

## **UISCE** Domestic Water Conservation needs serious consideration to build water

## supply resilience

Despite abundant rainfall, over 12,000 lakes and 84,000 km of river channel, Ireland's water supply is under pressure. In each of the past four years, there has been some level of county-based water conservation requests or restrictions, and this became apparent at a national level with the implementation of a Water Conservation Order (hosepipe bans) that lasted a number of weeks in 2018 and again in 2020. Increasing population and industrial demands for water resources, added to the uncertainty caused by climate change, results in regional variations in availability and supply across the country. The greatest demand is in the midlands and south-east of Ireland which has the least rainfall, leaving the Greater Dublin Area particularly vulnerable to water supply issues. Irish Water has stated that 58% of their Water Supply Zones are in a supply-deficit in normal conditions with up to 66% in deficit in drought conditions. These challenges are likely to become more acute with population growth projected at 21% over the next 25 years, while the planned new abstraction licencing regime might restrict what can be withdrawn from surface and groundwater bodies for drinking water supply. Ireland's water supply infrastructure is also poor and significant investment will be needed to make it fit for purpose so that water supply is sustainable in all water resource zones across the country. Significant investment is being put into reducing the leakage rate, replacing and upgrading mains and water treatment plants, but all of this work takes years to achieve, the average project taking 7 years to complete from inception to working infrastructure.

Against this background it is interesting that water conservation measures are rarely considered. The Water Forum recently commissioned research with a view to developing a *Framework for Improving Domestic Water Conservation*. Ireland ranks 10<sup>th</sup> highest out of 25 EU countries for domestic water use, it is estimated that we use 133 litres per person per day, where 26% of that is flushed down the toilet, 28% used for bathing and 30% used in taps for cooking, cleaning, etc. 19% of the energy used in Irish homes goes to heat water. The research estimates if per capita consumption could be reduced by 20% to 110 litres per person per day there would be a savings of 0.45 kg CO2 emissions per property per day, while a third of all water related emissions could be saved by reducing water use to 80 litres per person per day. The research highlights the benefits of smart meters to monitor water use in the home as research in the UK shows that unmetered households use on average 40 litres per person more water per day than metered households. Smart meters give water consumers immediate feedback on water use so they can make informed decisions.

The key challenges to the implementation of domestic water conservation measures identified in the research is the lack of public awareness around (1) the processes that underpin water treatment and supply and (2) the amount of energy and resources required to produce drinking water and (3) the amount of water an individual uses. Essentially, there is no perceived need to save water in Ireland due primarily to the lack of information on the costs associated with supplying drinking water to homes and industry and on water supply vulnerability. As Benjamin Franklin said 'when the well's dry, we know the worth of water; the Water Forum believes that serious consideration needs to be given to water conservation measures to prevent future water shortages and imposed restrictions.

Building resilience in our water supplies will be explored further in the upcoming **Eco Eye Programme** to be broadcast on **RTE 1 on Tuesday 1**<sup>st</sup> **March at 7pm.** The <u>research report</u> is available on the Water Forum website.

## **Note to Editors**

An Fóram Uisce - The Water Forum was established as a statutory body in June 2018 to facilitate stakeholder engagement and debate on issues relating to water as a resource, water quality, rural water concerns, issues affecting customers of Irish Water and issues associated with the implementation of the Water Framework Directive.

The Forum consists of 26 representatives from a wide range of organisations with direct connections to issues relating to water quality. These include consumer, community and water sports groups, business and trade unions, environmental sector, Irish Water consumers, the group water scheme sector and a range of other sectors including education, agriculture, fisheries and forestry.

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