

With Germany, Belgium and Turkey still reeling from historic floods, a new report outlines how Nature-based Solutions can help reduce the impact of such disasters across Europe.

Launched during World Water Week, a new report by Deltares, commissioned by WWF, finds that restoring rivers' natural characteristics and dynamics increase flood resilience in a more sustainable way and more cost-effectively than traditional engineering solutions.

The Deltares report shows that when all benefits for water quality, nutrient retention and flood risk reduction are taken into account, large-scale floodplain and river restorations are more economically attractive than traditional solutions.

In Germany and Belgium, massive floods have devastated cities and villages and killed over 200 people this year alone. According to estimates from the latest IPCC report, if global temperatures increase by 1.5°C or more compared to pre-industrial levels, heavy precipitation and associated flooding will intensify and become more frequent in most regions across the continent.

When rivers overflow dams and flood whole settlements, floodplains could prevent life-threatening situations. However, over the past centuries, Europe has seen its natural floodplains drastically reduced, leaving major rivers little room when water levels rise. For instance, the Rhine and Meuse rivers, which overflowed their banks during the floods, have entirely lost their natural floodplains. [1] Usually, in response to massive floods, governments invest in technical solutions, such as building higher dams, to further regulate rivers. They disregard the most sustainable and cost-effective solution: making space for rivers.

“Solving the climate crisis and saving biodiversity go hand in hand. If you put together the increase of massive floods due to climate change and the drastic decrease of floodplains to mitigate them, you get a deadly cocktail for humanity”, says **Andreas Baumüller, Head of Natural Resources at WWF European Policy Office.**

“Instead of working against nature by investing billions of euros in fossil gas and constructing even higher dams, we need to invest in nature-friendly solutions. Restoring floodplains has become a question of survival, not only for nature but also for people”, Baumüller said.

The report also demonstrates that large-scale floodplain restoration needs to be undertaken not only in the regions that have most recently been affected, but everywhere in Europe.

“There is an urgent need to invest in ways to withstand weather disasters and repair our relationship with nature,” urged Andreas **Baumüller.** “Member States now have an

opportunity to use the EU recovery funds to finance those investments, instead of supporting harmful activities. Investing now in Nature-based Solutions will save precious lives as well as, in the long term, taxpayers' money".

The EU Recovery and Resilience Facility, designed to help the economic recovery from Covid-19, stipulates that 37% of the EU fund must support the green transition, including climate adaptation, and biodiversity and ecosystems. **Nevertheless, nearly 50 billion euros are set to go to activities that would harm the green transition, in France, Germany, Portugal and Spain alone. [3]**

WWF calls on EU decision-makers to:

Include in the upcoming EU Nature Restoration Law legally binding, ambitious restoration targets, in particular for floodplains, wetlands, and all types of ecosystems that contribute to retain and store water. WWF is calling on the European Commission to propose a target of at least 15% of land and sea (650,000 km²) to be restored by 2030 both at the EU and Member State level.

Introduce a "nature-based" requirement to EU funds earmarked for investments in water, climate, disaster risk reduction, energy, and agricultural and transport sectors, so that only interventions which both address societal challenges and preserve or improve biodiversity conservation and the ecological status of water bodies can benefit from public funds.

Natural water retention measures such as wetland restoration should be given priority over single-objective grey infrastructure as a solution to water-related problems.

Make sure that scenarios of hydrological events with return periods > 100 years are integrated into all current and upcoming EU strategies, legislation, and planning documents, as those will become more and more frequent.

WWF calls on EU Member States to:

Include Nature-based Solutions, and in particular floodplain restoration and natural water retention measures, as key measures in national and regional plans on water, forests, floods, climate, disaster risk reduction, energy, and agricultural and transport sectors, ensuring cross-sectoral coordination.

Include scenarios of hydrological events with a return period > 100 years in all their plans, starting with upcoming River Basin Management Plans and Flood Risk Management Plans and with the implementation of the Next Generation EU funds.

Invest in Nature-based Solutions through their River Basin Management Plans, Flood Risk Management Plans and Disaster Risk Reduction plans, using Resilience and Recovery Funds.

Define a clear standard methodology for cost-benefit or cost-efficiency analyses of public

investments that allow showing the various benefits of Nature-based approaches, considering and valuing all ecosystem services and using a sufficiently large spatial scope and time horizon.

Source: WWF