strongest one in at least 1,000 years with associated risks of floods, droughts and extreme heat. In Europe, a summer marked by droughts, wildfires and shrinking rivers will therefore most likely be followed by an autumn marked by heavy rainfall and resulting floods.

Intense rainfall events in Valencia, Spain in 2024 and in parts of Germany, Belgium and surrounding countries in 2021 have already showed how devastating such events can be. However, the severity of the impacts revealed major flaws in land and water management, including construction in flood risk areas. To reduce these risks, it is urgent to increase natural water retention in the landscape and to give rivers space by reconnecting them to their floodplains.

In Germany, the relocation of dykes along the river Elbe created new retention areas with diverse lowland floodplains. During the flood in Lenzen in 2013, the expanded area for floodwaters after the cutting of the old dyke and the restoration of the floodplain reduced the flood stage upstream by nearly 0.5m.

Conclusions

There is therefore a strong case for greater EU strategic focus on implementing the existing policy frameworks under the WFD and the NRR and complementing this with restoring lost water-retention capacity. Efficiency can reduce abstractions and improve the management of existing water resources. However, these measures mainly reduce pressure on the water system; they do not **recreate the landscape's capacity** to store water when it is abundant and release it when it is scarce.

If resilience means the capacity to withstand and recover from shocks, then for water resilience the starting point should be **recovering the natural buffering capacity that has been lost**, rather than primarily making a degraded system operate more efficiently.

Given the scale of the estimated historical loss and the multiple resilience functions provided by restored “sponge” landscapes, restoration should be treated as a core water- and climate security investment, not simply as an environmental co-benefit.

Therefore, the actions outlined in this briefing serve multiple benefits to limit the impacts of a changing climate.

Recommendations for the EU Commission for the new EU Water Initiative:

- Reverse the reckless decision to revise the Water Framework Directive in order to justify more pollution from critical raw materials sector
- Accelerate the implementation and enforcement of the WFD, including through the ongoing Structured Water Dialogues with the Member States
- Integrate the WFD into other sectoral policy and funding mechanisms especially agriculture, in the preparations of the National and Regional Partnership Plans to ensure farmers are supported to deliver landscape water resilience
- Ensure that the upcoming Water Initiative is in line with better regulation principles, consolidates the existing legal basis, secures consistent compliance across the EU and prioritises new action to retain more water in the landscape in line with the recommendations outlined in this brief.



Living Rivers Europe is a coalition of seven environmental and angling organisations: the European Anglers Alliance, the European Environmental Bureau, the European Rivers Network, Surfrider Foundation Europe, The Nature Conservancy, Wetlands International Europe and the WWF's European network.

