



In this issue

- 1 Launch of Policy Brief on Climate Change Impacts on Ireland’s Water Resources
- 4 Education and Awareness

Launch of Policy Brief on Climate Change Impacts on Ireland’s Water Resources

During SDG week, the Water Forum launched a Policy Brief on Climate Change Impacts on Ireland’s Water Resources.

The global climate change crisis is inextricably linked to water. Climate change is intensifying the water cycle and affecting weather patterns causing more intense rainfall events and flooding in some regions and extended droughts in others. For Ireland, changes in seasonality and precipitation patterns

along with increased extreme weather events and a continued rise in sea level are all indicated in the latest Climate Status Report.

Heavy rainfall and flooding can wash contaminants from land to rivers and lakes and as 80% of public drinking



Panel discussion on the impacts of Climate Change on water resources and Policy Brief launch during SDG Week, Dr Triona McGrath, the Water Forum (left) Dr Michelle McKeown, University College Cork (middle) and Dr Fiachra O'Loughlin, University College Dublin (right).

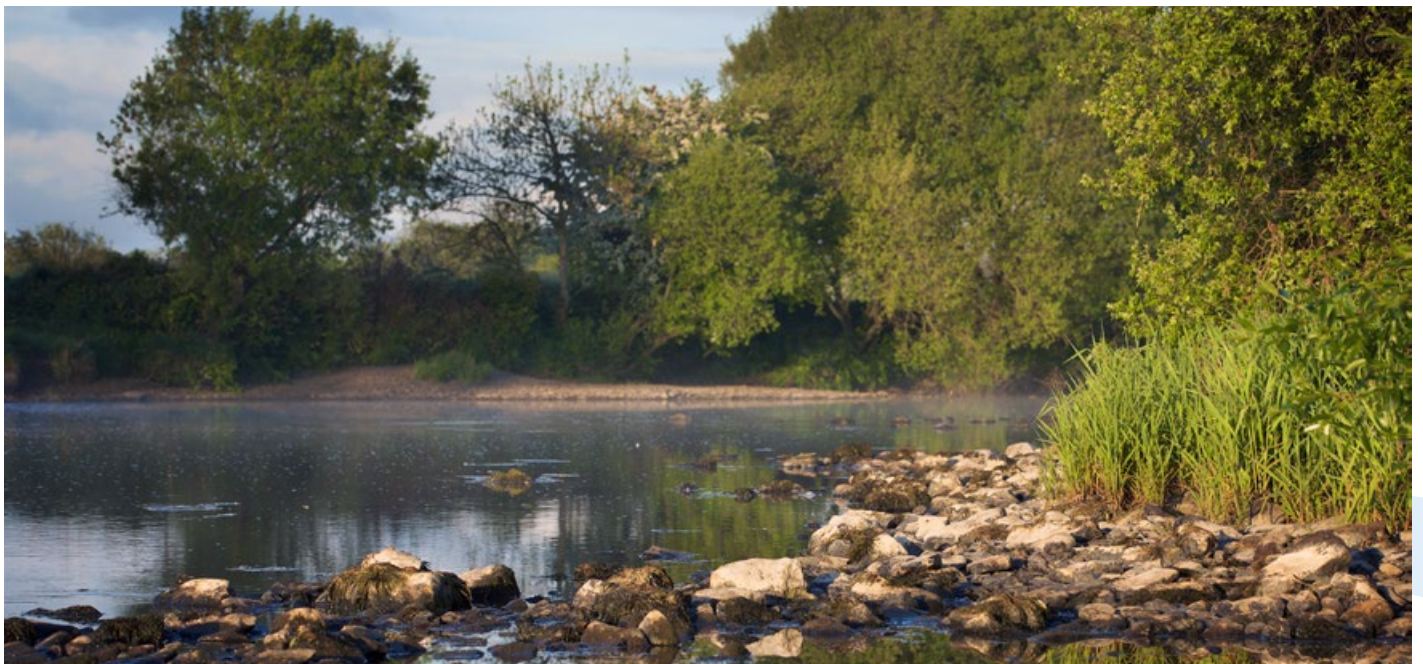
water is sourced from lakes and rivers additional treatment may be required, while bathing water quality and aquatic ecosystems will also be impacted. In extended dry periods or drought conditions river flow levels will be lower and this reduces the dilution of pollutants impacting water quality. Rising water temperatures can reduce oxygen levels in water with negative impacts on freshwater

life. Higher lake temperatures can result in stratification that prevents mixing and leads to reduced oxygen levels in bottom waters. In peatland catchments warm dry conditions can increase peat decomposition and carbon compounds are washed into surface waters. When drinking water sourced in such catchments is treated with chlorine, it can result in a carcinogenic by-product

called trihalomethanes (THM). Ireland already has the highest rate of THM exceedances in Europe.

Public water supply is used for domestic drinking water, wastewater treatment, food production, industrial and farming activities. Surface waters are also used for hydropower generation, fishing and recreation. Water management is central to good public health, a functioning environment, and a productive economy; it should therefore be central to climate action planning. Water resource management is critical to minimise the impacts of the climate crisis on society.

“In extended dry periods or drought conditions river flow levels will be lower and this reduces the dilution of pollutants impacting water quality. Rising water temperatures can reduce oxygen levels in water with negative impacts on freshwater life.”



Low water levels in River Feale, Co. Kerry, Ireland.



Dr Triona McGrath, the Water Forum, presents research and policy recommendations at the Environment Ireland Conference in September.

“Flood Risk Management Plans should be revised to include the latest climate projections for Ireland and account for the spatial variation in expected precipitation. Using nature-based solutions in catchments for flood management could provide benefits for water quality, biodiversity and climate.”

The policy recommendations in this brief are based on the findings from two research projects commissioned by the Water Forum to evaluate if Ireland’s current national policies and climate adaptation plans address the future risk of climate change on water resources. One project focused on water quantity, *‘Projected climate change in Ireland and associated risk to water quantity; a review of national policies, governance and plans for future proofing Ireland’s water supply’* which was completed by Dr Fiachra O’Loughlin, University College Dublin. The second project focussed on water quality, *‘Projected climate change in Ireland and associated risk to water quality; policy recommendations for Ireland’*, which was completed by a team of researchers at University College Cork, led by Dr Michelle McKeown.

Key policy recommendations included: **Ireland’s Climate Change Action Plan** needs to address water quantity and

water quality issues more significantly.

- Water conservation and water efficiency should be used as tools for climate mitigation, where less demand will reduce the energy needs for water treatment and supply, and climate adaptation whereby reduced demand results in less abstractions and potential water supply shortages.
- Water efficiency targets should be included in future housing developments supported by amendments to Building Regulations.

Sectoral Adaptation Plans should be revised to include additional measures such as consideration of the impacts of increasing lake water temperatures that can result in enhanced eutrophication and cyanobacterial blooms.

Flood Risk Management Plans should be revised to include the latest climate projections for Ireland and account for the spatial variation in expected

precipitation. Using nature-based solutions in catchments for flood management could provide benefits for water quality, biodiversity and climate.

Drought Management Planning; Ireland has yet to develop Drought Management Plans as recommended under EU policy. These should be developed at catchment scale, where possible, and aim to account for spatial variation in precipitation. They should be publicly available to help inform planning decisions around water efficiency standards in new housing developments.

Governance and Policy Coherence Climate Action Plans should aim to achieve greater policy coherence and alignment of climate, water and nature objectives to support better integration of resources with optimum environmental benefits. The Water Forum’s policy document a Framework for Integrated Land and Landscape Management provides a toolkit for such an integrated catchment-based approach.

Education and Awareness There is currently a lack of knowledge of the potential impacts of climate change on water resources in Ireland

and potential subsequent implications for public health and the environment. To address this a public awareness campaign targeting the general public covering water and climate related issues is recommended. Education initiatives that focus on a bottom-up understanding of water, the processes that underpin treatment and supply,

the energy and resources required to produce drinking water should be supported.

The **policy brief** has been submitted to the Department of Housing, Local Government and Heritage and to the Climate Change Advisory Council. It was shared with the Climate Action Regional

Offices (CARO) and recommendations were submitted to Local Authorities to support the development of their Climate Action Plans. The findings and recommendations were presented at the Environment Ireland Conference at Croke Park Dublin in September.



Water treatment facilities at Vartry Reservoir.

Education and Awareness

Water Forum participated in the Sustainable Development Goals week between 23rd September and 1st October to launch its Climate Change Impacts on Ireland's Water Resources policy brief and to share the panel discussion on the research findings about the impacts of climate change on water quality and quantity in Ireland.

Link to [panel discussion on Climate Change](#)

