

The Water Forum
– An Fóram Uisce

A stakeholder body
influencing water policy



AN
FÓRAM
UISCE

Case Study:

Water Conservation in Ireland



The Water Forum was set up as a stakeholder body in 2018 to advise on water policy. The Forum has 27 members representing 16 sectors of society that bring different perspectives on how water should be managed.

Despite Ireland being perceived as a 'wet' country, the greatest demand for water is in areas where there is least rainfall. In addition, demand for water is increasing from a growing population and expanding economic needs. Climate change impacts will further exacerbate the challenges in water supply. In 2018 and again in 2020, Irish Water (Uisce Éireann) issued two national water conservation orders (hosepipe bans) the former lasting 4 weeks and the latter 6 weeks in duration owing to extended dry spells. As one of the Forum's statutory functions is to advise on water conservation, we took the following steps to formulate a position.

Science to Policy

The Water Forum commissions research to ensure policy recommendations are based on the latest science and data. In 2021, we commissioned research on domestic water conservation in Ireland, which was completed by Dr. Sarah Cotterill, University College Dublin. This report titled, *A Framework for Improving Domestic Water Conservation in Ireland* presented 10 policy recommendations including:

- Establish a national water conservation team to develop and implement a national water conservation strategy in Ireland.
- Rethink water education to support a bottom-up understanding of water linked to the Irish curriculum
- Update building regulations in Ireland to specify total water use per building and maximum ratings for fittings.

Stakeholder Engagement

Following presentation of the research to members of the Water Forum, the Forum hosted two workshops to discuss the policy recommendations in more detail. The first workshop focused on developing a national strategy for water conservation and the recommendation to update building regulations to include water efficiency targets. Attendees at the workshop included officials from the Department of Housing, Local Government and Heritage (including representatives from water policy and building regulations), the Irish

Green Building Council, Uisce Éireann, National Federation of Group Water Schemes, Waterwise UK, and Water Forum members.

In 2023, the Forum hosted a second workshop to focus on the recommendation to develop a bottom-up understanding of water, linked to the national curriculum. A wide range of education stakeholders were invited to consider how water education could be improved in the school curriculum and in non-formal education settings. The Forum commissioned the development of cross-curriculum education modules to help build a bottom-up understanding of water resources, water and wastewater services in Ireland.

Four modules that comprise of lesson plans, PowerPoint presentations and a student workbook are available to download for free from the Forum's website and Scoilnet.ie (a Department of Education online resource centre for teachers).



Education workshop to consider how to rethink water education in formal and non-formal settings.

Policy Position

Building on learnings from the commissioned research and workshops, the Forum then developed a policy position on water conservation which was submitted to the Minister of Housing, Local Government and Heritage in May 2023. Recommendations included:

- Develop a committed government-led strategy for water conservation in Ireland that includes a program of actions to implement water conservation measures nationally.
- Establish a national water conservation team with a mandate to lead the development and implementation of a government-led water conservation strategy.

Following positive engagement with Minister Darragh O'Brien and Minister Malcolm Noonan in July 2023, the commitment to establish a National Water Conservation Working Group is now included in the DHLGH Water Services Policy Statement.



Water Forum members, team and Dr Sarah Cotterill presented the research and the Forum's water conservation policy recommendations to Minister Darragh O'Brien and Minister Malcolm Noonan and officials from the Department of Housing, Local Government and Heritage.

National Survey

In August 2023, the Water Forum commissioned a national survey of over 1518 water consumers to gain an understanding of water consumers knowledge of and interest in water conservation and technologies. The survey found that 74% of respondents support water conservation measures but 59% do not know how much water they use. 73% said more information would help them manage their water use. Based on these findings the Forum highlighted the need 'for education and awareness on how to increase water efficiency in the home, to take advantage of the strong consumer support for conservation'.

Cost Benefit Analysis

Following engagements with officials from the DHLGH, the Forum commissioned research in 2024 to carry out a cost-benefit analysis of setting water use targets at building scale.

This research was carried out by Dr John Gallagher and Prof. Laurence Gill of Trinity College Dublin to review and assess the value and impact of implementing water saving measures in new build homes with a view to strengthening the Water Forum's recommendation in this regard.

The research used a baseline scenario of water consumption at 110 litres per person per day (LPD) to represent a 3-bedroom, 2-bathroom, 4-person occupancy new build family home. Using Uisce Éireann data, the researchers estimated a combined cost to the State of €4.40 per m³ (1,000 litres) for water and wastewater services. Different scenarios were then assessed, initially to achieve targets of less than 90 LPD, and subsequently to deliver more ambitious targets of less than 80 LPD through adopting more ambitious water saving technologies.

The main research findings include:

- Low-to-moderate cost water saving technologies (e.g. efficient taps, showers and toilets) would add less than €180 per new-build home to developer costs.
- Reducing water usage from an estimated baseline of 110 litres per person per day to 90 litres per person per day across the planned 303,000 new homes (based on four-person occupancy) could save 2.2 million cubic metres of water per year nationally.
- This reduction would cut approximately €9.7 million in costs for water and wastewater services to 2030.
- Reduced hot water consumption through more efficient taps and showers could reduce household energy costs by up to €280 per year.
- These technologies would also reduce a household's carbon emissions by 70 and 93 kg CO₂ eq. in electrical energy savings, equating to an estimated reduction of 1.5% of the average Irish person's annual carbon emissions.

The opportunity is now

The Programme for Government 2025 has committed to building 303,000 new homes over the next five years. Uisce Éireann has indicated that water supply constraints in some areas of the country hamper meeting the Government's housing targets.

The research confirms that using water saving technologies and setting water efficiency targets for new builds would reduce water demand, relieve pressure on water and wastewater infrastructure, and it would help unlock capacity for additional housing, particularly in areas with water supply constraints.

Significance of the Forum's work

- This example of bringing science to policy through a national stakeholder body, illustrates the positive impact the Water Forum is having on national policies and water management.
- The Forum is very supportive of advancements in the establishment of the National Water Conservation Working Group, and we will provide scientific support and input from stakeholders to progress the work of this group.
- We will continue to inform and engage to make sure those who wish to conserve water in their homes are empowered to do so.