



SUBMISSION TO IRISH WATER

Public Consultation on the Regional Water Resources Plan for the South and West Region.

August 2022

Contents of the Submission

Introduction	3
Scope of the submission	3
Demand Management / Water Conservation	4
Future-proofing water services.....	6
Drought Management Plans	6
Flood Management Plans	7
Planning for Sea Level Rise	8
Planning for Future Population and Economic Growth	8
Sustainable provision of high-quality water services	9
Data transparency.....	10
Summary of Recommendations.....	11

Introduction

The Water Forum (An Fóram Uisce) was established in June 2018 in accordance with the provisions of Part 5 of the Water Services Act 2017. The Water Forum is the national statutory body representative of stakeholders with an interest in the quality of Ireland's water bodies. The Water Forum consists of 25 members including representatives from a wide range of organisations with direct connections to issues relating to water quality and public water consumers. Approximately 50 different organisations were involved in the nomination of members.

The Water Forum welcomes the wide scope of work undertaken by Irish Water (IW) to develop the draft Regional Water Resources Plan (RWRP) for the South and West Region (herein referred to as 'the draft Plan'). The Forum welcomes the opportunity to respond to the public consultation.

The draft plan is significant for both environmental and socio-economic development in the southwest region over the coming decades. Population growth, climate change, aging infrastructure and spatial-economic changes are increasingly stressing the water resources, and IW is challenged to reverse the results of previous approaches and support increasing needs with limited resources, while facing a number of data gaps.

Scope of the submission

The primary scope of the Forum's submission aims to balance the need for urgency around actions to provide water supply where it is needed, increase the resilience in water supply and water quality in the South and West Region, while minimising any environmental impacts of abstractions along a catchment.

In the National Water Resources Plan (NWRP), Irish Water proposed three key pillars, stating *"together these pillars will enable Irish Water to optimise our capital and operational solutions to achieve the best outcomes and react to emerging issues"*. These three key pillars of Lose Less (reducing leakage), Use Less (promoting and supporting water conservation) and Supply Smarter (developing the right combination of infrastructure that provides a sustainable, connected, resilient, long term water supply where it's needed without negatively impacting the environment), have each a role to play in achieving sustainability and resilience in water supply across the South and West region. The Forum is concerned about sufficient inclusion of the Use Less Pillar in the draft Plan. Approaching these pillars in a more holistic way, could result in simultaneous improvements at many levels.

Please note specific questions presented by Irish Water for the public consultation have been included in the relevant sections.

Demand Management / Water Conservation

Section 4 and Section 7 of the draft RWRP-SW, and the Study Area Technical Reports (Appendices 1-3), set out solutions we can undertake to address some of these Needs in the interim, while we develop the Preferred Approaches. Do you have you any comments on this?

It is the Forum's view that IW needs to place a stronger emphasis on water conservation in the South and West Regional Water Resources Plan (SW WRP), given the deficits in the supply demand balance (SDB), the future challenges (climate change, population growth, exploitation of nearest resources, inadequate infrastructure) and the current levels of energy used by IW¹. While the Forum acknowledges that Section 5.3 in the Regional Plan mentions the Use Less Pillar and water conservation, the Forum is of the view that this is Section is short and weak. Despite 'Use Less' being one of the three pillars proposed in the NRWP, there is little focus on water conservation measures within the draft Plan. The Forum is supportive of the statement *"The Use Less pillar focuses on activities to help us to understand water use habits, influence behaviour, encourage change and to promote the use of water efficient devices and appliances."* However, the Forum is of the view that the 6 bullets on Page 124 outlining the current water conservation activities, lacks detail and ambition to support this statement and drive the Use Less Pillar of the Plan. The Forum recommends that efforts to improve water conservation should occur simultaneously to the proposed increases in interconnectivity between the water resource zones (WRZs) in the region.

In 2021 the Water Forum commissioned research on *A Framework for Improving Domestic Water Conservation in Ireland*, (Cotterill and Melville-Shreeve, 2021)²; the research introduced issues around water scarcity in Ireland and the common misconceptions about water availability. Ten policy recommendations were proposed as part of this research where a number of recommendations are relevant to IW and the Use-less Pillar and the Forum recommends they are incorporated into the Regional Plan:

- Strengthen water education to support a bottom-up understanding of water (from the processes that underpin treatment and supply, to the energy and resources required to produce drinking water), to bring the necessary behavioural change around a more reasonable water resources management.
- Initiate an awareness campaign to highlight water scarcity in Ireland and potential future threats on our water supply. Educational campaigns can lead to a longer and deeper change in behaviour than traditional policy instruments, so they are considered necessary for the public to understand the challenges and the seriousness of the situation, as well as the benefits for changing certain perceptions and habits.
- The research recommended that a National Water Conservation Team is established, comprised of all agencies and partners responsible for water, to share best practice, skills and knowledge in Ireland. The Forum suggests IW will have a leading role in this team once established, along with the Water Forum.

¹ IW are the largest single user of electricity in Ireland and therefore should be considering all ways to reduce this; water conservation, i.e. less demand from users, less treatment, less pumping, less leakage, less energy is an obvious example (Cotterill and Melville-Shreeve, 2021).

² Cotterill and Melville-Shreeve, 2021; [A Framework for Improving Domestic Water Conservation in Ireland - Research Report - An Foram Uisce \(thewaterforum.ie\)](https://www.thewaterforum.ie)

- Introduce smart metering as a non-pricing strategy to raise awareness of how and where water is used – this could be considered for a pilot project for a community in Ireland to determine if it has a positive impact on water use.
- Identify funding for retrofittable water-saving kits which should be provided free of charge to all domestic households – this could be considered for regions in the South West which already have supply demand issues.

Furthermore, there is still poor communication around water scarcity and droughts in Ireland. Research commissioned by the Forum (Antwi et al. 2021)³, analysed how drought and water scarcity were communicated by different bodies in Ireland, which found that “water scarcity” and “shortage” in describing drought impact on Ireland's water resources were rarely used. One of the key recommendations from this research is for IW to improve their coverage of drought events to increase public interest and conservation action. The Forum recommends that IW increase their communications and education strategies to increase awareness of water scarcity and drought in Ireland, as a proactive measure rather than in crises management. The Forum is willing to support Irish Water in these efforts.

In order to increase efforts on community engagement and demand management, the Forum recommends IW should increase investment in community engagement through the inclusion of community liaison officers across the country, which will support awareness campaigns and allow two-way communication between IW and the public. This would allow communities to be involved and co-create community projects for water conservation, supporting an integrated approach to water management and source protection initiatives. Furthermore, the Forum recommends that IW develops local community plans to increase knowledge around water scarcity issues in the region and ways the community can support water conservation measures in the plan.

The Forum welcomes future engagement and collaboration with IW in relation to water conservation initiatives. Water conservation is a central pillar of the Forum’s Strategic Plan, where one of the Strategic Goals is to ‘advocate for the need for and benefits of meaningful public engagement and education on water resource management’. Therefore, the Forum would be happy to support IW in future initiatives and communications around water conservation.

Recommendations – Demand Management and Water Conservation

- Enhance water education to support a bottom-up understanding of water (from the processes that underpin treatment and supply, to the energy and resources required to produce drinking water).
- Initiate an awareness campaign to highlight water scarcity in Ireland and potential future threats on our water supply as a proactive measure for demand management, rather than crises management.
- IW should establish community engagement liaison officers who could lead

³ Antwi, H.S., Linnane, S., Getty, D., Rolston, A. (2021). Communicating water availability to improve awareness and the implementation of water conservation measures in the Republic of Ireland. [Communicating-water-availability FULL-REPORT-1.pdf \(thewaterforum.ie\)](https://www.thewaterforum.ie/wp-content/uploads/2021/11/Communicating-water-availability-FULL-REPORT-1.pdf)

community engagement, increasing communication between IW and the public and supporting water conservation measures.

- Pilot a smart metering programme as a non-pricing strategy to raise awareness of how and where water is used in the home, this data could also be very valuable to IW in planning and developing future information campaigns.

Future-proofing water services

Section 3 of the draft RWRP-SW and each of the Study Area Technical Reports (Appendices 1-3) outline the Need in terms of water quality, quantity, sustainability and resilience across the region and in each of the Study Areas. Do you have any comment on the Need (Deficit)?

Drought Management Plans

During the low rainfall events of 2018 and 2020, a number of supplies in the South West Region were severely impacted, despite the fact that these events were not defined as severe based on historical records due to its short duration. Customers experienced reductions in water pressure and some temporary loss of supplies, principally as a result of a lack of capacity in existing infrastructure.

Now in August 2022, there are 40 water supplies currently at risk from drought conditions, 5 of which are in Cork and 3 in Kerry⁴, where IW is implementing measures to ensure continued water supply. Some of these, including 60,000 customers in Kerry, have overnight restrictions in place. There are an additional 60 supplies being closely monitored to ensure normal supply is maintained in summer and into autumn. IW have seen noticeable increase in water usage in seaside resorts and agricultural areas and expect demand to remain high through August.

In 2019 the Department of Housing, Local Government and Heritage (DHLGH) developed a sectoral climate change adaptation plan for water⁵, which outlined the future projections of climate change in Ireland (Page 8); this reported projected decreases in summer precipitation, with increased frequency/duration/magnitude of summer dry/drought periods. It is therefore crucial that our water service providers develop detailed drought management plans, specific to different regions, to increase resilience to supply for the future.

The Forum is aware of Appendix E in the NWRP which outlines a high-level overview of drought management with IW. The Forum is of the view that there should be detailed Drought Management Plans specific to the South West region, included in the South and West Regional Plan. The European Commission stated that IW should develop Drought Management Plans as part of their NWRP^{6,7}, which is still currently not addressed. The Forum recommends that IW add an urgent action in the Regional WRP to develop these Regional

⁴ [Conserve water to protect essential supplies as hot spell continues | News | Irish Water](#)

⁵ [dhplg_sectoral_adaptation_plan_final_en.pdf \(old.gov.ie\)](#)

⁶ https://ec.europa.eu/environment/water/water-framework/pdf/5th_report/SWD_2021_250.PDF

⁷ <https://www.eureau.org/resources/briefing-notes/5111-briefing-note-on-the-impact-of-drought-on-drinking-water/file>

Drought Management Plans. These plans should be made publicly available and indicate how much capacity there is throughout the region during extended drought periods.

The Forum acknowledges that IW have outlined the learnings from the 2018 and 2020 events in the regional plan (Section 2.4). However, the learnings presented are more crises management (reactive) as opposed to proactive measures to reduce the impact of the crises. The Forum is supportive of the activity outlined in Box 2.5 (Page 48) for “Tracking drought indicators and planning responses and activities”. The Forum recommends that there is early intervention in response to these indicators in attempt to reduce the extent of the crises, rather than planning for crises management. The proposed “Communication campaigns to promote water conservation;” should be initiated early to inform the public about potential water shortages, highlighting water conservation measures, and it should be targeted to communities, industries and stakeholders who will be most affected.

Recommendations – Drought Management;

- Drought Management Plans specific to each water resource zone (WRZ) should be included in all Regional Water Resources Plans.
- Drought Management Plans should be made publicly available and indicate how much capacity there is throughout the region during extended drought periods.
- Proactive and early intervention, with communication campaigns to promote water conservation should be initiated in response to tracking drought indicators in attempt to reduce the extent of the crises, rather than planning for crises management.

Flood Management Plans

As acknowledged in Section 2.4.3 of the Regional Plan, climate projections over the next century indicate an increased likelihood of river and coastal flooding in Ireland (EPA, 2020, EPA 2021). The Regional Plan refers to the Flood Risk Management Plans required by the Floods Directive and the responsibilities of the OPW with the Catchment Flood Risk Assessment and Management (CFRAM) Programme. The OPW flooding maps, clearly indicate a high possibility of flooding in many areas across the South West region. The Flood management plans of the OPW referenced in the text, do not refer to any management relevant to water treatment plants or disruption to water supplies.

The Forum therefore recommends that Flood Management Plans, specific to the water resource zones and water treatment plants of the South West region, should be included in the South West Regional Plan.

Recommendations – Flood Management

- Flood Management Plans, specific to the water resource zones and water treatment plants of the South West region, should be included in the Regional Plan. Training should be provided to personal on requisite procedures.

Planning for Sea Level Rise

Any proposed upgrades to infrastructure in the Regional Plan will be long-term investments, going beyond the 25-year horizon of the draft Plan. A level of futureproofing is recommended to be considered into the plan, particularly in the face of climate change as part of the design studies of those works (e.g. design life usually considered for 50 or 100 years for such works). This will have multiple benefits, economically and environmentally, and also related to the future resilience of the infrastructure assets. The consideration of sea level rise should be included in IW's planning processes for upgrades of water treatment plants in coastal areas of the South West Region to support resilient water services in the long term (i.e. >100 years).

Recommendations – Sea Level Rise

- Sea Level Rise Management Plans specific to relevant WRZs should be included in Regional Water Resources Plans and considered in the development of new capital projects.

Planning for Future Population and Economic Growth

In Section 2 of the draft RWRP-SW we set out information on the current situation in the Region in respect of the population growth and economic development and how we considered this in our water resource planning approach. Do you have any comments on this?

The overall regional population growth for the South West Region is 33% from 2019 to 2044. The Cork and South Kerry study area has the highest projected growth rate at 40%, which is driven by the Cork City forecast growth of 54% by 2040.

The link to the Overview of Water Treatment Plants (WTPs) provided with the consultation documents is very useful; [WTP Overview SW.pdf \(water.ie\)](#), which gives a list of the WTPs in the region, details of the plants, with a rating for SDB deficit. It also indicates the interim and long term plans for the WTPs. The Forum is also supportive of the water supply register available on IW's website, which gives an indication of the available capacity for water supply in each Local Authority area, e.g. for Cork [WSCRs Web-Version Cork.pdf \(water.ie\)](#). The Forum would like clarity on whether this information is used by Local Authorities in the review of planning applications, or if the responsibility lies with IW to assess whether new applications should be granted planning based on water supply capacity in a region.

In relation to the process of new connection enquiries carried out by IW as part of the planning process with Local Authorities, the Forum recommends that IW provide further detail on its role on regulatory control of growth, development and expansion of activities (i.e. their capacity to refuse new domestic and non-domestic connections depending on the necessary infrastructure required to allow their optimum water allocation, ensure their sustainable operation and provision of high-quality water services), to ensure there is transparency and accountability for water sustainability in the planning process.

The Forum acknowledges that IW have both a role in economic growth and environmental protection, and is therefore of the view that there should be more transparency in where trade offs are required between the two.

Recommendations – Population and economic growth

- IW should provide further detail on its role on regulatory control of growth, development and expansion of activities to ensure transparency and accountability for water sustainability in the planning process.
- IW should consider working with planners in the application of restrictions on water use in developments (such as maximum use per household per day) where there is or is likely to be supply deficits in the future.

Sustainable provision of high-quality water services

Section 4 and Section 7 of the draft RWRP-SW, and the Study Area Technical Reports (Appendices 1-3), set out solutions we can undertake to address some of these Needs in the interim, while we develop the Preferred Approaches. Do you have you any comments on this?

The Forum recommends that a more holistic, integrated approach is adopted in the context of Integrated Catchment Management and Framework for Integrated Land and Landscape Management (FILLM)⁸, which should include source protection measures. This could reduce dependencies on infrastructural and treatment solutions to achieve adequate water quality (i.e. end of pipe approaches). The Forum recommends that IW outline the necessary engagement with leading agencies to address these source protection measures, with more consideration of ‘front of pipe solutions’. This transition will require skilled personnel; the Forum therefore recommends the IW increase their staff capacity to include scientists with expertise in integrated catchment management.

The Forum supports that IW will invest in their human asset base to improve their Level of Service; i.e. having sufficiently trained personnel to manage infrastructure and to provide the best possible services. Following on the transition from the current service level agreements with Local Authorities to IW being the single public utility, the Forum recommends that IW outline their planned quality control of the production of drinking water, in particular the quality control for the operation of water treatment plants. For example, the Forum recommends water treatment should be akin to food service provision and there should be regional quality control managers who can provide oversight to quality control and quality assurance across water treatment plants in a region.

⁸ The Water Forum (2021). Framework for Integrated Land and Landscape Management. <https://thewaterforum.ie/framework-for-integrated-land-and-landscape-management/> FILLM (Framework for Integrated Land and Landscape Management) supports a ‘whole-of-environment’ approach, agreed by AFU.

Recommendations – high quality water services

- Irish Water’s Regional Plans should adopt a more holistic, integrated approach in the in the context of Integrated Catchment Management and Framework for Integrated Land and Landscape Management (FILLM), which should include source protection measures.
- IW should increase their staff capacity to include scientists with expertise in integrated catchment management and to augment the implementation of ‘front of pipe’ solutions.
- IW should provide detail on their planned quality control of the production of drinking water and operation of water treatment plants, following the transition to Irish Water being single public utility for public water.

Data transparency

Section 6 and the Study Area Technical Reports (Appendices 1-3) of the draft RWRP-SW summarise our process for developing options to address the Needs in the SW Region. Do you have any comments on this process?

Section 7 sets out how we identify our Preferred Approach to addressing the Need at WRZ and Study Area level. The Study Area Technical Reports (Appendices 1-3) and the Study Area Environmental Reviews will set out how the Preferred Approach has been identified in more detail. Have you any feedback on this?

The Forum recommends that measures to increase the transparency in data available to or used by IW in the assessment of their proposed plans for the South West Region are included in the final Plan.

Addressing the current data limitations is crucial for having more transparent and informed decisions, in particular data gaps around catchments and water bodies, with the consideration of the broader environmental capacity (catchment-based assessments), rather than just the infrastructure capacity. Furthermore, the accumulative impacts of abstractions should be assessed in a catchment (i.e. an integrated catchment management approach) for greater resilience and environmental protection. A better estimate of the hydrological balances in WRZs, would allow the perspective of the water quantity management to change from “*Water Quantity that Irish Water can provide*” (p.5 of the assessment of need), to “*Water Quantity that each water body can provide*”.

Recommendations – Data transparency;

- IW should include scheduled actions in the Regional Plan to address current data gaps to accurately assess hydrological balances and supply-demand estimates, with a clear outline of tangible goals and timelines. Details should be included of the relevant external cooperation requirements (e.g. formal collaboration between IW and the EPA, GSI, ongoing projects such as the GW3D project).

Summary of Recommendations

Recommendations – Demand Management and Water Conservation

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- IW should establish community engagement liaison officers who could lead community engagement, increasing communication between IW and the public and supporting water conservation measures.
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