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National Water Resources Plan,
Irish Water,
PO Box 13216,
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15th February 2023

To whom it concerns,

The Water Forum is the national statutory body, consisting of 25 stakeholders, including public water consumers and a wide range of organisations with direct connections to issues relating to water quality and water services. As outlined in the Water Services Act 2017, the statutory role of the Water Forum in relation to Irish Water (now Uisce Eireann) is to make recommendations *“In relation to performance of its functions”* and *“when requested in writing by Irish Water on any policy document”*. The objective of the Water Forum responding to a public consultation of Uisce Eireann is to provide sectoral and stakeholder perspectives and input to Irish Water policies, including the interests of public water consumers.

As a measure of effectiveness of its work, the Forum has reviewed the impact of the recommendations made in its submission on Irish Water’s Regional Plan for the Eastern and Midlands Region, which indicated minimal impact of the Forum’s recommendations in the final plan. While the Forum acknowledges that Uisce Eireann has responded to many of the Forum’s recommendations in its consultation report, there has been minimal material change in the final regional plan. Members are of the view that where appropriate, additional actions should be added to the final policy document to ensure commitment to future actions and accountability. The Forum therefore recommends that for Uisce Eireann’s regional plans, actions (where appropriate) should be added to the final regional plan, rather than merely a response in the consultation report, which holds no accountability for future actions and doesn’t result in a material change in the final policy.

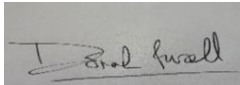
The Forum acknowledges that many of its recommendations are related to national objectives of Irish Water (e.g., water conservation, future proofing and resilience with climate change, transparency). However, the Forum is of the view Irish Water’s national strategies and objectives should be translated into implementation actions at a regional scale, where the implementation plan is set out in Regional Plans in a targeted approach specific to each region. Examples of where national objectives should be incorporated into regional plans:

- Clear goals/actions within the Regional Plans to increase water conservation efforts that involve and support local communities in places impacted by drought in recent years and areas where future population and economic growth will result in greater demand on water services. This is to show a clear commitment to implement Uisce Eireann’s ‘Use Less’ strategic objective at regional and local levels.

- There should be clear, timebound actions included in Regional Plans to complete and publish drought management plans for every water resource zone.
- Regional plans should highlight where there are regional data gaps (e.g. leakage rates, unaccounted for water), with timebound actions to address the gaps.

The Water Services Act also outlines the statutory role of the Water Forum in relation to advice on water conservation, which is also outlined in the Water Services Policy Statement 2018 – 2025. A key focus of the Forum’s submissions on Irish Water’s Regional Plans has been on water conservation, in line with Irish Water’s Use Less Pillar. The Forum is concerned with the response from Irish Water in addressing domestic water conservation in the Eastern and Midlands Region, *“It is therefore difficult at this time to assess the potential benefit of water conservation activity in Ireland”*, which is now published in the Eastern and Midlands Regional Plan. The Forum recommends that this section in other regional plans is revised, to ensure there is no doubt of Irish Water’s ambition or commitment to delivering the Use Less Pillar at Regional Scale.

Yours Sincerely,

A rectangular box containing a handwritten signature in black ink. The signature appears to read "Donal Purcell".

Donal Purcell

Senior Executive Officer



SUBMISSION TO IRISH WATER

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

February 2023

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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 North 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 northwest 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 North 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 North and West region. As outlined during the public consultation of previous Regional Plans, 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-NW, 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 North and West Regional Water Resources Plan (NW 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.

Furthermore, the draft Plan states that growth in non-domestic demand outside of Regional Growth Cities, is assumed to be offset by water efficiency. The Forum recommends that IW should provide more information on how they plan to increase water efficiency, in addition to their 'business-as-usual' water conservation initiatives.

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

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/research-report-an-foram-uisce)

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.
- 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 North West which already have supply demand issues.

The Forum acknowledges that the IW have cited this research in the published Eastern and Midlands Regional Plan, where IW supports the need for updated building regulations. However, the Forum is concerned with the statement in the EM Plan; “It is therefore difficult at this time to assess the potential benefit of water conservation activity in Ireland.” While the Forum acknowledges that it is difficult to currently quantify the benefits of water conservation activities relative to the supply demand deficit, the scientific evidence presented in Cotterill and Melville-Shreeve (2021) clearly highlights the multiple benefits of water conservation (e.g. less waste of potable water, reduced greenhouse gas emissions from both water abstraction and treatment and heating water in the home). The Forum recommends that Irish Water include actions to both increase the ambition of water conservation initiatives in the Regional Plans and identify where regional pilot projects could support IW to start to quantify the volumetric impacts on water demand.

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 expand 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. To support efforts to increase awareness of supply demand deficits in the Region, the list of WTPs in the region with their relevant SDB deficit (which is currently outlined in the link [WTP_Overview_SW.pdf](#) (water.ie) in the Appendix) should also be presented in map-based format to illustrate the areas of highest supply demand in the region. This map should be included in the final Plan but should also be used as a tool to increase awareness among communities in the Region, particularly those with the highest SDB deficits.

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 \(thewaterforum.ie\)](#)

In order to increase efforts on community engagement and demand management, the Forum recommends IW should increase investment in community engagement through the appointment of community liaison officers across the country, which will support awareness campaigns and allow two-way communication between IW and the public at local level. 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 works with local authorities and communities to develop community plans to increase knowledge around water scarcity issues in the region and identify 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.
- The list of WTPs in the region with their relevant SDB deficit (which is currently outlined in the link [WTP_Overview_SW.pdf](#) (water.ie) in the Appendix) should also be presented in map-based format to illustrate the areas of highest supply demand in the region. This map should be included in the final Plan and also to support efforts to increasing awareness of supply demand deficits in the Region.
- IW should establish community engagement liaison officers who could lead 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.
- Include actions to both increase the ambition of water conservation initiatives in the North and West Plan and identify where regional pilot projects could support IW to start to quantify the volumetric impacts on water demand.
- The Forum recommends that IW should provide more information on how they plan to increase water efficiency which is proposed to offset non-domestic growth (outside of Regional Cities), in addition to their 'business-as-usual' water conservation initiatives.

Future-proofing water services

Section 3 of the draft RWRP-NW 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)?

Infrastructure Investment and Interim Solutions

The Forum broadly supports the proposal for the construction of 12 new WTPs, upgrading capacity at 45 WTPs and improving barrier performance at 105 existing WTPs to reduce water quality risk across all WRZs in the North West Region. The Forum supports this proposed capital maintenance programme (e.g. WTPs upgrades, reservoir cleaning programmes, network cleaning) as it is particularly critical in this region since 97 of the 142 WTPs (68%) are 'At Risk' in terms of water quality, and therefore have a high risk of disruption to supply.

The Forum acknowledges that Irish Water have identified 142 short term capital maintenance solutions for all WTPs in the North West Region as interim solutions (small scale on existing infrastructure - pipes, reservoirs, networks, meters, SCADA, equipment) to maintain a sustainable water supply. The Forum supports the need for this capital maintenance to increase the Level of Service provided by Irish Water.

Furthermore, a number of group water schemes (GWS) supply water to public water schemes in the North West Region. In order to maintain and improve efficiencies in these supplies, there should be greater liaison between Irish Water, individual GWS and the National Federation of Group Water Schemes as an interim measure to strengthen the level of service and to ensure Irish Water have the most up to date information in relation proposed upgrades on these supplies.

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.

Drought Management Plans

Between 2018 and 2022, there have been multiple requirements for night time restrictions in the North West region due to supply demand issues after extended dry periods, e.g. Roundstone, Carna, Foxford and the Aran Islands.

In 2019 the Department of Housing, Local Government and Heritage (DHLGH) developed a sectoral climate change adaptation plan for water⁴, 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

⁴ [dhplg_sectoral_adaptation_plan_final_en.pdf \(old.gov.ie\)](#)

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 North West region, included in the North and West Regional Plan. The European Commission stated that IW should develop Drought Management Plans as part of their NWRP^{5,6}, which is still currently not addressed. The Forum recommends that IW add an urgent action in the Regional WRP to develop these Regional Drought Management Plans. These plans should be made publicly available and indicate how much capacity there is throughout the region during extended drought periods. While the North and West Region will likely experience less extreme drought conditions relative other parts of Ireland, 43% of WRZs in the region already have a supply demand deficit, therefore drought management plans will still be necessary to ensure resilience in water supply throughout the year.

The Forum notes that the response by Irish Water in the consultation report of the Eastern and Midlands Regional Plan, was that drought management plans will be done for every WRZ in the next iteration of the NWRP; however, the Forum is still of the view that an associated action should be added to the Regional Plans, to ensure accountability and progress towards developing these drought management plans.

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. If some drought management plans are not yet ready for the Regional Plans, an action should be added to the Regional Plan with a timebound commitment to their development, for transparency and accountability in the task.
- Drought Management Plans should be made publicly available and indicate how much capacity there is throughout the region during extended drought periods.

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

⁶ <https://www.eureau.org/resources/briefing-notes/5111-briefing-note-on-the-impact-of-drought-on-drinking-water/file>

- 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. Irish Water state that “The flood zones were informed by the OPW flood risk maps which provide estimates of fluvial and coastal flooding and provide an overview of potential flood risk considering the impacts of climate change and sea level rise.” The OPW flooding maps, indicate a high possibility of flooding in some areas across the North 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 North West region, should be included in the North West Regional Plan.

Recommendations – Flood Management

- Flood Management Plans, specific to the water resource zones and water treatment plants of the North West region, should be included in the Regional Plan. If flood management plans are not yet ready for the Regional Plan, an action should be added to the Regional Plan with a timebound commitment to their development, for transparency and accountability in the task.

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 project population growth for the North West Region ranges from 21% in smaller towns, to 53% in Galway City and suburbs.

The draft Plan states that growth in non-domestic demand outside of Regional Growth Cities, is assumed to be offset by water efficiency. The Forum recommends that IW should provide more information on how they plan to increase water efficiency, in addition to their ‘business-as-usual’ water conservation initiatives.

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. The Forum recommends that this is presented in map-based format, to indicate the areas of highest supply demand deficit in the region, which should be included as a map in the final regional plan. 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 Donegal, (<https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/donegal/>).

In relation to both population and economic growth in the North West Region, the Forum recommends that a section is included in the Plan, which outlines the roles of responsibilities of both Irish Water and other authorities (such as Local Authorities) in the review of planning applications for both domestic and non-domestic customers which require a connection to the public supply. There should be transparency and accountability on the assessment of additional connections which influence the supply demand deficit 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

- The list of WTPs in the region with their relevant SDB deficit, which is outlined in the link [WTP Overview SW.pdf \(water.ie\)](#) provided in the Appendix should also be presented in map-based format to illustrate the areas of highest supply demand in the region, and this map should be included in the final regional plan.
- 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. A section should be included in the Plan, which outlines the roles of responsibilities of both Irish Water and other authorities (such as Local Authorities) in the review of planning applications for both domestic and non-domestic customers which require a connection to the public supply.
- 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 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)⁷, 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 acknowledges that this will be a requirement under the Recast of the Drinking Water Directive, and is of the view that some information on the required catchment assessments in the North West Region, should be included in the Plan.

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.

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, and outline how Irish Water will meet the requirements of the Recast Drinking Water Directive for catchment, with source protection plans specific to the North West Region
- 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.

⁷ 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.

- 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 North West Region are included in the final Plan. Actions to address data availability and transparency should not merely be included in the Consultation Report, but also included in the final Regional Plan for the North and West Region.

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

- 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.
- The list of WTPs in the region with their relevant SDB deficit (which is currently outlined in the link [WTP_Overview_SW.pdf](#) (water.ie) in the Appendix) should also be presented in map-based format to illustrate the areas of highest supply demand deficit in the region. This map should be included in the final Plan and also to support efforts to increasing awareness of supply demand deficits in the Region.
- IW should establish community engagement liaison officers who could lead 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.
- Include actions to both increase the ambition of water conservation initiatives in the North and West Plan, and identify where regional pilot projects could support IW to start to quantify the volumetric impacts on water demand.

Recommendations – Drought Management

- Drought Management Plans specific to each water resource zone (WRZ) should be included in all Regional Water Resources Plans. If some drought management plans are not yet ready for the Regional Plans, an action should be added to the Regional Plan with a timebound commitment to their development, for transparency and accountability in the task.
- 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.

Recommendations – Flood Management

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

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. A section should be included in the Plan, which outlines the roles and responsibilities of both Irish Water and other authorities (such as Local Authorities) in the review of planning applications for both domestic and non-domestic customers which require a connection to the public supply. That IW 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.

Recommendations – high quality water services

- Irish Water's Regional Plans should adopt a more holistic, integrated approach is adopted in the in the context of Integrated Catchment Management and Framework for Integrated Land and Landscape Management (FILLM), which should include source protection measures and outline how Irish Water will meet the requirements of the Recast Drinking Water Directive for catchment, with source protection plans specific to the North West Region.
- 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.

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).