

# Newsletter

An Fóram Uisce – looking after Ireland’s water resources

Issue 07 / Spring 2022

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## Water Forum webinar

On the 3rd February 2022 the Water Forum hosted a webinar discussion on public participation in water management.

The context for the webinar was set with an introduction to the Water Forum’s Framework for Integrated Land and Landscape Management (FILLM) policy which recommends the broadening of the integrated catchment management approach to include outcomes for biodiversity enhancement and climate mitigation. The FILLM approach recommends beginning with a stakeholder ‘vision’ for the catchment. In order to explore how this might be achieved, the latest academic research

in public participation and practice for deliberative and participative democracy approaches was presented in Session One.

### Session 1

Session 1 was chaired by Dr Suzanne Linnane.

**Dr Patrick Bresnihan** defined public participation as engagement that includes communities, citizens, non-citizens and stakeholders, but also operates beyond the local scale. It

is not just about ‘raising awareness’ or encouraging behaviour change but includes a commitment to *social transformation* that carries the potential for dissent and critique of the status quo. It does not invariably lead to better environmental outcomes, but it can facilitate democratic practices by enhancing ownership, equity, and empowerment, and by fostering more sustainable uses of natural resources. He identified three pillars of public participation: equity; expertise; and scale/context. Incorporating community knowledge in decision-making through integrative and participatory approaches position local knowledge as an efficient, timely, and sustainable complement to scientific knowledge. Regarding equity, differences in power and capacity needs to be addressed. As everyone does not start from the same place, appropriate resources need to be provided so that everyone is equipped to make an equal contribution. Water governance is complex and processes that operate at national scale can prescribe local decision making and possibilities for action. To overcome this, experts, agencies and communities need to build interdisciplinary partnerships to develop and agree solutions.

**Dr Clodagh Harris** stated that ‘wicked problems’ such as water and climate needs a multi-sector and representative response to reimagine democratic practice to create a *vibrant democratic ecology*. This means widening democratic practice with greater inclusion, equity and empowerment. Deliberative democratic practice allows for reasoned discussions, whereby policies and plans are based on considered judgements of facts supported by a wide range of expert input. Deep public participation includes co-creation and co-design and co-decision making. Such approaches need full participation and representation from all of society, therefore stakeholder and community mapping, is essential to achieve such wide engagement. During dialogues and participatory events

clarity needs to be provided on who the participating stakeholders are. Discussions need to remain open and flexible with informed responses facilitated. These approaches require holistic collaboration between disciplines, sectors, different actors and methods of engagement. Facilitation needs to be respectful and there needs to be a commitment to respond on how the recommendations will be used. Essentially the recommendations and outcomes of deliberative engagements need to be embedded in the democratic systems, in catchment management that would mean within catchment management plans.

**Dr Alexandra Revez** presented a Deliberative Democracy toolkit developed as part of the Imagining 2050 project funded by the EPA. The toolkit provides practical tools for deliberative and participative processes such as Empathy Mapping, Audience Polls, Community mapping, etc. All of the approaches emphasise providing good information, considering the views of others and giving time to consider future impacts allowing for future scenario planning. The toolkit is available at [Imagining 2050 Toolkit – MaREI](#).

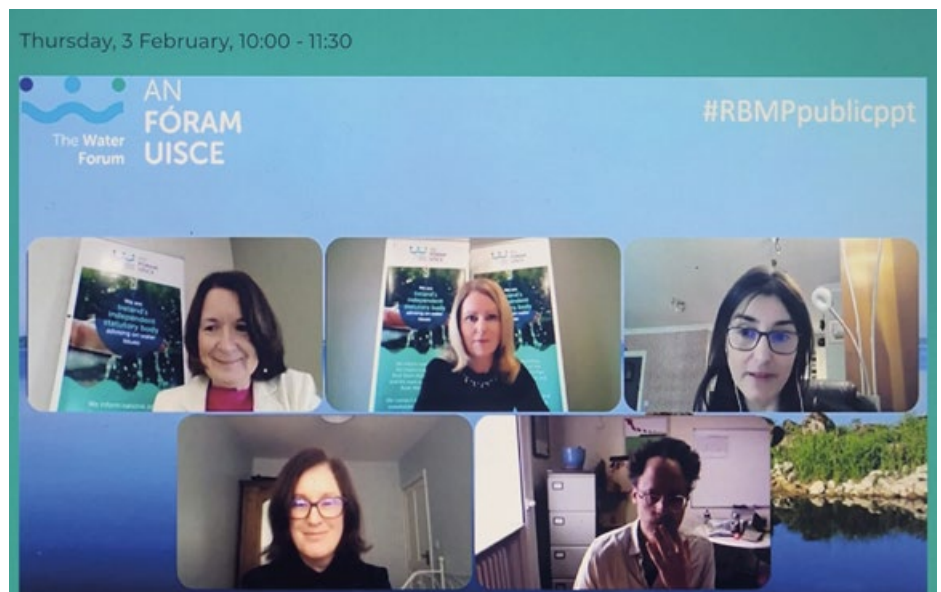
## Session 2

Session 2 explored current practice in

public participation and learnings that should be applied in the 3rd River Basin Management Plan.

**Mark Horton** is leading the development of Rivers Trusts across Ireland and has many years of experience getting communities involved in catchment management. He has used various community engagement techniques such as sense of place, exploring how the river is used, river memories and history to develop visions and action plans for catchments. He believes *top-down and bottom-up approaches are needed* and partnerships need to be created to facilitate the delivery of actions. Empowering communities to change behaviour needs meaningful catchment action planning and community groups need adequate resources for sustained activity.

**Micheál O’Cinneide** highlighted the growing community activism that is currently happening in Ireland. The iCatch network of catchment groups includes over 15 rivers trusts. Communities tend to take a holistic view that includes many aspects of a catchment including heritage, education, recreation trails, biodiversity and water quality. *A community engagement framework needs to be developed to support community*





actions; there needs to be an adequate funding model and scientific data needs to be made available to groups.

**Sean Corrigan** of the National Federation of Group Water Schemes discussed how engaging communities on biodiversity had benefits for water quality. Sean's work has identified the need to *build trust with communities and individuals*, where trust, honesty and mutual respect are key to achieving outcomes. Farmers are very willing to take action, often at their own expense, for the benefit of the environment and the wider community.

**Fran Igoe** of the Local Authority Waters Programme (LAWPRO) has a key role in community engagement and participation in the River Basin Management Plan. LAWPRO have focused raising awareness, participation and engagement primarily in Priority Areas for Action. The Community Water Development Fund has been a very useful tool in achieving community actions on the ground. A Guide for Community Groups to plan and develop projects has been created, and LAWPRO work with the agricultural sector to gain inroads in improving farming practice. LAWPRO finds water literacy levels are low and are providing Leader funded training on biodiversity and citizen science monitoring to address this

deficit. While people's time is precious there is a big interest in projects and catchment management, actions need to be underpinned by science, that is scientists, experts and communities need to work together. *To deliver meaningfully at local level Governance structures need to be strengthened with the development of a proper framework* to achieve outputs and actions.

## Q&A

Over 400 people attended the event and there was excellent engagement in the Q&A with over 80 questions posted. Unfortunately, there was not time to address them all. Based on learnings from the 2nd cycle and the webinar discussions, the supports needed by communities to deliver water quality outcomes in the 3rd cycle include:

- Catchment science needs to be discussed at local level, the issues need to be identified and solutions need to be found and actions agreed
- Structures for scientists, experts and communities to work side by side to deliver outcomes for water quality need to be put in place
- Policy support needs to be provided in the form of a Governance model with roles and responsibilities agreed
- Scientific data and funding have to be provided to active community

groups to ensure sustainability of engagement.

Significant progress has been made in the 2nd RBMP cycle with the implementation of a new governance structure for water management that allows for cross agency collaborations at national, regional and local levels. The local authority shared service provided by LAWRPO, coordinated enhanced collaborations and drove new levels of engagement with agencies at regional level and with communities at local level.

The discussions and many of the recommendations and learnings shared in this webinar have contributed to the Water Forum's submission on the draft River Basin Management Plan. The Forum would like to take this opportunity to thank all of the presenters for their time, informative and generous input to the debate.

The Water Forum recently completed its **Strategic Plan for 2022-2027** and the work programme is set firmly in the context of the current environmental crises. Key international scientific reports state we have less than 10 years to prevent catastrophic climate change. We are living through the 6th mass extinction of species caused primarily by human activity and water resources are under severe stress globally. Essentially, our current lifestyles and consumption patterns are unsustainable. While the work of the Forum is concerned with water resource management, it believes that an integrated landscape management approach needs to be taken that considers water, biodiversity, climate and soils simultaneously.

The webinar begins the work programme of the new strategy by exploring what additional structures, policy and processes will be needed to facilitate the transformative action required to address the environmental crises for water, biodiversity and climate.



# Policy submissions

Since September 2021, the Forum has had extensive dialogue and engagement with the Department of Housing, Local Government & Heritage & other agencies during the development of its submission, bringing a range of interests and different perspectives together – a core strength of the Forum. In its submission, the Forum has made recommendations in four key areas:

- An outcomes-based approach
- Governance
- Public Participation
- Pressures

The Forum members were invited to meet with and present the submission to Darragh O'Brien, TD and Malcolm Noonan, TD along with Department personnel on 31st March 2022 in the

Custom House. The members are looking forward to further engagements over the coming months to continue contributing to the development of the final plan.

The Forum would like to thank the Department of this opportunity and for facilitating, online, the members who could not attend in person.



Minister Darragh O'Brien and Minister Malcolm Noonan with Dr Matt Crowe, Forum Chair, members and staff.

## Education and awareness

### Factsheets

The Forum is preparing a series of introductory Factsheets to the Water Framework Directive, an Introduction to the River Basin Management Plan and more are forthcoming in the coming months. Please circulate these to your networks.

The Introduction to the Water Framework Directive Factsheet is available [here](https://www.thewaterforum.ie).

**Factsheet 1**

### Water Framework Directive (WFD)

The national stakeholder body representative of stakeholders with an interest in the quality of Ireland's waters.


**Introduction to the Water Framework Directive (WFD)**

The Water Framework Directive (Directive 2000/60/EC) is EU legislation that regulates water management in Europe. Its main objective is to protect water quality in lakes, rivers, groundwaters and coastal waters and enhance freshwater resources, with the aim of achieving 'good ecological status' of all waters within the EU. Member states are required to set out how they will achieve these objectives in River Basin Management Plans.


Achieving good ecological status involves meeting certain standards for the ecology of water habitat, chemistry and quantity of water. The percentage of EU waterbodies not in good ecological status or potential is shown in Figure 1.

In order to determine the ecological status of water, member states are required to establish and implement water monitoring programmes. The Environmental Quality Standards Directive (Directive 2002/90/EC) and the Groundwater Directive (Directive 2006/118/EC) set the quality standards of the WFD.

The Environmental Protection Agency has responsibility for monitoring the ecological status of rivers, lakes and coastal areas in Ireland and publish these findings annually in water quality reports, such as the 2019 Water Quality in Ireland Report.



**Figure 1.** Percentage of EU waterbodies not in good ecological status or potential per river basin district. Source: [www.eea.europa.eu/en/press/press-releases/2020/04/04-2020-04-01](https://www.eea.europa.eu/en/press/press-releases/2020/04/04-2020-04-01)



[www.thewaterforum.ie](https://www.thewaterforum.ie)

**Factsheet 2**

### River Basin Management Plan

The national stakeholder body representative of stakeholders with an interest in the quality of Ireland's waters.

**Introduction to the River Basin Management Plan**

The EU legislation that regulates water management in Europe is the **Water Framework Directive (WFD)**. Its main objective is to protect water quality in lakes, rivers, groundwaters and coastal waters and enhance freshwater resources, with the aim of achieving 'good ecological status' of all waters within the EU. Ireland's **3rd River Basin Management Plan** will outline Ireland's plans over the next 6 years to protect the water bodies with good ecological status and to restore waterbodies that do not meet good ecological status.

**Ireland's river catchments**

A river catchment (also called river basin) is the area of land drained by a river. For management purposes, Ireland's waterways are broken down into 46 catchment management units. These are made up of 585 sub-catchments containing 642 waterbodies (Table 2). A water body is an individual unit of a water feature used for monitoring and planning purposes. It is groundwater that could be part of an aquifer. For surface water it could be part of a stream, river, estuary or stretch of coastline. A map of the 46 catchment units is available here.

**Table 2. Regulation and number of waterbody types**

Waterbody type	No. of waterbodies
River	5,592
Canal	38
Lake	822
Coastal	112
Transitional	195
Groundwater	104
<b>Total</b>	<b>6,863</b>


**Water quality in Ireland**

Water quality monitoring is carried out by the Environmental Protection Agency (EPA). Water quality is assessed against the standards and environmental objectives set out in the EU Water Framework Directive. Surface waters are assessed in terms of their ecological status and groundwater is assessed in terms of chemical status (Figure 3).

Further details are available at [www.epa.ie/information/monitoring\\_assessment/freshwater\\_monitoring/water\\_quality\\_in\\_ireland-2015-2018.php](https://www.epa.ie/information/monitoring_assessment/freshwater_monitoring/water_quality_in_ireland-2015-2018.php)

**2015-2018 WFD Surface Waters Ecological Status**

- High
- Good
- Moderate
- Poor
- Bad



**Figure 3.** A map showing distribution of water quality in Ireland according to the WFD.

[www.thewaterforum.ie](https://www.thewaterforum.ie)

# Research: Water conservation

The Joint Oireachtas Committee in 2017 recommended that water conservation should be embedded as a principle of water policy in Ireland, encouraged by incentivising savings and discouraging wastage. The implementation of national Water Conservation Orders (hosepipe bans) in 2018 and again in 2020 along with additional local and regional water supply restrictions such as reduced pressures and night-time restrictions prompted the Water Forum to commission research on the mechanisms needed to best encourage and facilitate domestic water conservation measures in Ireland. Dr Sarah Cotterill from UCD and Dr Peter Melville-Shreeve from the University of Exeter completed the research and

presented their findings in a report titled *A Framework for Improving Domestic Water Conservation*.

Population growth, increasing demand and the effects of climate change are putting Ireland's water resources under pressure. Irish Water have reported that more than half of their 539 water supply zones are in deficit in normal weather conditions and 66% are in deficit in summer drought. Despite this, the research has identified that a key challenge to water conservation in Ireland is that there is no perceived need to save water as there is regular and ample rainfall and large areas of lakes and rivers. There is also a lack of awareness of water supply scarcity and

vulnerability; the amount of energy and resources required to produce drinking water; the amount of water an individual or household uses and of the processes that underpin water treatment and supply. While Ireland's water infrastructure is being upgraded the population is projected to increase by 26% in the Greater Dublin area and 21% nationally in the next 25 years, while climate change will result in drier summers and longer periods of drought.

Saving water has societal, environmental and economic benefits. 19% of home energy use is to heat water and a 20% reduction in water use nationally would save hundreds of thousands of tonnes of GHG emissions annually. Reduced



The Forum would like to congratulate Dr Sarah Cotterill on receiving the prestigious UCD Nova Award for this research and the Forum's research lead, Dr Triona McGrath who managed the work.





water use also reduces wastewater discharge thereby mitigating wastewater capacity issues and resulting in treatment cost reductions.

32% of drinking water supplied by Irish Water is for domestic use. The majority of Irish people have no idea how much water they use each day and while CSO figures estimate per person water use at 133 litres per day, approximately 26% of that is used to flush the toilet. The report states that smart metering can be an impactful measure for water conservation with research from the UK showing that metered households use 20% less water than unmetered households.

There are many simple domestic water saving technologies available including toilet cistern bags, shower timers and aerated taps and showerheads. Water

companies in the UK distribute these free of charge to encourage water efficiency and the recommendation is that a number of such devices are used to achieve greatest impact.

Greywater reuse or community level rainwater harvesting has been found to deliver significant savings, up to 100 litres per property per day. In some areas of the UK where water demand is high relative to supply, planning and building regulations specify restrictions on per capita consumption. Additionally, greywater reuse technologies are shown to be very effective particularly in multi-occupancy buildings.

The report states that stronger measures are needed for effective water conservation such as revised building regulations with minimum fitting standards and a water labelling

scheme linked to energy efficiency. The research finds that mandatory labelling schemes are more effective than voluntary schemes, and Government-led schemes have the best outcomes. The recommendations include that Building Regulations are updated to specify total water use per building and maximum ratings for fittings; and that water use should be included in the Building Energy Regulation (BER) Certificate to align water and energy efficiency at building scale.

Importantly, educational campaigns can lead to a longer and deeper change in behaviour than traditional policy instruments. However, key barriers will have to be overcome:

- Insufficient information on personal water use (installation of smart meters)
- Insufficient information on water scarcity (awareness initiatives)
- Difficulty changing habits (technology/policy incentives and water labelling)

With the lack of perceived need to save water due to the dearth of information on water scarcity or water supply vulnerabilities, there will be no incentive to do so. The report recommends rethinking water education to support a bottom-up understanding of water. A thorough understanding of the processes that underpin water treatment and supply, the energy use and resources required to produce drinking water needs to be delivered and ideally linked to the national curriculum.

The Water Forum will work to progress these policy recommendations over the coming months.

**A Framework for Improving Domestic Water Conservation in Ireland Research Report**

**Policy recommendations for Improving Domestic Water Conservation in Ireland**