

Regional Water Resources Plan North West

Post Consultation Report



Tionscadal Éireann
Project Ireland
2040



Data Disclaimer:

Data disclaimer: This document uses best available data at time of writing. As data relating to population forecasts and trends are based on information gathered before the Covid-19 Pandemic, monitoring and feedback will be used to capture any updates. The National Water Resources Plan will also align to relevant updates in applicable policy. In December 2022, the Water Services (Amendment) (No. 2) Act, 2022 was signed into law. This act provides that, from the 31 December 2022, Irish Water will only be known as Uisce Éireann. It also provides that, from that date, all references in any enactment, legal proceedings or other document to Irish Water shall be construed as references to Uisce Éireann only. This consultation report reflects this transition from Irish Water to Uisce Éireann.

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Glossary

Term	Description
AA	Appropriate Assessment
AFU	An Fóram Uisce
ALC	Active Leakage Control
ASSAP	Agricultural Sustainability Support and Advisory Programme
BGI	Blue-Green Infrastructure
CAP	Climate Action Plan
CAP	Common Agricultural Policy
CARO	Climate Action Regional Offices
CCC	Clare County Council
CDP	County Development Plan
CIF	Construction Industry Federation
CRU	Commission for the Regulation of Utilities
CSL	Customer Side Leakage
DAERA	Department of Agriculture, Environment and Rural Affairs
DAFM	Department of Agriculture, Food, and the Marine
DBO	Design Build Operate
DECC	Department of the Environment, Climate and Communications
DHLGH-NPWS	Department of Housing, Local Government and Heritage – National Parks and Wildlife Services
DI	Distribution Input
DMA	District Metered Area
DMP	Drought Management Plan
DSS	Decision Support Systems
DWD	Drinking Water Directive
DWI	Drinking Water Inspectorate
DWR	Drinking Water Regulations
DWSP	Drinking Water Safety Plan
DYAA	Dry Year Annual Average

DYCP	Dry Year Critical Period
EAP	Environmental Action Plan
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
GSI	Geological Survey Ireland
GTGWS	Glasough - Tyholland Group Water Scheme
GWS	Group Water Schemes
HED	Historic Environment Division
Ibec	Irish Business and Employers Confederation
ICARUS	Irish Climate Analysis and Research Units
ICMSA	Irish Creamery Milk Supply Association
IFI	Inland Fisheries Ireland
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
UÉ	Uisce Éireann
UFW	Unaccounted For Water
IWAI	Inland Waterways Association of Ireland
LAP	Local Area Plan
LAWPRO	Local Authority Waters Programme
LoS	Level of Service
LSE	Likely Significant Effects
LMS	Leakage Management System
MASP	Metropolitan Area Strategy Plan
MCA	Multi Criteria Analysis
MCC	Meath County Council
MCZ	Marine Conservation Zone
MPA	Marine Protected Area
MPT	Marine Plan Team
MUR	Meter Under Registration

NASCO	North Atlantic Salmon Conservation Organisation
NBS	Nature-Based Solutions
NDD	Non-Domestic Demand
NDP	National Development Plan
NED	Natural Environment Division
NFGWS	National Federation of Group Water Schemes
NICCAP	Northern Ireland's second Climate Change Adaptation Programme
NIEA	Northern Ireland Environment Agency
NIS	Natura Impact Statement
NPDWAG	National Pesticides and Drinking Water Action Group
NPF	National Planning Framework
NPO	National Policy Objectives
NPWS	National Parks & Wildlife Service
NTS	Non-Technical Summary
NWRA	Northern and Western Regional Assembly
NWRP	National Water Resources Plan
NYAA	Normal Year Annual Average
OPR	Office of the Planning Regulator
OPW	Office of Public Works
PAs	Preferred Approaches
PCR	Public Consultation Report
PHC	Per Household Consumption
PS	Public Supply
PWS	Public Water Scheme
PWSA	Project Works Service Agreement
RBMP	River Basin Management Plan
RCC	Roscommon County Council
RSCA	Regional Seascape Character Areas
RCP	Representative Concentration Pathways
RGC	Regional Growth Centre
RPO	Regional Policy Objectives

RSES	Regional Spatial Economic Strategies
RWRP	Regional Water Resources Plans
RCC	Roscommon County Council
QI	Qualifying Interest
SA	Study Areas
SAC	Special Areas of Conservation
SDZ	Strategic Development Zone
SEA	Strategic Environmental Assessment
SCADA	Supervisory control and data acquisition
SELL	Sustainable Economic Level Leakage
SDB	Supply Demand Balance
SDGs	Sustainable Development Goals
SGWS	Stranooden Group Water Scheme
SID	Strategic Infrastructure Development
SPA	Special Protection Area
SDZ	Strategic Development Zone
UFW	Unaccounted-For Water
UKWIR	UK Water Industry Research
WAFU	Water Available for Use
WCP	Winter Critical Peak
WFD	Water Framework Directives
WG	Water Group
WI	Waterways Ireland
WRZ	Water Resource Zone
WSP	Water Supply Project
WSZ	Water Supply Zone
WTP	Water Treatment Plant
WwTP	Wastewater Treatment Plant
ZoI	Zone of Influence

1 Introduction

Uisce Éireann is developing its first National Water Resources Plan (NWRP). The NWRP is Uisce Éireann's 25-year strategic plan for Ireland's public water supplies. The NWRP allows us to move towards a safe, secure, reliable, and sustainable drinking water supply for all Uisce Éireann customers, whilst safeguarding the natural environment.

The preparation of the NWRP provides an opportunity to plan for the delivery of water services at a national level. It allows Uisce Éireann to review all public water supplies in a consistent way and to develop a clear approach to address the current and future needs of our supplies. This approach in turn will allow Uisce Éireann to understand and prioritise the required investment in water services over the short, medium and long term.

Water resources planning plays an essential part in ensuring a safe, secure, sustainable, and reliable public water supply that supports Government policy and Uisce Éireann's policy.

The NWRP contains a large amount of detailed and technical information. To ensure the plan is clearly communicated, Uisce Éireann is delivering the NWRP in two phases:

Phase 1 - NWRP Framework Plan: The Framework Plan sets out the methodology we use to identify needs across our 539 existing water supplies in a uniform way, and to review options in order to develop a "Preferred Approach" for addressing "Need" in each supply or group of supplies. The Framework Plan was adopted in May 2021 following Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and extensive public consultation. The Framework Plan and supporting documentation are available at https://www.water.ie/projects/strategic-plans/national-water-resources/2.-NWRP-Framework-Plan_For-Final-Adoption_2021_05_25.pdf

Phase 2 – The Regional Water Resources Plans: Phase 2 involves the development of four Regional Water Resources Plans that will apply the methodology in the Framework Plan. Each Regional Plan will summarise the Needs within the water supplies in the applicable region and develop a Preferred Approach to resolve them. Phase 2 is being delivered as four (4) Regional Plans for the Eastern and Midlands, South West, North West and South East regions. Each Regional Plan will undergo SEA and AA and will be subject to public consultation. The delivery of Phase 2 as four Regional Plans is to make the process more manageable and to facilitate public engagement in the consultation process. However, as each Regional Plan is delivered it will include a cumulative assessment of the Plans that have been developed and consulted upon previously.

The Eastern and Midlands Region (RWRP-EM) consultation took place between December 2021 and April 2022. Following the consultation, the plan was adopted by Uisce Éireann on 30 September 2022. The consultation report, along

with the updated documents including the RWRP-EM and associated environmental reports, are available to view at <https://www.water.ie/rwrp/eastern-midlands>.

The Regional Water Resource Plan for the South West (RWRP-SW) was the second of the four Regional Plans to be delivered. Consultation took place between June 2022 and August 2022. Following the consultation, the plan was adopted by Uisce Éireann on 28 February 2023. The consultation report, along with the updated documents including the RWRP-SW and associated environmental reports, are available to view at <https://www.water.ie/rwrp/south-west>.

The Regional Water Resource Plan for the North West (RWRP-NW) is the third of the four Regional Plans to be delivered. Uisce Éireann undertook public consultation on Phase 2 of the draft RWRP-NW between 22 November 2022 to 21 February 2023. This consultation report is a response to the submissions made as part of that public consultation process.

The fourth and final public consultation, the Regional Water Resource Plan for the South East (RWRP-SE) Region, the 12-week public consultation launched on 11 July 2023 and will run until 3 October 2023.

Once Phase 1 and Phase 2 of the NWRP comprising the Framework Plan and four Regional Water Resources Plans have been finalised, they will be treated as a unified Plan and the relevant four regional groupings South West, North West, South East, Eastern Midlands will have no ongoing application in future iterations.

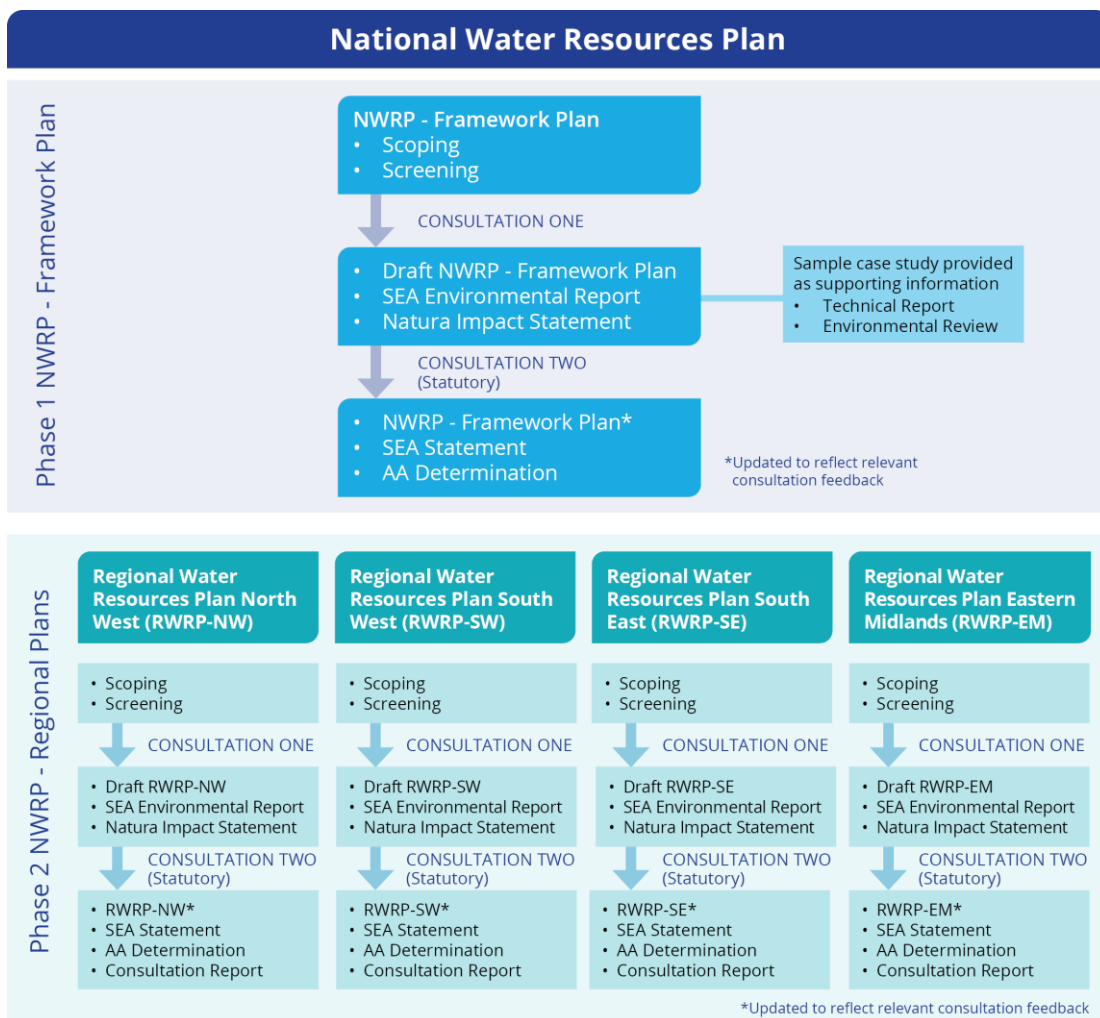


Figure 1.1 Components of the National Water Resources Plan

1.2 Benefits of the NWRP

Previously, the availability of water resources was mostly considered at a local or county level. Undertaking a national plan now means that we can provide all our customers with a more consistent level of water supply that will ensure the best sustainable use of water resources for the benefit of all.

The NWRP sets out a standardised approach to water resources and services at national, regional and local levels, in the short, medium, and long-term. This means that in the future, wherever you are in the country, when you turn on your tap, you will have a safe, secure, sustainable and reliable public water supply.

The NWRP is a long-term plan, to ensure our water resources are sustainable for future generations. A robust and sustainable water resources plan will ensure that Ireland’s water supplies will have the capacity to support future growth and encourage investment.

1.3 Why do we need a NWRP?

Water is part of our everyday lives, we need it when we turn on the taps to get a drink, to wash our dishes and clothes, to have a shower and to flush the toilet. Businesses throughout the country also depend on a reliable water supply, from

coffee shops and restaurants, to hairdressers, and farming enterprises right up to multi-national companies. It is essential to everything we do.

However, our water infrastructure is already under increasing pressure to meet the current demand for water as a result of population growth, climate change, and our changing environment. The quality of our drinking water can be affected in many ways including soil or rock types, land use practices, pollution, and even heavy rainfall. To prevent unplanned water outages, water conservation orders, reductions in water pressure, or restrictions to water supplies, we have to plan ahead. How we choose to plan our water resources today will determine the water supply we can provide now and into the future.

1.4 Consultation One

In Phase 2 each Regional Plan will undergo SEA and AA and will be subject to public consultation. Consultation One on the SEA Scoping Report for the RWRP-NW was held from 1 June 2022 to 29 June 2022. The SEA Scoping Report was provided to all environmental authorities as specified in the SEA Regulations, for the purposes of initial consultation on the scoping of the SEA for the North West Region. The feedback obtained was considered and reflected in the draft RWRP-NW, the associated SEA Environmental Report and the Natura Impact Statement (NIS).

Throughout 2022 and 2023, ongoing stakeholder engagement took place with the environmental authorities, key stakeholders and local authorities respectively. This is further discussed in Chapters 3 and 4.

Members of the public, interested parties and environmental authorities were invited to contribute to the development of the draft RWRP-NW as part of the SEA and AA process through public consultation at key stages, as outlined in the RWRP-NW Consultation Roadmap in Figure 1.2.

RWRP North West Public Consultation Roadmap

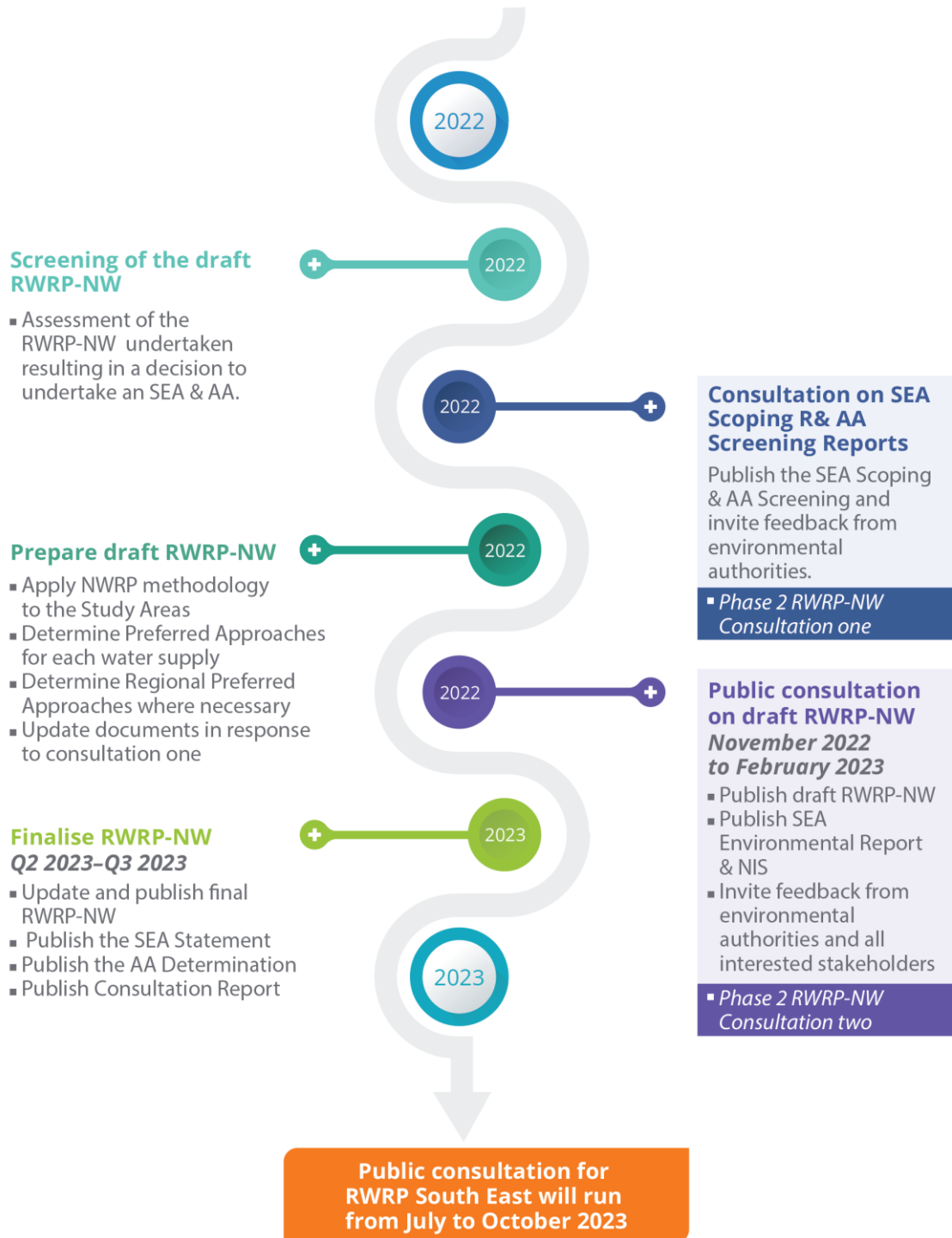


Figure 1.2 RWRP North West Public Consultation Roadmap.

2 Pre-Consultation Engagement

As part of the development of the Phase 2 RWRP-NW, a pre-consultation engagement phase was undertaken with key stakeholders. These include the statutory stakeholders identified pursuant to the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435 of 2004) (as amended) (the “SEA Regulations”) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) (as amended) (the “Habitat Regulations”). Although not prescribed under the SEA Regulations, we also engaged with the Commission for Regulation of Utilities (CRU) in the pre-consultation phase given their role as our regulator and An Fóram Uisce (AFU) due to their functions under the Water Services Act 2017.

Emails offering pre-consultation briefings were issued to a number of key stakeholders on 10 October 2022 (see Table 2.1). On the 17 October 2022 Uisce Éireann launched the pre-consultation engagement. A series of online briefings were facilitated by Uisce Éireann on the draft RWRP-NW and associated environmental reports. The purpose of the briefings in 2022 was to update stakeholders on our progress and discuss any new information available.

Please see Table 2.1 for a list of dates for all eight pre-consultation briefings completed during October and November 2022.

Table 2.1 Key Stakeholders (and environmental authorities) Pre-consultation briefings

Stakeholder	Date
An Fóram Uisce (AFU)	8 November 2022
Commission for Regulation of Utilities (CRU)	20 October 2022
Department of the Environment, Climate and Communications (DECC);	21 October 2022
Environmental Protection Agency (EPA)	17 October 2022
Inland Fisheries Ireland (IFI)	15 November 2022
Local Authority Waters Programme (LAWPRO)	21 November 2022
Northern Ireland Environment Agency (NIEA)	9 November 2022
Waterways Ireland (WI)	15 November 2022

3. Consultation Two

3.1 Introduction

Uisce Éireann undertook public consultation on Phase 2 of the draft RWRP-NW in accordance with the consultation requirements of the SEA Regulations”) and the Habitat Regulations. We have termed the Phase 2 draft RWRP-NW consultation as Consultation Two. Consultation Two also provided an opportunity to make submissions on the accompanying SEA report, and on the Natura Impact Statement (NIS) prepared pursuant to the Habitat Regulations.

Uisce Éireann’s consultation and engagement processes are in line with the public participation requirements of the Aarhus Convention, along with the requirements for public consultation for the purposes of the SEA Directive and Habitats Directive. Our public participation process includes different phases with reasonable timeframes in excess of the statutory minimums under the SEA Regulations and Habitat Regulations, allowing the public to be informed, and for the public to participate effectively during the decision-making process.

Uisce Éireann commits to continuing to provide communications and public consultation that are accessible, meaningful, transparent, proportionate and accountable for all stakeholders including those without a technical background. These principles have underpinned the approach Uisce Éireann has taken to the communications and public consultation for the NWRP to date relative to Phase 1 NWRP Framework Plan and Phase 2 NWRP, the four Regional Water Resource Plans.

Table 3.1 sets out Uisce Éireann's guiding principles for communications and public consultation that have been observed throughout the development to date of the RWRP-NW.

Table 3.1 Principles of Consultation

Principle	Explanation
Accessible	Information should be easy to access, it should be communicated in a manner that is appropriate to the stakeholder group and should avoid the use of industry jargon. The consultation process should be inclusive, and it should be straightforward to participate in the process. This includes making submissions, asking questions and attending events.
Meaningful	Consultation is a two-way process and should be viewed as a genuine opportunity for stakeholders to influence outcomes. The NWRP Team should be prepared to consider all relevant submissions

	that are received through the consultation process. Consultation should take place at identified stages in the development process, in advance of key decisions being made and feedback should be used to inform those decisions.
Transparent	Core to all engagement and communications in respect of a decision-making process is that the process is transparent, that people can understand and see the process by which decisions were made and how their input was considered. They may not agree with a decision, but they should have an understanding of the fair and objective process by which these decisions were made.
Proportionate	Undertaking communications activities that are appropriate for the specific project or plan and circumstances. Ensuring Uisce Éireann provides value for money at all times, while using its resources to make a real difference.
Accountable	Accountable decision making ensures that the relevant feedback has been taken on board and has been responded to in a fair and transparent manner. Careful record keeping of submissions and the review process are features of this principle.

Throughout the development of the draft RWRP-NW, Uisce Éireann has consulted with members of the public and all interested stakeholders in accordance with the following legislative, planning and best practice requirements:

- Aarhus Convention requirements;
- Strategic Environmental Assessment (SEA) Directive requirements;
- Habitats Directive requirements;
- Irish legislation requirements; and
- International best practice including Gunning Principals and International Associations for Public Participation Guidelines (IAP2).

3.2 Phase 2 – RWRP North West

The draft RWRP-NW was issued for consultation on 22 November 2022, with consultation closing on 21 February 2023.

In order to assist stakeholders in making a submission as part of this public consultation, we invited feedback on the following consultation questions; however, noting that any feedback was not limited to these questions:

1. In Section 2 of the draft RWRP-NW 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?
2. Within the North West Region we consider 119 water supplies (Water Resource Zones) represented across 7 Study Areas. Do you have any comments on the Study Areas?
3. Section 3 of the draft RWRP-NW and each of the Technical Appendices 1-7 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?
4. Sections 4, 7 and 8 of the draft RWRP-NW, and the Technical Appendices 1-7, 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?
5. Section 6 and the Technical Appendices 1-7 of the draft RWRP-NW summarises our process for developing options to address the needs in the NW Region. Do you have any comments on this process?
6. Section 7 sets out how we identify our Preferred Approach to addressing the need at WRZ and Study Area level. Each, of the Technical Appendices for Study Areas 1-7 (A-G) and Environmental Review for Study Areas 1-7 (A-G) will set out how the Preferred Approach has been identified in more detail. Have you any feedback on this?
7. The draft RWRP-NW looks at a range of solutions to meet the need in a WRZ or Study Area. These solutions are not limited by distance, therefore, some solutions for the WRZ or Study Area will involve interconnections across multiple supply systems. Have you any comments on the Regional Preferred Approach?
8. Do you have any comments on the Strategic Environmental Assessment (SEA) Environmental Report and Natura Impact Statement (NIS) which accompany the draft RWRP-NW?
9. We have produced a RWRP Consultation Roadmap. Do you have any comments on this?
10. How would you like Uisce Éireann to communicate with you as the RWRPs progress?

A number of communications tools were developed to promote the consultation and to raise awareness among the public, interested parties and environmental authorities and to encourage participation in the consultation process.

The following communications tools were used:

- RWRP-NW webpage on the Uisce Éireann website;

- Information brochure on the consultation available in English and Irish;
- RWRP-NW infographic;
- RWRP-NW consultation roadmap;
- Non-technical summary (NTS) of the draft RWRP-NW;
- Press releases to national and regional media;
- Media interviews;
- Newspaper adverts;
- Online briefings;
- Online public webinars;
- Social media;
- Animations, explaining water resource planning topics including population growth, balancing water supply, demand and climate change;
- Public display of hardcopy documents; and
- Correspondence and briefings with:
 - Statutory stakeholder
 - Key stakeholders
 - Elected representatives;
 - Local authorities;
 - Interested parties;
 - Media; and
 - General public.

These communications tools and channels are discussed in more detail in Chapter 4.

4. Consultation Two Promotion

4.1 NWRP Webpage

A NWRP dedicated webpage was provided on the water.ie website and went live on 13 October 2017 at www.water.ie/nwrp. A separate dedicated webpage was created with details of the Phase 2 RWRP-NW consultation, i.e., Consultation Two on 22 November 2022. An Irish version of the webpage was also made available.

A consultation animation was created as a visual aid illustrating our approach to the RWRP-NW consultation. The animation aids communication, through an alternative format to text, assisting our efforts to effectively inform as broad a

demographic as possible. An English and Irish version were created and available on the website.

The draft RWRP-NW, the SEA Environmental Report and the NIS were made available to view or download from the RWRP-NW dedicated webpage on 22 November 2022, along with all other relevant information, including the RWRP-NW consultation roadmap, the consultation information, the NTS and an RWRP-NW infographic.

Details on how to participate in the consultation were included on the RWRP-NW webpage. Submissions were invited via the following channels:

By email: nwrp@water.ie

Or by Post: National Water Resources Plan, Uisce Éireann, P.O. Box 13216, Glenageary, Co. Dublin

For the period of the initial draft RWRP-NW consultation (between 22 November 2022 and 21 February 2023) there were 1,510 page views and 1,131 unique page views of www.water.ie/rwrp/north-west

Those that visited the site spent on average 6 minutes and 28 seconds minutes on the page. The majority of pages on water.ie are visited for less than a minute. Table 4.1 outlines the number of opens of the consultation documents available on the webpage.

Table 4.1 Consultation document opens

Document	No. of openings
RWRP-NW draft Plan	520
RWRP-NW draft Plan Non-Technical Summary	73
RWRP-NW SEA Report	27
RWRP-NW NIS	17
RWRP-NW Information Brochure	0

4.2 Consultation Two Information Brochure

A consultation information brochure outlining the draft RWRP-NW, details of the consultation questions and information on how stakeholders could provide feedback on the draft RWRP-NW and associated environmental reports was published on the RWRP-NW webpage on 22 November 2022.

The brochure provided a summary of the draft Regional Plan, how the Regional Plan will be delivered and the next steps.

The information brochure was made available in both English and Irish and available on the website www.water.ie/rwrp/north-west. A copy of the English version can be found in Appendix A.

4.3 RWRP-NW Infographic

A RWRP-NW infographic was produced to be used in printed materials and on the webpage. The infographic is a helpful visual aid, which clearly illustrates water resources planning and outlines our approach to Ireland's first NWRP. The infographic aids communication, through an alternative format to text, assisting our efforts to effectively inform as broad a demographic as possible. The infographic can be found in Appendix B.

4.4 Press Release

A press release announcing the commencement of statutory consultation on the Phase 2 draft RWRP-NW, was issued under embargo to national, regional, and local media on 21 November 2022 for release on 22 November 2022. It was issued to raise awareness of the consultation amongst the general public and to increase public participation. The press release included details of the draft RWRP-NW and information on the consultation, along with links to the documentation and all necessary information on how to participate.

A reminder press release was sent on 15 February 2023, to all national media and regional media, as well as all elected reps in those counties, Uisce Éireann's social media channels and website. A final reminder, ahead of the close of consultation issued to all of the above on 16 February 2023.

The press release was also added to the news section of the Uisce Éireann website, www.water.ie/news.

A copy of the press release issued is available in Appendix C.

4.5 Media Interview and Press

Uisce Éireann spokespeople were made available for media interviews and press briefings throughout the consultation period. Six radio interviews were completed by the project team on regional radio stations in Galway and Longford.

A considerable amount of national and regional coverage was generated across all media channels throughout the consultation period. 14 print and 19 online articles were published about the Phase 2 draft RWRP-NW plan in national and regional newspapers their online editions and on radio websites.

4.6 Newspaper Adverts

Statutory newspaper adverts were placed in the Irish Independent, The Irish Examiner and the Irish Times on 22 November 2022, and the Irish Farmers Journal on 24 November 2022. The advertisements were published in national newspapers to raise awareness of the consultation across the country and to encourage participation. The advertisements advised where copies of the

documentation could be obtained or viewed, the dates of the consultation, as well as the various means of engaging with the NWRP project team.

Regional adverts were published in 12 newspapers on 22,23 and 24 November 2022 advertising the online public webinars for the draft RWRP-NW. The regional publications were:

- Anglo Celt
- Clare Champion
- Connacht Tribune
- Donegal News
- Dundalk Argus
- Leitrim Observer
- Longford Leader
- Meath Chronicle
- Northern Standard
- Roscommon Herald
- Sligo Champion
- Western People

Copies of the newspaper adverts are included in Appendix D.

4.7 Social Media

The launch of the draft RWRP-NW consultation was promoted on social media using the Uisce Éireann Twitter, Facebook and LinkedIn page, as displayed in Table 4.2 below. Promoting the consultation on these platforms enhanced the potential to inform a higher volume of people across a broad demographic.

A suite of engaging animations was developed for use on social media to explain many water resource planning topics including population growth, climate change and supply demand balance.

In total, 14 Facebook posts, 5 Twitter posts and 4 LinkedIn posts were shared, 12 of which were promoted to achieve optimum stakeholder reach. In total, 4.4 million impressions were made.

Table 4.2 Social Media

Platform	No. of posts	Impressions
Facebook	14	4.37 million
Twitter	5	8,615
LinkedIn	4	18,000

4.8 Public Display of Documents

In order to ensure the draft RWRP-NW and associated environmental reports were readily accessible, hard copies of the draft RWRP-NW, including appendices, the SEA Environmental Report, the NTS and the NIS were provided for public display in 29 local authority offices and at two county libraries for the duration of the consultation period.

The availability and location of these documents at the planning counter in local authority offices and at the county libraries was promoted through the project website, social media and newspaper advertisements. An audit of all 31 displays was undertaken by the NWRP team during the consultation period where the team confirmed that all documents were received and available for the public as advertised. In addition, hard copies and electronic copies of these reports were available upon request through the project email and phone.

A full list of the planning counters and libraries where the documents were displayed is included in Appendix E.

4.9 RWRP Freephone Phonenumber

The NWRP team introduced a dedicated phonenumber during this period of consultation to improve accessibility due to Covid-19 restrictions or for those with limited or no internet access. The freephone number, 1800 46 36 76, was publicised in national newspapers, on all of the consultation documents, and on the website. The phonenumber was staffed by the NWRP team during office hours throughout the consultation period but no calls were received.

4.10 Direct Engagement

At Uisce Éireann, we take the nature and quality of our relationships with all of our stakeholders very seriously. We have worked closely to understand their views and interests, to deliver the RWRP-NW in partnership and respond to their interests as we progress our plan. Uisce Éireann engages with stakeholders through public consultation and ongoing engagement on our infrastructure projects and plans. We commit to continuous and responsive two-way communication, at every stage of the consultation process to ensure that information is accessible, meaningful, transparent, and accountable for all stakeholders.

4.10.1 Statutory Stakeholders

We engaged with statutory stakeholders on numerous occasions throughout the development of the draft RWRP-NW Plan. These stakeholders play a key role in shaping and informing the development of the RWRPs.

As part of the development of the draft RWRP-NW, there has been pre-consultation engagement with the environmental authorities, which was undertaken as outlined in Chapter 2 of this report. On the commencement of the public consultation on the draft RWRP-NW and associated environmental reports, an email announcement was issued to all statutory stakeholders,

including the environmental authorities as required by the SEA Regulations, on 22 November 2022.

Briefings were offered during the consultation period and hard copies of the documents were distributed to the environmental authorities on request. For a full list of stakeholder briefings dates please see Appendix H.

4.10.2 Elected Representatives

Emails were issued to all elected representatives on the 22 November 2022 via the NWRP project email, including to Ministers, TDs, Senators, MEPs, and Councillors. The correspondence included details of the consultation and invited feedback on the draft RWRP-NW, NIS, and SEA Report, with the consultation questions set out. The correspondence also included links to the above documents, outlined the next steps in the process for developing the RWRP-NW, as well as the offer of a dedicated online briefing with the NWRP team and included details of an online booking form to arrange this.

4.10.3 Local Authorities

To increase awareness and encourage participation in the draft RWRP-NW consultation, Chief Executives and Directors of Services for Water / Environmental Services of all 13 local authority areas were notified of the consultation by email on 22 November 2022. Correspondence included details of the draft RWRP-NW, an outline of the consultation and the consultation questions, and all necessary information on how to participate.

A hard copy of each of the consultation documents was provided to all 31 local authorities planning counters to provide council employees and members of the public alike the opportunity to view the documents in person.

4.10.4 Interested Bodies

Interested bodies were identified through a stakeholder mapping process from existing stakeholders that Uisce Éireann engage with regularly on plans and projects and stakeholder groups who may have a valid interest in the development of the NWRP. This is to ensure that a wide range of stakeholder groups were made aware of the consultation and given the opportunity to engage and participate in the process.

An email was issued on 22 November 2022 to those identified, informing them of the details of the consultation and inviting them to give their feedback on the draft RWRP-NW Plan and associated environmental reports.

4.10.5 Uisce Éireann National Stakeholder Forum

Uisce Éireann hosts the Uisce Éireann National Stakeholder Forum quarterly, which has representations from the three pillars of sustainability: economic, social and the environment. Participants represent these sectors at a national level with effective two-way engagement occurring on specific themes.

On 23 November 2022, Uisce Éireann briefed the National Stakeholder Forum and gave an update of the public consultation on the draft RWRP-NW.

4.10.6 Public Webinars

A total of four public webinars were held over the months of January and February 2023 and 48 interested members of the public registered their attendance. Two of these webinars were held in the evening to facilitate workers and commuters.

The public webinars were promoted through press releases that issued to all regional media in the 12 counties (newspaper outlets, online media channels and radio stations), as well as to all elected representatives and on Uisce Éireann's social media channels. A copy of the press release is included in Appendix C.

Updates were made to the Uisce Éireann website and an email update was issued to all stakeholders on the NWRP mailing list. A presentation on the draft RWRP-NW Plan was given at each webinar, followed by a Q&A session with the NWRP team. A pre-recorded webinar with auto captions was updated to the website and available for those that could not attend a webinar. See Appendix G for a copy of the Q&A document.

4.10.7 Online Briefings

Extensive engagement with key stakeholders has been undertaken during the consultation period. Targeted consultation with these stakeholders ensures transparency and that all available data relevant to the draft RWRP-NW is gathered as early as possible in the process. In addition, it will help to ensure that concerns and queries raised can be addressed in a timely manner.

Table 4.3 Stakeholder Briefings RWRP-NW

Stakeholder Group	No of briefings
Local Authority Councillors	13
Interested Bodies	5
Key Stakeholders & Environmental Authorities	2
Elected Representatives	3
Public Webinars	4

4.11 Outcomes of the Consultation

All feedback received during this public consultation process on Phase 2 of the RWRP-NW was reviewed by the NWRP team and all relevant feedback has been incorporated into the RWRP-NW. A summary of the feedback received, our response to this feedback and any consequential changes made to the RWRP-NW is detailed in Chapters 5 - 15 of this report.

The SEA Statement and AA Determination adopted by Uisce Éireann outline how environmental considerations have been integrated into the RWRP-NW and how consultation influenced the development of the RWRP-NW.

5 Analysis of the Feedback

This section of the report outlines the approach taken to analyse the 39 submissions received during this period of statutory consultation, Consultation Two, on Phase 2 of the draft RWRP North West and associated environmental reports.

5.1 Methodology

Each submission received via email has been acknowledged but not responded to individually. Each submission was reviewed in its entirety by the NWRP team and summarised in this consultation report. One submission (from the National Parks and Wildlife Service) was not accepted on the basis that it was received after the consultation period closed. However, Uisce Éireann is satisfied that any comments raised by NPWS have already been addressed in the final RWRP-NW by virtue of updates made to the RWRP-SW (which was updated prior to the RWRP-NW consultation). Uisce Éireann will continue to engage with NPWS in relation to any comments or concerns held. The personal data of individuals who made submissions is not documented within this report and is being held in accordance with GDPR 2018.

Following a review of the feedback received, the key themes from the submissions which emerged were identified to assist consideration and review, and are as follows:

- Policy;
- RWRP- NW Regional Plan;
- Environment;
- Need;
- Solutions Methodology;
- Regional Plan Consultation Process;
- Plan Implementation;
- Option Types;
- Natura Impact Statement;
- Water Resource Planning; and
- Outside the Scope of the RWRP-NW

The following chapters of this consultation report comprise a summary of all submissions received under each theme followed by Uisce Éireann's response to the key points raised. Some feedback may be relevant to a number of themes and are addressed under several headings across several chapters.

The views represent the views of those who made submissions as part of the public consultation process. The issues outlined in the feedback section are in the order in which they appear and there is no bias implied by the order in which they are addressed.

5.2 Out of Scope

There were several submissions received during the consultation that mentioned topics outside of the scope of the RWRP-NW. Although not directly

related to this consultation, we have captured and summarised that feedback in Chapter 16 and have forwarded on any queries to the relevant teams in Uisce Éireann to respond.

Any feedback in relation to in-flight Uisce Éireann projects, or any other area of the Uisce Éireann business that does not relate to the RWRP-NW was shared with the corresponding project teams, details of which can be found on www.water.ie

5.3 Submission Overview

The following figures present the results of the overall analysis of the 39 submissions. Figures 5.2 and 5.3 display the themes and sub-themes mentioned as a percentage of the overall mentions.

Figure 5.2 Theme Mentions.

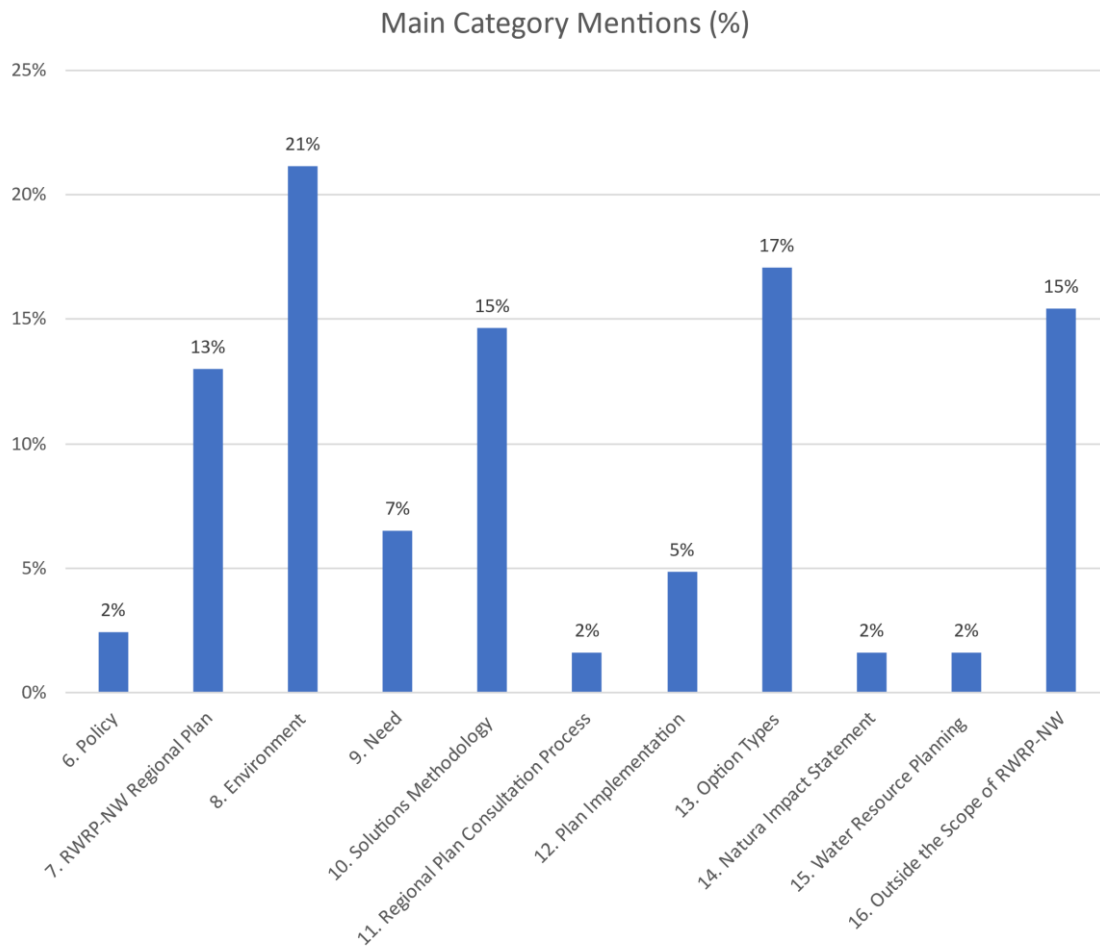
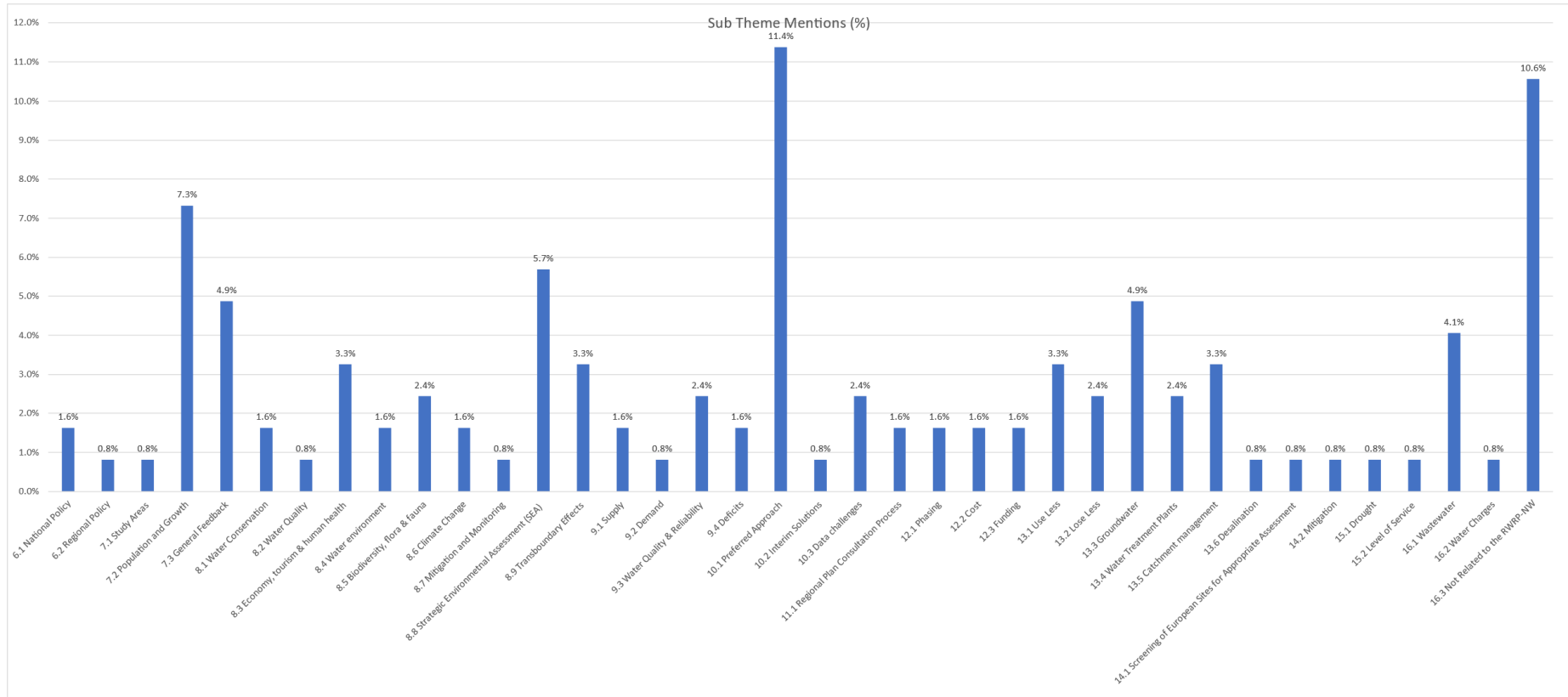


Figure 5.3 Sub Theme Mentions



5.4 Submission Process

In the following Chapters, the key references from submissions to issues under each theme are summarised. Within the overall theme, several sub-themes are identified and a summary of the relevant mentions in the submissions are detailed under each sub theme followed by our response. A ‘mention’ does not imply the sentiment of the comment, whether it was positive or negative or to what extent it was discussed in a submission. The number of mentions may, in some cases, be greater than the number of submissions received if the sub-theme was mentioned more than once in a submission. It is the number of mentions recorded overall in all 39 submissions.

Our response is of necessity set out generally speaking on a broad basis.

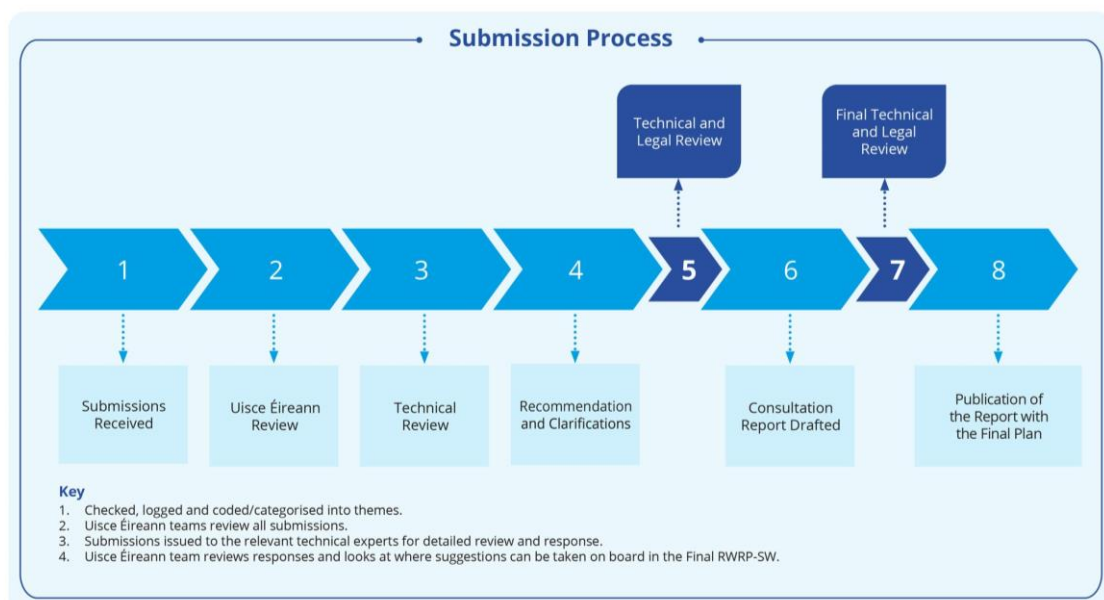
References to any consequential changes made to the draft RWRP-NW Regional Plan, any clarifications required, and any other actions considered appropriate have been included. Also included is a consolidated summary of those changes and flow-on actions in the “Conclusions” section at the end of each of the following Chapters.

It is acknowledged that there is a degree of repetition in some of the responses to the various sub-themes. This is to allow a reader interested in just one sub-theme to get a full picture of the response to it, without having to cross-reference the response given to other sub-themes.

Relevant feedback captured in the next section will be taken into account by the project team in the development of the remaining Regional Plan, South East.

Figure 5.4 Submission Process

5.5 Review of Preferred Approaches Arising from Consultation



As set out in Section 9 of the RWRP-NW the RWRP will be formally reviewed every five years. Baseline forecasts and data feeding into the NWRP will be reviewed as new information is made available. Our data is continuously improving, and it is important that we review our Preferred Approach further to the receipt of updated data. During the consultation period for the RWRP-NW we received updated data for a number of WRZs through consultation workshops and subsequent further assessment, which resulted in a review of the Preferred Approach for those WRZs.

Under the draft RWRP-NW we proposed to discontinue supplies from GWSs to seven WRZs: Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale. This was because we were unable to assess whether the existing and future GWSs abstractions will meet sustainable abstraction limits under the new licensing framework. Recognising that there will be greater clarity on the sustainability of existing and future abstractions once the new abstraction legislation and regulations are confirmed, we have selected to maintain supplies from these GWSs.

Following the review, Uisce Éireann considers that ten (10) updates to the Preferred Approach are required and three (3) additional feasible options were added into the assessment.

A summary of the updated data received and updates to the RWRP-NW are provided below.

5.5.1 Blacklion PWS (GWS Import) WRZ (Study Area B)

The WRZ preferred for Blacklion PWS (GWS Import) WRZ in the draft RWRP-NW was to develop a new groundwater abstraction and new WTP to supply the required full demand.

The Preferred Approach has now been updated to keep supplying Blacklion PWS (GWS Import) WRZ from Gowlan GWS following feedback. A new feasible option was added for Blacklion PWS (GWS Import) WRZ is to be fully supplied from Northern Ireland Water.

5.5.2 Gowna (GWS Import) WRZ (Study Area B)

The WRZ preferred approach for Gowna (GWS Import) WRZ in the draft RWRP-NW was rationalization to Gowna WRZ.

Preferred Approach has now been updated to keep supplying Gowna (GWS Import) WRZ from Erne Valley GWS.

5.5.3 Arvagh PWS (GWS Import) WRZ (Study Area F)

The WRZ preferred approach for Arvagh PWS (GWS Import) WRZ in the draft RWRP-NW was rationalisation to Gowna WRZ.

The Preferred Approach has been updated to continue supplying Arvagh PWS (GWS Import) WRZ from Erne Valley GWS. Option for Arvagh PWS (GWS Import) WRZ to be supplied from Erne Valley GWS was previously screened out but it was brought back as a feasible option.

5.5.4 Gowna WRZ (Study Area B)

The Preferred Approach for Gowna WRZ in the draft RWRP-NW was to rationalise Arvagh and Gowna (GWS Import) to the Gowna WRZ and increase the existing surface water abstraction.

The Preferred Approach has been updated to increase the existing surface water abstraction for the Gowna WRZ only.

5.5.5 Ballyhaise PWS (GWS Import) WRZ (Study Area B)

The WRZ preferred approach for Ballyhaise PWS (GWS Import) WRZ in the draft RWRP-NW was to interconnect Ballyhaise, Cavan and Ballyjamesduff WRZs and supply the deficit from Ballyjamesduff WRZ. The Preferred Approach has now been updated to continue supplying Ballyhaise PWS (GWS Import) WRZ from Annagh GWS. The Option for Ballyhaise PWS (GWS Import) WRZ to be supplied from Annagh GWS was previously screened out but it was brought back as feasible option following feedback during the consultation.

5.5.6 Cavan and Ballyjamesduff WRZs WRZ (Study Area B)

The Preferred Approach for Cavan and Ballyjamesduff WRZs in the draft RWRP-NW was to interconnect the WRZs with the Ballyhaise PWS (GWS Import) WRZ and to increase abstraction from the surface water source in the Ballyjamesduff WRZ. The Preferred Approach has now been updated to interconnect the Cavan and Ballyjamesduff WRZs and to increase abstraction from the surface water source in the Ballyjamesduff WRZ.

5.5.7 Glaslough (GWS Import) WRZ (Study Area B)

The WRZ Preferred Approach for Glaslough (GWS Import) WRZ in the draft RWRP-NW was to rationalise to Monaghan WRZ. The Preferred Approach has now been updated to continue supplying Glaslough (GWS Import) WRZ from Glaslough/Tyholland GWS.

5.5.8 Emyvale (GWS Import) WRZ (Study Area B)

The WRZ Preferred Approach for Emyvale (GWS Import) WRZ in the draft RWRP-NW was to rationalise to Monaghan WRZ. The Preferred Approach has now been updated to continue supplying Emyvale (GWS Import) WRZ from Glaslough/Tyholland GWS.

5.5.9 Monaghan WRZ (Study Area B)

The Preferred Approach update for Monaghan WRZ in the draft RWRP-NW was to rationalise Emyvale (GWS Import) WRZ and Glaslough (GWS Import) WRZ.

The PA for Monaghan WRZ has been updated to upgrade the existing WTPs for water quality improvements as WRZ is not in deficit.

5.5.10 Killeshandra PWS (GWS Import) WRZ (Study Area F)

The WRZ Preferred Approach for Killeshandra PWS (GWS Import) WRZ in the draft RWRP-NW was new surface water abstraction from Town Lake and new WTP to supply the required full demand. The Preferred Approach has been updated to continue supplying Killeshandra PWS (GWS Import) WRZ from Erne Valley GWS. Option for Killeshandra PWS (GWS Import) WRZ to be supplied from Erne Valley GWS was previously screened out but it was brought back as feasible option.

5.5.11 Pettigo Pub WRZ (Study Area B)

New option added as feasible option for Pettigo Pub WRZ. The option is to supply the required demand in WRZ from Northern Ireland Water. The Preferred Approach has not changed from the draft RWRP-NW.

5.5.12 Foxford WRZ (Study Area C)

A new Feasible Option has been included for Foxford WRZ, to supply the required deficit in WRZ from Callow GWS. The Preferred Approach has not changed from the draft RWRP-NW.

5.5.13 Castlerea WRZ (Study Area F)

A new Feasible Option has been included for Castlerea WRZ, to supply the required demand in WRZ from Lough Mask WRZ. The Preferred Approach has not changed from the draft RWRP-NW.

6. Policy

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Policy”. Within the overall Policy theme, we identified two sub themes, which we set out in Figure 6.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.



Figure 6.1 Policy Theme.

6.1 National Policy

6.1.1 Summary of National Policy Feedback

The Environmental Protection Agency (EPA) requested Uisce Éireann to ensure there is “consistency and alignment between this regional plan and the environmental objectives in other regional and national plans.” The EPA also highlighted that the RWRP-NW and its implementation should be “aligned with key relevant higher-level plans and programmes, and that it should also take account of the relevant objectives and policy commitments of the National Planning Framework, the Regional Spatial and Economic Strategies, relevant flood risk management plans and the River Basin Management Plan as appropriate.”

Ibec stated that alignment with policy is essential and noted that the Uisce Éireann Framework Plan is evidently designed with relevant governmental and environmental policy in mind. Ibec also said that it is “crucial for Uisce Éireann to monitor and analyse policy developments as the volume of policy initiatives coming down from both the Government and the EU is increasing.” Ibec recommended that the establishment of a communication forum for water management stakeholders, including Uisce Éireann, the Environmental Protection Agency, the Department of Housing, local authorities and An Fóram Uisce “would be beneficial in bridging the knowledge gap.”

6.1.2 Response to National Policy

A key objective of the RWRP-NW is to ensure that water infrastructure can support the proposed growth policies at national, regional and county level. Uisce Éireann has and will continue to ensure that any future demand projections are informed by

the most current national, regional and local demographic data available and revised appropriately (if required).

The National Development Plan (NDP) 2018-2027 sets out the investment priorities that will provide the foundation for implementation of the National Planning Framework (NPF) and the commitment to public investment reform. Uisce Éireann has used the best available information from the NPF and three Regional Assemblies when developing our demand forecasts within the NWRP. Therefore, our Framework Plan directly aligns with national policy on growth and allows us to understand the role of the public water supply in supporting future growth and development. Further details on the Policy feeding into the NWRP is outlined in Chapter 1 of the Framework Plan.

In response to Ibec, Uisce Éireann has established and fostered excellent relationships with our stakeholders including with government, the Environmental Protection Agency (EPA), local authorities and An Forám Uisce (AFU).

We meet with our stakeholders regularly through formalised briefings and meetings and on specific projects when we invite each stakeholder to take part in a dedicated project briefing. We hold quarterly updates with local elected representatives, attend Oireachtas Committee briefings and have established forums with AFU. We will continue to collaborate with regulators and key stakeholders to facilitate priority investment in water infrastructure and secure supplies across Ireland.

6.2 Regional Policy

6.2.1 Summary of Regional Policy Feedback

Meath County Council (MCC) stated that “it is important that Uisce Éireann continues to support the settlement hierarchy, settlement typologies and policy responses contained in the RSES for the Eastern and Midland Region 2019-2031.” MCC noted that the RSES for the Northern and Western Region 2020-2032 is also relevant for the RWRP NW. They commented that the “continued alignment of Uisce Éireann priorities with that of Core Strategy settlements is critical to the sustainable expansion of these settlements and will play a significant role in strengthening the urban structure of the region.”

In this regard, MCC welcomed Section 2.2.2 of the Draft Plan which noted that supporting the stated National Policy Objectives (NPOs) and Regional Policy Objectives (RPOs) within the National Planning Framework (NPF) and Regional Spatial and Economic Strategies (RSESs) is central to the NWRP. They further welcomed Section 2.2 ‘Water Quantity – Supply Demand Balance’ which stated that the forecasts for future populations were based on the National Planning Framework (NPF), RSES and information from Local Authority Planning Sections (where available).

6.2.2 Response to Regional Policy Feedback

Uisce Éireann confirms that growth projections used within our draft RWRP–NW were based on best available data from the NPF and RSES’s at the time of compiling our draft RWRP–NW. Uisce Éireann also notes that a workshop was held with each local authority planning and water services section to review data and information in advance of the publication of the draft RWRP-NW.

Uisce Éireann has and will continue to ensure that any future demand projections are informed by the most current national, regional and local demographic data available at the time of their making and revised appropriately, if required. Uisce Éireann will update the Supply Demand Balance with the 2022 census data once published. Updated data and information, such as new census data and the impact of Covid 19, will be incorporated on an iterative basis via the monitoring and feedback process in section 8.3.8 of the Framework Plan.

Uisce Éireann recognises the ongoing work between the Regional Assemblies and the local authorities over the course of the development of the Local Authority Development Plans. As these plans are finalised, Uisce Éireann will incorporate the increasingly refined growth rates into our demand forecasts through the monitoring and feedback process set out in Section 8.3.8 of the Framework Plan.

The development of the NWRP will enable us to understand the scale of strategic investment required across our supplies, and to propose the right solutions and the appropriate level of investment needed within the context of the National Planning Framework. It also enables us to identify data gaps and commit to pilot projects and schemes to improve our information. This will not only help Uisce Éireann, but also local authorities, the Government, and other bodies in terms of coordinated thinking.

6.3 Conclusions on Policy Feedback

Having carefully reviewed the submissions received on the theme of Policy, Uisce Éireann considered that no updates or further recommendations to the RWRP-NW are required. For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW

7. RWRP-NW Regional Plan

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Regional Plan”. Within the overall Regional Plan theme, we identified three sub themes, which we set out in Figure 7.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

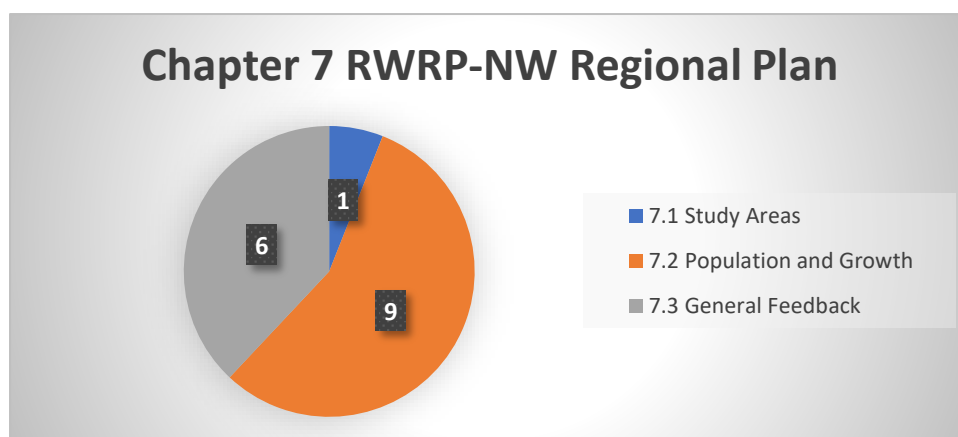


Figure 7.1 Regional Plan Theme.

7.1 Study Areas

7.1.1 Summary of Study Area Feedback

St. Patrick’s Sanctuary queried why Lough Derg was included in Study Area A while Pettigo is included in Study Area B. They also noted that “in the absence of any clarification, we would have some concern that this division in our area might impact on the best possible long-term planning.” They highlighted that “security of water supply could help sustain and underpin development plans for our organisation.”

7.1.2 Response to Study Area Feedback

The Study Area boundaries are based on Water Framework Directive (WFD) catchments and WRZ location and type (urban and rural). Further details on grouping WRZs into study areas are provided in Section 8.3.2 of the Framework Plan. The option development process that we apply to identify the Preferred Approach considers all feasible options and the locations of proposed new supplies are not constrained by Study Areas or regional boundaries.

As outlined in Section 6.1.1 of the draft RWRP-NW, we review potential solutions at three different scales - WRZ level, study area level and regional level – to allow us to explore strategic, cost-beneficial solutions to secure supplies and deliver environmental objectives at a national level.

7.2 Population and Growth

7.2.1 Summary of Population and Growth Feedback

An Fóram Uisce (AFU) noted that the projected population growth for the North West Region ranges from 21% in smaller towns, to 53% in Galway City and suburbs. They commented that the draft Plan states that growth in non-domestic demand outside of Regional Growth Cities, “is assumed to be offset by water efficiency.” AFU recommended that Uisce Éireann “should provide more information on how they plan to increase water efficiency, in addition to their ‘business- as-usual’ water conservation initiatives.”

In relation to both population and economic growth in the North West Region, AFU also recommended that a section is included in the Plan, which outlines the roles of responsibilities of both Uisce Éireann 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.” AFU highlighted that 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 UÉ as part of the planning process with local authorities, AFU further recommended that UÉ provide further detail on its role on regulatory control of growth, development and expansion of activities (i.e. capacity to refuse new domestic and non-domestic connections depending on the necessary infrastructure required to allow optimum water allocation, ensuring sustainable operation and provision of high-quality water services), to “ensure there is transparency and accountability for water sustainability in the planning process.”

AFU acknowledged that Uisce Éireann has both a role in economic growth and environmental protection and was therefore of the view that “there should be more transparency in where trade-offs are required between the two.” AFU asked that Uisce Éireann “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.”

Roscommon County Council commented that the National Planning Framework (NPF) underpins population growth that is economically, socially and environmentally sustainable. They noted that as part of Roscommon’s County Development Plan 2022 – 2028, Roscommon Town, Carrick on Shannon including Cortober are identified as key towns in the North West Region.

The Council pointed out that Roscommon and Carrick on Shannon are supported by self-sustaining growth towns such as Boyle, Castlerea, Ballaghaderreen, Strokestown & Elphin, and that Roscommon Town is projected to grow by 30%.

Ibec noted that, as a strategic infrastructure provider, Uisce Éireann plays a major role in supporting national economic growth. They further commented that “preliminary results of the 2022 Census identified population increase throughout every county on nationwide basis.” It was the view of Ibec “that the delivery of local

critical infrastructure will be more important than ever for both households and enterprises.”

Ibec believed that “future regional supply capacity must be planned in a manner consistent with the corresponding projections for population and household formation contained in Ireland’s National Policy Objectives (NPOs); Regional Policy Objectives (RPOs) within the National Planning Framework (NPF), Regional Spatial and Economic Strategies (RSEs) and National Development Plan (NDP).” They were of the view that capacity constraints on the current water and wastewater infrastructure are already apparent.

Ibec highlighted that addressing asset reliability issues identified across the distribution network within the North West region will be key. They also commented that “red tape uncertainties in planning applications and licensing applications should not obstruct delivery” and that Uisce Éireann needs to “work together with local authorities, planners, and businesses in a holistic manner.”

Ibec indicated that business needs are growing and changing. They stated, “the Importance of the NW region to national economic activity is huge given its role in nurturing indigenous enterprise and attracting foreign investment.” They believed that risks associated with weather, outages and water restrictions, should be “future-proofed by continuous improvement in the delivery of services.”

Ibec pointed out that the National Investment Programmes listed in section four of the consultation document identify critical water quality requirements aimed at addressing high risk water supplies nationally. They commented “Uisce Éireann should provide regular updates as network repairs and upgrades are continued.”

Clare County Council noted a number of Clare’s Economic & Social Strategies will require accelerated water and wastewater investment including:

Ennis - Designated Key Town in the Regional Spatial and Economic Strategy for future Government investment.

- Tánaiste Leo Varadkar recently launched Ennis 2040 Economic & Spatial Plan for Ennis – increase population from 25K to 37K, create 5,000 jobs through nine transformational projects and Ireland’s first Climate Adaptive Town, by 2040.
- New Data Centre for Ennis is currently in planning process and will require additional investment in water infrastructure.
- €10M current government investment in regeneration of Ennis town centre

Limerick Shannon Metropolitan Area – Designated for strategic government investment

- Shannon International Airport, Free Zone and Future Mobility Campus
- Shannon Town Masterplan to rejuvenate Shannon Town Centre by 2027

- South Clare/University of Limerick Economic Strategic Development Zone (SDZ) – expansion of the University of Limerick and associated industries, of significant social and economic importance to the state.
- Expected delivery of 833 social housing units across the county 2022 - 2026
- Moneypoint Green Energy Hub - Green hydrogen construction and storage, Floating Offshore Wind Farm and wind turbine construction.
- Rural Regeneration of towns and villages including Ennistymon, Scariff and Tulla

Clare County Council - Physical Development Directorate highlighted that Section 5 of the draft Plan details that “no allowance has been made in the demand projections for future non-domestic growth, outside of locations identified in the Project 2040.” The Council commented that the relevant national strategy for rural development, Our Rural Future: Rural Development Policy 2021-2025, must be considered in any demand projection in rural areas. They noted that the strategy has as a key objective to “grow regional employment by creating an environment that supports entrepreneurship and enterprise growth in rural areas.”

To support national policy in rural areas, the Council recommended that “an allowance for future non-domestic growth should be part of any future demand calculations.

The Office of the Planning Regulator (OPR) noted “as part of its evaluation and assessment, the Office seeks to ensure that future housing and other development is aligned with existing and planned water supply infrastructure, including through direct engagement with Uisce Éireann.”

The OPR said it is critical that the RWRP-NW, in planning for both the quantity and location of supply, “be based on the population growth targets set out in the National Planning Framework (NPF) and in the Regional Spatial and Economic Strategy (RSES) for the North West Regional Area. The Northern and Western Regional Assembly (NWRA) encompasses the Metropolitan Area Strategic Plans (MASP) for Galway, in addition to the Regional Growth Centres (RGCs) of Sligo, Letterkenny and Dundalk designated under the NPF.” They pointed out that although the Non-Technical Summary does not refer to the RGCs, the Office noted that “the growth targets for the RGCs and the key towns in the three RSES, and the targets for the cities from the NPF are considered in the main report.” However, the OPR noted it is not clear, “why the RWRP- NW provide that growth projections for other areas are based on the draft NPF1”.

The Office commented that Uisce Éireann “should ensure that this approach does not materially affect the assumptions underpinning the draft RWRP.” Furthermore UÉ “should take particular care with population assumptions for counties at the border of the RWRP boundaries.”

The OPR encouraged UÉ to incorporate the Department of Housing, Local Government and Heritage detailed population growth projections that are based on

the NPF targets, to inform local authorities in developing housing targets in accordance with the requirements under the section 28 guidelines. The OPR noted these detailed projections would be of assistance to finalising its regional and national plans.

The Office welcomed proposals to refine growth rates and population forecasts in the final document. In particular concerning the Galway MASP.

The Office welcomed the commitment in the RWRP-NW to support the objectives of the RSES for the Northern and Western Regional Assembly. It also welcomed the commitment to coordinate with local authorities' statutory plans to invest in water infrastructure to service the core strategies of city and county development Plans. The Office further welcomed the clear identification of the settlement hierarchy in national planning policy, including City, Metropolitan Area and Key Towns.

The Office provided some additional comments regarding the alignment between the RWRP-NW and national and regional policy. The Office highlighted the RSES which sets specific population targets for Galway City and metropolitan area in line with the NPF, with detailed projections set out in the Galway MASP. The Galway MASP identifies locations for strategic employment and residential development areas that are critical to the achievement of the population targets.

It further identifies specific and general water network and storage upgrades as enabling infrastructure for the following strategic residential development areas:

- Roscam, Murrough, Castlegar, Baile Chláir, Ragoon and Knockcarra in the city; and
- Oranmore, Baile Chláir and Bearna.

The OPR stated that it is not clear “if these growth factors have been taken into account in respect of the relevant RWRP-NW study areas and, if not, the Office recommends that this is specifically provided for given the key role of the areas in delivering the RSES”. The OPR acknowledged that the population growth target for ‘Galway City and suburbs’ in Table 3.8 of the plan appears consistent with that under the NPF and RSES. However, the OPR noted “table 3.8 contains generalised assumptions and growth rates for the other settlements, based on the size of a settlement rather than its designation, which is not consistent with the RSES and risks assuming a ‘business as usual’ growth pattern.”

The OPR commented that it is not clear from Table 3.8 that the RWRP takes into account the three RSES growth ambitions for the Regional Growth Centres of Sligo, Letterkenny and Dundalk

The Office highlighted that the development plans for Galway City and the counties of Mayo, Leitrim, Roscommon, Cavan, Monaghan and Louth are now adopted. The Office recommended that UÉ “provide for in excess of 30% growth to 2040 in the case of ‘Key Towns’, so that the timing and level of investment is aligned with the implementation of the NPF and RSES.”

Furthermore, the Office stated that UÉ should also take account of the more detailed population and housing targets to ensure the appropriate alignment of water resource infrastructure over the medium and longer term.

Northern Ireland Water noted “the current forecasts in the Region in respect of population growth and economic development with an overall regional population growth of 25% from 2019 to 2044...is in contrast to the population growth projections within the current Draft NI Water Resource & Supply Resilience Plan which estimates a 2.6% total increase in population by the peak in 2045. There is also a relative flat profile in predicted economic growth in NI during the same period.”

Clare County Council’s (CCC’s) Planning Department, Economic Development Directorate highlighted concerns around population forecasts for Study Area G.

The Council pointed out that in Table 3.8 ‘Population Growth Rate of Settlements in the North West Region’ are based on the draft NPF, and that a growth rate of average 21% has been ascribed to towns with a 2016 population of between 1500 and 10,000 and a growth rate of average 15% to settlements with population less than 1500 in 2016. The Council noted that this “may not align with the planned population growth for individual settlements within Study Area G, i.e., the growth set out in the Core Strategy of the Clare County Development Plan 2023-2029.”

The Council further noted “it appears that the annual growth of overall population of Study Area G, based on Úisce Éireann’s projections, is approximately equal to the annualised growth for the aggregate population growth (from 2023-2029) of the 13 settlements within Study Area G that are listed in the Core Strategy of Co. Clare’s Draft County Development Plan 2023-2029”.

CCC further commented that population growth outside of the listed settlements, plus demand within the part of Study Area G that is within County Galway, “may contribute to a situation where demand in Study Area G would exceed supply.”

The Council acknowledged the statement at Section 2.2.3.1 that: “To account for uncertainty in our estimation of future growth, we have included a headroom allowance (safety margin) in our demand forecast”. Given this allowance, the Council did not anticipate that an update to growth forecasts would significantly change the RWRP-NW outcomes.

The Council acknowledged the statement at Section 2.2.3.1 that we recognise the ongoing work between the regional assemblies, the Office of the Planning Regulator and the local authorities over the course of the development of the Local Authority County/City Development Plans and the Galway City MASP.

Clare County Council welcomed further consultation with Uisce Éireann to align Clare’s Core Strategy population growth rates and to ensure that Uisce Éireann’s Investment Plans are “robust enough to allow for growth in the towns, villages and rural areas across Co. Clare.”

Meath County Council (MCC) identified Nobber, Kilmainhamwood and Drumconrath as Villages in the Settlement Hierarchy for County Meath, as per Table 3.4: ‘Meath Settlement Hierarchy’ contained in Chapter 3 of the Meath County Development Plan 2021-2027.

MCC also noted that Table 2.12: ‘Core Strategy Table, Population and Household distribution to 2027’ contained in Chapter 2 ‘Core Strategy’ of the MCDP allocates 840 residential units as a combined figure for the 21 villages in the county.

MCC requested that Uisce Éireann should “liaise with MCC Forward Planning Department in relation to the predicted number of new households and associated population growth for Nobber, Kilmainhamwood and Drumconrath as well as their associated wider rural catchments.”

They further noted that Castletown is identified in the MCDP as a Rural Node which is to facilitate a smaller level of local growth compared to the other 3 settlements.

7.2.2 Response to Population and Growth Feedback

Uisce Éireann welcomes the feedback in relation to population and growth considered in the draft RWRP-NW. Uisce Éireann's approach to population forecasts is set out in more detail in Section 4.3.2.1 of the Framework Plan.

A key objective of the RWRP-NW is to ensure that water infrastructure can support the proposed growth policies at national, regional and county level. Uisce Éireann confirms that growth projections used within our draft RWRP–NW were based on best available data from the National Planning Framework (NPF), Regional Spatial Economic Strategies (RSES’s), Metropolitan Strategic Area Plans (MSAP’s) and County Development Plans (CDP) at the time of compiling our draft RWRP–NW.

Uisce Éireann also notes that a workshop was held with each local authority planning and water services section to review data and information in advance of the publication of the draft RWRP-NW.

Uisce Éireann will try to facilitate growth in non-domestic water use via efficiency improvements and water conservation. As outlined in section 7.3.2 of the Framework Plan, our activities include supporting the Green Schools Programme and our certified Water Stewardship Programme. Through the stewardship programme, we work with business customers to reduce water consumption through efficiency measures and increase awareness of water quality and environmental impact.

Uisce Éireann have committed to becoming more ambitious regarding water conservation and efficiency as demonstrated in the SEA Environmental Action Plan, Table 10.1 and EAP6 Options and Approach Development Process and Supporting Measures:

- EAP6.2 Consider customer research on the water supply and demand management including water efficiency options development along with local community and stakeholder views.

- EAP6.3 As data is developed to support understanding on water conservation, develop water conservation/water efficiency options to be considered as part of the Options Assessment Methodology for future plan cycles.

Uisce Éireann supports the Priority Recommendations outlined in AFU's Position Paper on Water Conservation which includes the development and implementation of a government-led water conservation strategy. We will review policy and trends in relation to efficiency improvements and water conservation over the coming years and refine our forecasts as per the monitoring and feedback process set out in section 8.3.8 of the Framework Plan.

In response to the query from AFU on the connections process, we note that through our Connection and Developer Services function, Uisce Éireann has an early engagement process in place (Pre-Connection Enquiry) to provide an early indication of the potential feasibility of connecting a development and the capital upgrades that might be required to cater for this development. Once Uisce Éireann completes the review of an applicant's Pre- Connection Enquiry, a confirmation of feasibility is issued. This is a high-level assessment of feasibility (based on the information available at the time of issue) that will indicate if any capital upgrades are required. The local authorities have access to the water capacity register available on Uisce Éireann's website, and can use this, amongst other information, to assess the planning application.

To ensure the satisfactory completion of a development, the draft Water Services Planning Guidelines under section 28 of the Planning and Development Act 2000 (as amended) requires that any grant of planning permission or approval requiring direct and indirect connection(s) to water services infrastructure must include a condition requiring the applicant or developer to enter into a connection agreement(s) with Uisce Éireann prior to the commencement of development. In addition, section 55 of the Water Services Act, 2007 (as amended) obliges a person to obtain the consent of Uisce Éireann prior to connection to our infrastructure. Customers can apply for a connection once they have submitted an application for planning permission, however Uisce Éireann will only issue a connection offer once planning permission has been granted.

Uisce Éireann currently works with developers to determine if water efficiency measures could be taken, and the developer can reduce the projected required water demand. In August 2022, we launched a guide for the construction industry that sets out how builders and developers can achieve water conservation through measures such as innovative technology installations and rainwater harvesting systems. We ran Water Conservation Clinics, developed in partnership with the Construction Industry Federation (CIF), to offer training and guidance on how businesses can conserve water on site. Uisce Éireann is also exploring concepts for potential pilot projects with developers to determine if water efficiency measures could be implemented to reduce projected water demand.

Ibec specified the need for Uisce Éireann to plan its future regional supply capacity in a manner consistent with the NPF, RSESs and the NDP. Uisce Éireann confirms that growth projections used within our draft RWRP–NW were based on best available data from the National Planning Framework (NPF) and Regional Spatial Economic Strategies (RSES's) at the time of compiling our draft RWRP–NW. Updated data, including new census data, will be incorporated via the monitoring and feedback process outlined in Section 8.3.1 of the Framework Plan.

Uisce Éireann acknowledges the advice provided by Ibec in relation to key areas for prioritisation. The prioritisation of Preferred Approaches will occur on a national basis and progressed through Uisce Éireann's Capital Investment Plans. The phasing and timeframes for the delivery of individual projects will be determined through the capital investment process. When prioritising projects through Uisce Éireann's Capital Investment Plans, we will ensure that these decisions are based on dialogue with the RSES and local authority housing and planning functions.

In response to Ibec's concern regarding "red tape uncertainties in planning applications and licensing applications" potentially obstructing deliveries, Uisce Éireann confirms that we commit to working together with our stakeholders to deliver the proposed water infrastructure developments to minimise delays within the planning and appeals system.

Uisce Éireann reports on the status of critical infrastructure projects implemented under our national investment programmes on our website. Further information can be found at <https://www.water.ie/projects/>.

Uisce Éireann acknowledges the key projects in Clare County Council's Economic and Social Strategies and we will continue to work with regulators and our key stakeholders to facilitate priority investment in water infrastructure to secure supplies and facilitate growth across Ireland.

In response to Clare County Council's comment regarding demand projections, as outlined in Section 4.4 of the Framework Plan, Uisce Éireann have included a headroom allowance in our estimation of demand and future growth. Headroom is the safety margin which is applied to demand forecasts to allow for uncertainties in our calculations on both the demand side and the supply side. The allowance is calculated and added to estimated demand to provide a buffer in the supply demand balance (SDB) and to ensure that the preferred approach is sized appropriately to meet future required needs. Furthermore, Uisce Éireann will continuously update the SDB in line with the data received. New data will be incorporated via the monitoring and feedback process outlined in Section 8.3.1 of the Framework Plan. This will allow Uisce Éireann to respond to growth and development needs and prioritise water supply investment in collaboration with local authorities and with reference to the County/City Development Plans and Local Area Plans LAPs and MASPs.

The OPR, NI Water and CCC noted that the growth projections in the draft RWRP–NW for some settlements differ compared with projections in RSES's, Draft NI Water

Resource and Supply Resilience Plan and Clare County Development Plan. UÉ note that planning settlements are not exactly aligned with the existing water supply asset base, as our water supplies can serve large areas covering urban and rural settlements through an interconnected asset base. Where this is the case, we have attributed the differing growth rates to the proportion of the supply that is in the urban and rural settlements, to ensure that the overall growth is aligned with the figures obtained from the RSES and with the Draft NPF.

Uisce Éireann are satisfied that our data and projections are based on the best available information at the time of the compiling the draft RWRP-NW and represent the expected growth rates in the planning settlements. We will continue to liaise with the CCC and other stakeholder to ensure that our data represents the most up-to-date information on current population distribution and forecasts. Updated data, including new census data, will be incorporated via the monitoring and feedback process outlined in Section 8.3.1 of the Framework Plan.

Uisce Éireann recognise the ongoing work between the regional assemblies and the local authorities over the course of the development of the Local Authority Development Plans. As these plans are finalised, we will incorporate the increasingly refined growth rates into our demand forecasts through the monitoring and feedback process set out in Section 8.3.8 of the Framework Plan. This will include recent and new growth factors relating to strategic regional development areas mentioned in the OPR submission, as well as regional growth centres and key towns. The methods for forecasting water demand utilising the population projections are detailed in the NWRP Framework Plan Section 4.

UÉ also confirm that there are structured protocols and interface points for population growth updates through Uisce Éireann's Forward Planning Team. The team Lead manages the stakeholder interface with the OPR and there is an Uisce Éireann Forward Planning Lead assigned to interface with each of the three regional assemblies. In relation to the recommendation that consultation with local authorities continue, Uisce Éireann' confirms that we work closely with local authorities to ensure that water infrastructure and regulation has the capacity to meet existing and future customers' needs in line with growth rates and land zoning as set out in the RSES, NPF and Local Authority Development Plans. Uisce Éireann is satisfied that these growth projections represent the best available information at the time of writing, for the purposes of a plan level assessment.

Uisce Éireann notes the information provided by Meath County Council regarding development and growth projections for Nobber, Kilmainhamwood, Drumconrath and Castletown. We confirm that we will liaise with MCC Forward Planning Department to ensure proposed infrastructure development adequately supports development in these areas.

7.3 General Feedback

7.3.1 Summary of General Feedback

An Fóram Uisce (AFU) welcomed the wide scope of work undertaken by Uisce Éireann (UÉ) to develop the draft Regional Water Resources Plan (RWRP) for the North West Region.

AFU highlighted that the draft plan is significant for both environmental and socio-economic development in the northwest region over the coming decades. They further highlighted that population growth, climate change, aging infrastructure and spatial-economic changes are increasingly stressing the water resources, and that Uisce Éireann “is challenged to reverse the results of previous approaches and support increasing needs with limited resources, while facing a number of data gaps.”

Meath County Council (MCC) supported the implementation of the NWRP and the final Regional Plans and welcomed the consultation opportunity on the Draft RWRP-NW. MCC noted that they will continue to work with Uisce Éireann in its role in meeting the objectives of the NWRP and Regional Plans. MCC further noted that meeting these objectives will be achieved through continued engagement on existing services or potential new infrastructure which may emerge through the development management and forward planning functions of the Planning Department. They commented that the aim is to ensure the management of existing networks and infrastructure and the sustainable development of new safe and secure drinking water supplies and wastewater collection and treatment infrastructure. MCC believe this will “support our shared roles in sustaining social and economic growth and protecting the environment.”

MCC pointed out that, their previous submission on the NWRP Framework Plan was made during the review period of the Meath County Development Plan (MCDP) which is now adopted and has been in effect since the 3 November 2021. The Council noted that the MCDP recognises that one of the key challenges in relation to the delivery of sustainable water and wastewater infrastructure is the ability to address and keep pace with the infrastructural demands of a growing County while safeguarding public health and managing the protection of key environmental resources in the context of a changing climate.

Furthermore, MCC highlighted that they have provided a commitment as set out in MCDP 2021-2027 which states under INF POL 1 in Chapter 6 – Infrastructure Strategy: ‘To liaise and work in conjunction with Uisce Éireann in the development and upgrade of water supply systems to ensure that the County has an adequate, sustainable, and economic supply of suitable quality piped water for all users.’

They further highlighted that there are several policies and objectives outlined in the adopted MCDP which seek to ensure “the continued investment in the provision, extension and upgrading of the piped water distribution network across the County and to service existing and future populations in order to facilitate sustainable economic growth of the County in accordance with the requirements of the Core Strategy.”

MCC commented that the adopted MCDP also contains a number of written statements associated with each settlement in the county. They stated that in respect of the settlements associated with the North-West Region, objectives have all been included which relate to the delivery and maintenance of water and wastewater infrastructure stating, “To liaise with and support Uisce Éireann to endeavor to provide adequate water services to meet the development needs of the village within the plan period.”

MCC acknowledged that they will continue to support Uisce Éireann and provide commitment to ensuring that an adequate and sustainable water and wastewater infrastructure network is provided to service the growing population of the County. MCC Planning Department considered the approach taken in the draft RWRP-NW and assessment of the plan through Strategic Environmental Assessment, Appropriate Assessment and other criteria as “robust and sustainable” The Council also noted a minor error at Section 10.5.4 (p.295) ‘Transformation’ relating to the three-pillar approach ‘lose less, use less and supply smarter’

Ibec commented that Uisce Éireann’s ultimate goal should be to “have a holistic, resilient, integrated national network, capable of being fine-tuned using suitable simulation software, relying on real-time telemetry. Stakeholder engagement and data transparency should be at the forefront.”

Ibec further noted that given the historic legacy of fragmented water supply management, including source protection, “the phased approach needs to minimize risks to population, environment and enterprise activity. In this regard, the new Framework for Future Delivery of Water Services should make the process less complex than it otherwise would have been.”

The Department of Communities Northern Ireland: Historic Environment Division (HED) welcomed that comments provided at scoping stage relating to evidence bases for Northern Ireland’s historic environment (Table 5.2) and the Plans, Policies and Programmes relating to Northern Ireland’s Cultural Heritage (Appendix F, Table 1) had been taken into account.

The Northern Ireland Environmental Agency - The Department of Agriculture, Environment and Rural Affairs highlighted that given the geographical location and the catchments associated with the draft RWRP-NW that the Loughs Agency is the lead body for provision of advice regarding impacts to salmon and inland fisheries interests within the catchments of Lough Foyle and Carlingford Lough. They noted that said agency should be consulted in relation to this plan, and that DAERA Inland Fisheries would provide fisheries advice for those areas outside of the catchments of Foyle and Carlingford Loughs.

Clare County Council - Physical Development Directorate noted that the use of renewable energy sources is not dealt with in the draft Plan. They requested that this issue is included along with cost implications.

Clare County Council also asked that “As this plan is to be implemented over several investment cycles the issue of takeover of Group Water Schemes by Uisce Éireann should form part of the Plan.”

Clare County Council’s Planning Department, Economic Development Directorate welcomed the clarity that the relevant regional groupings will have no ongoing application in future cycles, since Clare has been split between the RWRP-NW and the RWRP-EM. The council pointed out that they had highlighted, in previous submissions, “that splitting the county between two Water Resource Planning regions compromises the complete assessment of the County as a whole, in terms of population and need.”

7.3.2 Response to General Feedback

Most respondents welcomed the opportunity to engage on the draft RWRP-NW and requested further stakeholder engagement and ongoing collaboration with Uisce Éireann. Uisce Éireann confirms it will continue to consult with stakeholders and interested parties throughout the development of the RWRPs.

Uisce Éireann’s approach to population forecasts is set out in more detail in Section 4.3.2.1 of the Framework Plan. A key objective of the RWRP-NW is to ensure that water infrastructure can support the proposed growth policies at national, regional and county level. We confirm that growth projections used within our draft RWRP–NW were based on best available data from the National Planning Framework (NPF) and Regional Spatial Economic Strategies (RSES’s) at the time of compiling our draft RWRP–NW. Uisce Éireann also notes that a workshop was held with each local authority planning and water services section to review data and information in advance of the publication of the draft RWRP-NW.

Uisce Éireann welcomes Meath County Council’s (MCC’s) support of the NWRP and commitment to working with Uisce Éireann to secure supplies for the growing population of the County. The minor error in the draft NWRP-NW that is identified in the MCC submission has been corrected in the final RWRP-NW.

In response to Ibec, the NWRP is a 25-year strategy to ensure we have a safe, sustainable, secure, and reliable drinking water supply for everyone. The NWRP has involved, and will continue to involve, extensive consultation with relevant authorities, stakeholders, and the public. Uisce Éireann will work with our key stakeholders through the development of the NWRP to minimise risks to the population, environment and enterprise base.

Uisce Éireann commits to continuous improvement and as outlined in Section 9 of the draft NWRP-NW we plan to develop a 5 to 10-year data and intelligence improvement strategy. This will include data related to the supply demand balance, water quality, asset register and performance of asset base with network models and real-time telemetry.

Uisce Éireann welcome feedback from The Northern Ireland Environmental Agency - The Department of Agriculture, Environment and can confirm that the NWRP has involved, and will continue to involve, extensive consultation with relevant authorities, stakeholders, and the public the development and delivery of plan.

Regarding Clare County Council's comment on the use of renewable energy sources, Uisce Éireann confirms that at project level the options will be developed to ensure all potential opportunities that can be afforded by the solution are realised. This may include an augmentation of the option in line with our Energy Efficiency Plan which aims to improve energy efficiency and use renewable energy sources where appropriate and economically viable. Uisce Éireann has already installed solar power at facilities in Newcastle West, Co Limerick, and Nenagh, Co Tipperary. We are committed to future renewable energy installations and are developing a multi-year framework, with circa €70m of works and services. Section 2.4.5.3 of the draft RWRP-NW describes Uisce Éireann's commitment to improving energy efficiency; and Section 6.4.2 provides further information on our approach to seeking opportunities to reduce our carbon emissions at the project development stage.

Each individual GWS is owned and controlled by its members (the community it serves) and in most situations, the GWSs are extremely proud of the service provided (which in many situations goes beyond the provision of drinking water services), as well as the achievements of their scheme to date. Therefore, it is not considered appropriate for Uisce Éireann to propose taking over GWSs as part of the Plan, and it is not assumed that an individual GWS is required to be taken in charge by Uisce Éireann.

Uisce Éireann has an "opt in" process for taking in charge GWSs and will identify GWSs actively looking to be taken in charge as part of the RWRPs. This will be considered in the development of the Preferred Approach and in future iterations of the NWRP.

As set out in Section 5.5 in the draft RWRP-NW we proposed to discontinue supplies from GWSs to seven WRZs: Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale. This was because we were unable to assess whether the existing and future GWSs abstractions will meet sustainable abstraction limits under the new licensing framework. Recognising that there will be greater clarity on the sustainability of existing and future abstractions once the new abstraction legislation and regulations are confirmed, we have selected to maintain supplies from these GWSs. If the GWSs abstractions are ultimately deemed to be unsustainable by the EPA, we will work with GWSs to consider alternative sources and reassess the feasible supply options that we identified through the NWRP option development process.

Once the first NWRP has been finalised, it is comprised of the Framework Plan and four Regional Water Resources Plans which together will be treated as a unified plan. The Regional Groupings are for delivery purposes only and will not impact the prioritisation of activities/interventions for upcoming capital investment plans. The Preferred Approaches identified in each RWRP will be prioritised collectively through Uisce Éireann's planning and investment cycles. In other words, there will not be any difference in investment priority across the four regional groupings. As outlined in section 1.8.2 of the Framework Plan, where local authority areas have been split, Uisce Éireann will engage with the relevant local authorities following the finalisation of the RWRPs, on the outcomes for all the water supplies in their areas.

7.4 Conclusion on RWRP-NW Regional Plan Feedback

Having carefully reviewed the submissions received on the theme of North West Regional Plan, Uisce Éireann has amended Section 10.5.4 (p.295) of the RWRP-NW to correct the error in the text from 'use less, use less and supply smarter' to 'lose less, use less and supply smarter'.

Uisce Éireann considers that no further updates or further recommendations to the RWRP-NW are required. For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

8. Environment

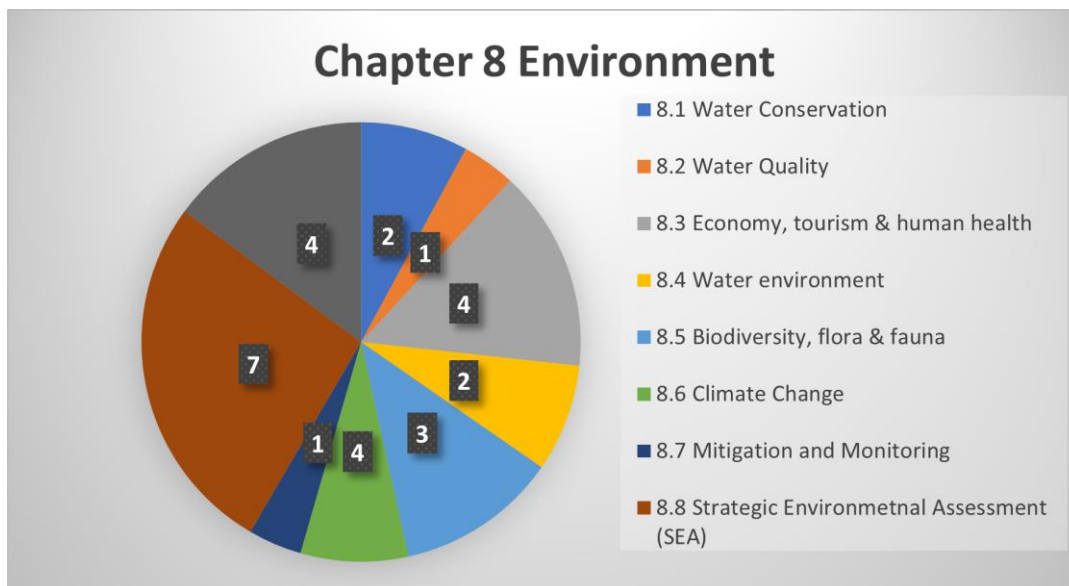


Figure 8 Environment Theme

8.1 Water Conservation

8.1.1 Summary of Water Conservation Feedback

The National Federation of Group Water Schemes (NFGWS) highlighted that water conservation plays an important part in protecting water sources and allowing for future demand. They highlighted that the six relevant Group Water Schemes (Erne Valley, Dhuish, Gowlan, Annagh, Glaslough-Tyholland and Doobally) are fully metered (both domestic and non-domestic) and usage is closely monitored through telemetry, allowing for close analysis of water demand. All water usage is communicated to GWS consumers, including households that do not exceed the free water allowance.

NFGWS welcomed the pillars “Use Less” and “Lose Less” in the regional plan and encourage more engagement with Uisce Éireann customers, both metered and unmetered. They noted that “more communication and educational awareness on a continuous basis is needed on the ground to create behavioural change.”

NFGWS would “welcome collaboration and improved engagement between the six Group Water Schemes and Uisce Éireann in this area, which will help to improve water efficiencies and ensure protection of water sources by helping meet future water demand challenges particularly in relation to droughts and climate change impacts.”

They noted that the Group Water Schemes that are supplying water into the nine towns and villages, Arva, Gowna, Killeshandra, Shercock, Blacklion, Ballyhaise, Glaslough, Emyvale & Dowra) across counties Cavan and Monaghan have been doing so for several years. NFGWS highlighted that “many of the alternative options proposed involve huge infrastructural cost to Uisce Éireann for a reasonably small quantity of water...and the financial implications of these proposals – particularly in

regard to value for money compared to alternative options should be closely analysed.” They further noted that if Uisce Éireann proceed with the preferred approach “it may cause causing serious infrastructural disruption to Group Water Scheme networks.”

8.1.2 Response to Water Conservation Feedback

Uisce Éireann welcomes NFGWS’ positive comments on supporting collaboration and engagement with us on improvement in water supply efficiency and water conservation in the context of future demand challenges.

As part of the option development process for the draft RWRP-NW, where appropriate, we considered meeting WRZ needs by connecting to adjacent GWSs. In these cases, Uisce Éireann will continue to consult with the NFGWS in the development of any Preferred Approach where we are proposing to obtain a GWS supply or utilise GWS infrastructure. We acknowledge that GWS consent would have to be given prior to advancing such an option. Opportunities to partner with GWSs will be explored as we progress the plan level Preferred Approach to project stage.

For some WRZs that are currently supplied by GWSs, Uisce Éireann were not able to assess the potential for existing and future abstractions to exceed sustainable abstraction limits. On these occasions we selected alternative supply options as the Preferred Approach to avoid the possibility of over-abstraction. We acknowledge the improvements proposed by the NFGWS in their submission to the draft NWRP-NW which aim to achieve Water Framework Directive objectives in relation to abstractions. We also recognise that as part of the new abstraction licensing regime, the EPA will adjudicate licence applications and confirm the sustainable abstraction limits. Once the new abstraction legislation and associated regulations are confirmed there will be greater clarity on sustainable abstraction limits. At this stage, if existing abstractions are deemed to be unsustainable by the EPA, GWSs could consider alternative sources to ensure sustainability or Uisce Éireann can reassess the alternative feasible options that we have identified through the NWRP option development process. For this reason and the submission received from the NFGWS, Uisce Éireann has updated the Preferred Approach to continue supplying the following WRZs from GWSs - Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale. As the abstraction legislation is implemented, UÉ will continue to work with GWSs to secure sustainable supplies for our customers into the future.

The above mentioned update to the Preferred Approach for Glaslough and Emyvale WRZs resulted in a change to the Preferred Approach for Monaghan WRZ. Given the Monaghan WRZ will be in surplus for the planning period, a new or increased supply is not required. We are therefore proposing to revise the Monaghan WRZ Preferred Approach from an increase supply to instead upgrade the existing WTPs for water quality improvements.

Similarly, the update to the Preferred Approach for Ballyhaise PWS WRZ results in an update to the Preferred Approach for Cavan and Ballyjamesduff WRZs. We are proposing to update the Preferred Approach to interconnect the two WRZs and supply spare capacity from Ballyjamesduff RWSS to Cavan RWSS only. Ballyhaise PWS will not connect to Ballyjamesduff but will continue to be supplied from Annagh GWS.

8.2 Water Quality

8.2.1 Summary of Water Quality Feedback

The Environment Protection Agency (EPA) acknowledged that the RWRP-NW clearly identifies the water-service related issues and challenges, including supply of water services and water quality aspects. The EPA welcomed “the existing national programmes including source protection programme, reservoir cleaning programme, disinfection programme, lead mitigation programme, trihalomethane reduction works in place to protect and provide for clean and wholesome drinking water.”

Furthermore, the EPA welcomed Uisce Éireann’s commitment to adhere with the WHO guidance related to drinking water source protection and to establish drinking water safety plans across all supplies under Uisce Éireann’s remit. “It will be important however, for Uisce Éireann to continue to identify and implement actions and mitigation to address those risks identified through the drinking water safety plan approach.”

8.2.2 Response to Water Quality Feedback

All water supplied by the public water supply must comply with the Drinking Water Directive. Uisce Éireann takes a risk-based approach to our water supplies using the World Health Organisation’s drinking water safety plan methodology. This ensures that our water treatment plants are designed based on the type of water abstracted from any given source and the treatment processes put in place are designed to remove contaminants. Uisce Éireann is currently in the process of completing Drinking Water Safety Plans for all supplies. All public water sources, including groundwater and surface water, involve water treatment.

8.3 Biodiversity, Flora and Fauna

8.3.1 Summary Biodiversity Flora and Fauna Feedback

The Department of Agriculture, Food and Marine (DAFM) highlighted that commercial sea fishing is a long standing, pre-existing and traditional activity in the marine environment, and it is essential that any negative impacts on fisheries are avoided. DAFM commented that “the evaluation of potential impacts on any commercial sea fishing activities needs to be given consideration as part of any planning/proposal process and during the development process itself.” DAFM noted it as “imperative that engagement should be sought with the fishing industry and other relevant stakeholders at as early a stage as possible to discuss any changes that may affect them to afford a chance for their input.” Fishers’ interests and

livelihoods DAFM highlighted “must be fully recognised, supported, and taken into account.”

DAERA Inland Fisheries noted that section 8.3.3 Cumulative Effects at regional level takes into consideration the potential impacts from habitat fragmentation and loss due to water quality, and that “this should also clearly reference habitat fragmentation due to barriers created to impound water.”

The Marine Conservation Advice Team (MCA), in the DAERA Marine and Fisheries Division welcomed that in Section 5.5.1 the designated sites within Northern Ireland as part of the transboundary assessment considered included Ramsar Sites, Special Areas of Conservations, Special Protected Areas, Areas of Outstanding Natural Beauty, Marine Conservation Zones and Areas of Special Scientific Interest.

MCA recommended in Section 5.5.3 species in the Northern Ireland Priority Species should be considered which can be viewed here: <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/northern-ireland-priority-species-list.pdf>. MCA welcomed the consideration of invasive non-native species in section 5.5.3. They further welcomed the consideration of ‘Seascape’ and further recommended including the following Regional Seascape Character Areas (RSCA): The Newry Estuary RSCA, Carlingford Lough RSCA, Atlantic RSCA, Lough Foyle RSCA, Foyle Estuary RSCA and North Coast Strands and Dunes RSCA.

MCA asked that the DAERA Marine Map Viewer should be referred to for details and Northern Ireland Regional Seascape Character Assessment.

In Table 5.11 MCA recommended “considering an interrelationship between ‘Biodiversity, including flora and fauna’ and ‘Cultural Heritage, including architectural and archaeological, as archaeological sites such as shipwrecks can be important habitats for marine species.”

In Table 5.12 Key issues and opportunities, MCA recommended considering ‘Marine Litter’ in association with tourism and “where tourism involves water vessels ‘Marine Invasive Non-Native Species.’” In addition, they suggested that marine habitats and species should be considered in association with ‘Biodiversity, Flora and Fauna’ and furthermore ‘Seascape’ in association with Landscape and visual amenity.

Inland Fisheries Ireland (IFI) commented that “the Plan should fully consider and make appropriate reference to and provision for aquatic biological diversity, the fisheries resource and relevant stakeholder interests... IFI commented that this RWRP-NW “should recognise that protection of the aquatic environment / habitat not only requires the protection of water quality but also necessitates the protection and maintenance of physical habitat, hydrological processes and regimes and broader biological diversity.” IFI highlighted that considering “State obligations to ensure sustainable development, it is advocated that such plans / policies prioritise maintenance and (where possible) restoration of ecological status in surface waters.”

IFI went on to note that the long-term environmental sustainability of any activity that may impact on the status of fish species, their habitats, fisheries and the recreational angling or related commercial activities that may utilise these resources is of primary concern to IFI. IFI commented that critical and sensitive habitats and species, both designated and otherwise, must be protected. IFI remarked that “a number of fish species and associated habitats are protected under European Directives in Ireland...from an IFI perspective, all fish species and associated habitats within its remit require protection and management for conservation and development...IFI advocates application of the precautionary principle when considering the fisheries resource and aquatic ecology in the current process.”

Inland Fisheries Ireland (IFI) noted that the protection of the aquatic environment must also include a greater commitment as well as to prevent fish mortality protect water quality and quantity. IFI commented that “sustainable management of hydrological regimes is necessary to safeguard the fisheries resource and avoid potential negative impacts on habitat and biological functions.” They went on to highlight that the maintenance and improvement of aquatic habitat is an important fisheries objective and forms part of the broader remit of other environmental authorities under the Water Framework Directive objectives. IFI requested that negative impacts of the RWRP-NW on aquatic habitats should be addressed in the plan. They noted that “these pressures are further exacerbated by climate disruption impacts reflected in increased likelihood of drought conditions as seen in 2018 and 2020.”

IFI commented that the 1997 Habitats Regulations and Special Areas of Conservation (SAC) Directive does not extend to the inclusion of all aquatic habitats of fish bearing importance, biodiversity significance or of amenity value “therefore, the reliance of any plan on these designations alone will exclude significant numbers of waterways which require consideration and protection.” IFI suggested that a comprehensive approach to impact assessment necessitates that looking beyond any one particular suite of designated sites would be of benefit and they are available for consultation in respect of the specific sensitivity of sites both without and beyond the boundaries of ‘protected sites’ designations.

8.3.2 Response to Biodiversity Flora and Fauna Feedback

We acknowledge the comment from DAFM that potential impacts on commercial sea fishing activities should be considered in the development of the Regional Water Resource Plans and early engagement should be sought. Our assessment of desalination options has taken account of potential environmental impacts including from their associated brine discharge on the aquatic environment and biodiversity, including potential impacts on fisheries and interest and livelihoods dependent on them. In section 7.4 of the SEA Environmental Report, we have highlighted the potential impacts from a small-scale desalination plant on the island of Innisboffin and the need for further assessment including on biodiversity, fisheries and livelihoods and for mitigation of effects.

We note that Section 8.3.3 Cumulative Effects of the SEA Environmental Report considers potential for habitat fragmentation and impacts on species movement. We have added clarification that this includes consideration of effects due to barriers created to impound water.

Section 5.12 of the SEA Environmental Report on transboundary effects includes reference to the Northern Ireland Priority Species List sources.

The DAERA Marine Map Viewer has been referred to for details and Northern Ireland Regional Seascape Character Assessment in section 5.12 of the SEA Environmental Report in relation to transboundary effects and sources of information on the baseline environment.

Table 5.11 has been updated to indicate the interrelationship between Biodiversity and Cultural Heritage.

Table 5.12 ‘Key Issues and Opportunities’ have been updated to consider Marine Litter in association with tourism and “where tourism involves water vessels ‘Marine Invasive Non-Native Species. In addition, marine habitats and species have been considered as part of aquatic habitats in the ‘Biodiversity, Flora and Fauna’ and furthermore ‘Seascape’ is already considered in the Landscape and visual amenity baseline section.

In response to IFI, UÉ recognise that protection of the aquatic environment is a core part of the option assessment process, which has aimed to ensure all proposed options meet sustainable abstraction requirements in relation to the Water Framework Directive (WFD). The wider WFD and biodiversity objectives are also embedded in SEA objectives and are to be taken forward through the mitigation and monitoring framework outlined in Section 9 of the SEA Environmental Report and committed to in Section 9 of Plan.

Where we have determined that some existing abstractions may not meet sustainable flow thresholds, the Preferred Approach improves or avoids further deterioration at these sources by abandoning the abstraction, or where viable alternatives do not exist, by reducing the abstraction or developing additional sources to support growth. Further detail of the assessment of sustainable abstractions is provided in Section 7.4.5 and Appendix C and Appendix G of the Framework Plan.

Uisce Éireann are identifying all potential barriers that are associated with Uisce Éireann infrastructure, from internal information, and international research in this area (<https://amber.international/>) is also supporting this task. Where abstractions interdependent on barriers are determined by the EPA to be unsustainable Uisce Éireann will, in collaboration with the EPA, establish a programme to move away from such abstractions. For locations where the Preferred Approach is not to move away, UÉ is engaging with IFI to, to develop fish passage at weirs associated with our abstractions to address fish movement throughout the year.

The RWRP-NW determines the feasible Preferred Approach at plan level. It is acknowledged within the Plan that further site-based assessments will be required at project level. These detailed environmental assessments will take place prior to any planning permission application being made and therefore site-specific questions will be addressed at this stage. More information on project level assessments is provided in Section 6.4.

Uisce Éireann recognises the importance of minimising the potential for environmental impacts of all proposed developments. We will ensure the ecology of the area is protected by implementing appropriate mitigation measures to manage environmental risks at project level. We have outlined key mitigation measures for the Preferred Approach in Table 7.1 of the Study Area Environmental Reviews which are provided in Appendix H of the SEA Environmental Report.

8.4 Climate Change

8.4.1 Summary of Climate Change Feedback

The Marine Conservation Advice Team (MCA), in the DAERA Marine and Fisheries Division noted that the following information might be of benefit for Section 2.4.3 Flood Risk: Sea Level Rise: “the Independent Assessment of UK Climate Risk (CCRA3) provides a series of projections of sea level rise for Belfast Northern Ireland. The projections detailed in this report the projections detailed in this report show that sea level is expected to rise between 0.14 – 0.16m in 2050 and 0.27 – 0.58m in 2080. While the IPCC report ‘Climate Change 2021: The Physical Science Basis’ states that global sea levels are projected to increase by 0.28-0.55m by 2100 under SSP1-1.9 (the lowest Green House Gas emissions scenario) or by as much as 0.63 – 1.01m by 2100 under SSP5-8.5 (the highest Green House Gas emissions scenario).”

Inland Fisheries Ireland (IFI) commented that “climate disruption is expected to have diverse and wide-ranging impacts on Ireland’s environment, society and economic development, including managed and natural ecosystems, water resources, agriculture and food security, human health and coastal zones.” IFI further noted that the immediate risks to Ireland which can be influenced by climate change are predominantly those associated with changes in extremes, such as droughts and floods and that “these factors should be integrated in every decision made when planning for surface and groundwater management.” IFI explained that high temperatures and low flows can cause changes in species distribution and phenology, including native, non-native and invasive species. IFI highlighted that Ireland’s native fish populations such as Salmon, Brown trout, Pollan and Arctic char are cold water species and “are more vulnerable to climate change and warming of our waterbodies than those fish species that have been introduced over the last 100 years.”

8.4.2 Response to Climate Change Feedback

The information from the DAERA Marine Conservation Advice team is noted and general projections from the IPCC report as reflected in the latest national Climate Action Plan has been taken into account in the preparation of the RWRP-NW and the SEA and issues in terms of sea level rise and other issues requiring climate change resilience and adaptation are identified as part of project level design and assessment consideration also.

In response to IFI, in developing the Preferred Approach, Uisce Éireann has considered the impact of abstractions on the aquatic environment and assessed sustainable abstraction thresholds during low flow periods. We have taken a conservative approach when conducting desktop assessments of the Preferred Approaches using the methodology set out in Appendix C of the Framework Plan. Further information on our approach to assessing abstraction pressures is provided in Section 2.3.5. Section 7.4 provides detail regarding the sustainability of our water abstractions under the Preferred Approach.

When considering the Preferred Approach, we assessed the resilience of each option to climate change by assessing available yields from the proposed new source in the future and by considering the location of our infrastructure in relation to flood zones. We have identified solutions to secure supplies and reduce water shortfalls during drought conditions. These solutions include both raw and treated water storages to support increased abstractions during high flow periods and provide for higher demands during low flow periods.

8.5 Mitigation and Monitoring

8.5.1 Summary of Monitoring and Mitigation Feedback

The Environmental Protection (EPA) commented that the “Monitoring Programme should be flexible to take account of specific environmental issues and unforeseen adverse impacts should they arise during implementation of the Plan.” They also suggested that it should consider and deal with the possibility of cumulative effects and that the monitoring of both positive and negative effects should be considered. Furthermore, “the monitoring programme should set out the various data sources, monitoring frequencies, responsibilities and reporting.” IFI commented that “if the monitoring identifies adverse impacts during the implementation of the Plan, Uisce Éireann should ensure that suitable and effective remedial action is taken.”

The EPA suggested that “The Plan implementation, monitoring and reporting should be aligned with the environmental monitoring and reporting required under the SEA legislation. This will assist in evaluating the environmental performance of the Plan.”

The EPA noted Uisce Éireann’s commitment to an environmentally sustainable approach to water abstraction, the challenge they noted “will be to ensure that environmental monitoring is carried out regularly to monitor water abstraction activities, particularly in areas with water dependant ecosystems (including groundwater). It is also important to have a plan in place to react to the monitoring results as necessary.” The EPA welcomed the commitment in Subsection 5.4.2 -

WFD and Abstractions within the North West Region, that Uisce Éireann will work with the EPA and GSI to develop systems (desktop and site investigation) to further understand the sustainability of groundwater abstractions.

The EPA welcomed the inclusion of Table 10.2 Monitoring Plan: Indicators and Targets in Chapter 10 and further welcomed the link between the Plan and SEA regarding monitoring implementation of the Plan. In relation to the Mitigation measures, the EPA acknowledged that the identified SEA mitigation measures have been integrated into the RWRP-NW which “shows a clear linkage between the Plan and SEA.”

The EPA highlighted it as important that monitoring of the significant environmental effects of implementation of the RWRP-NW are completed. “Bearing that in mind, we suggest for clarity, the information presented in Section 10 – Mitigation and Monitoring Plans, should be reorganised.” The EPA suggested considering a tiered approach to presenting the monitoring information; “The key high-level environmental protection objectives of the SEA could be set out in one table, along with the accompanying monitoring targets and indicators, monitoring frequencies and information sources. A second table could be provided to show the more detailed environmental objectives, targets and indicators, of relevance at a project level, rather than combining into one table for both plan and project related considerations.”

Furthermore, the EPA suggested it would be worthwhile limiting the number of indicators currently presented. “The monitoring indicators should be meaningful, have a monitoring frequency associated with them and include thresholds/targets or triggers above which remedial action should be taken.” The EPA noted “While some of the environmental indicators described are applicable at a plan- level, others appear to be more applicable at a project level. The aim should be for the higher-level SEA-specific monitoring aspects to align and inform the Plan-specific monitoring.”

The EPA suggested that “The more detailed project specific monitoring elements could be separated out and used to inform the development and implementation of future projects, that may arise out of the implementing the Plan.” With this in mind the EPA further noted “the key overarching environmental objectives to be taken at project level, identified in the SEA could be set out to help inform any project level monitoring that would be required.” This, they commented “would help promote further good SEA practice, as promoted in the EPA guidance document ‘The Tiering of Environmental Assessment – The influence of Strategic Environmental Assessment on Project-level Environmental Impact Assessment’ (EPA, 2021).” This approach they noted would “assist in linking the SEA monitoring and Plan-monitoring and reporting aspects.”

They further suggest that interim monitoring reports (annual or bi-annual) be provided over the lifetime of the RWRP-NW. “Such reporting would allow for

remedial action to be taken where significant adverse effects are identified...and enable Uisce Éireann to adapt the monitoring programme as necessary.”

Finally, EPA suggested that “Future amendments to the Plan should be screened for likely significant effects, using the same method of assessment applied in the “environmental assessment” of the Plan.”

8.5.2 Response to Monitoring and Mitigation Feedback

The SEA Environmental Action Plan also includes a task to review and update the monitoring indicators and targets to allow new conditions to be taken into account and to ensure the Plan is sufficiently flexible to take account of environmental issues arising during implementation of the Plan and any unforeseen adverse impacts including cumulative effects and recognises the need to take remedial action where significant effects are identified.

The Plan commits to the implementation of the SEA EAP and Monitoring plan, and this will be undertaken as an integrated part of the monitoring and feedback steps outlined in section 9 of the RWRP-NW.

The Strategic Environmental Assessment (SEA) monitoring plan references and takes account of good practice outlined in ‘Tiering of Environmental Assessment – The influence of SEA on Project-level Environmental Impact Assessment’ (EPA, 2021). The Monitoring Plan is therefore provided for in two parts. This has been clarified and explained further in SEA Environment Report section 10 and the different tables have been colour coded to help distinguish them for further clarity. Part 1 is plan level monitoring that addresses the high-level environmental protection objectives of the SEA; and Part 2 provides a monitoring framework for project level implementation that addresses more detailed environmental objectives. The monitoring indicators are relevant to the corresponding plan or project level context and are aligned with the indicators defined in the SEA to the National Water Resources Plan (NWRP) Framework Plan.

The Environmental Action Plan also includes a task to review and update the monitoring indicators and targets to allow new conditions to be taken into account and to ensure the Plan is sufficiently flexible to take account of environmental issues arising during implementation of the Plan and any unforeseen adverse impacts.

The Monitoring Plan and Environmental Action Plan have been designed to provide a basis for the identification and continuous review of the positive, negative and cumulative impacts of the RWRP-NW. The plan refers to monitoring targets and indicators, monitoring frequencies and review timescales, and information sources.

Reporting timescales are outlined for plan level monitoring in Part 1 of the Monitoring Plan. As outlined in Part 2 of the Monitoring Plan, reporting timescales across each project will be developed over the plan implementation period. Monitoring results on individual projects will be fed back to reporting for the Regional Plan and the SEAs.

Commitment to screening future amendments for likely significant effects, using the same method of assessment applied in the environmental assessment of the Plan is included as part of the monitoring and feedback approach set out in section 10 of the Plan.

8.6 Strategic Environmental Assessment (SEA)

8.6.1 Summary of Strategic Environmental Assessment Feedback

The Environmental Protection Agency (EPA) welcomed that the previous comments at SEA Scoping Stage have been considered, in preparing the RWRP-NW and associated SEA. EPA noted that the Water Environment (Abstractions and Associated Impoundments) Act 2022 will lead to the establishment of a licensing regime, once the enabling Regulations are published and it is “therefore likely that there will be an overlap in timelines between the final options assessment of the Regional Water Resource Plans, and the start of the licensing regime commencing.” EPA noted the main impact that this will have, will be on any proposed new abstractions or proposals to increase existing abstractions and “there will also be a requirement for EIA for any abstractions that will be licensed by the EPA.”

The EPA welcomed the comprehensive methodology applied during the consideration and selection of alternatives in the SEA and acknowledged that transboundary impacts have also been considered. They further acknowledged the study area and regional level assessments as detailed in Chapter 7 - Study Area Assessment Summaries and Chapter 8 – SEA Regional Level Assessments.

The EPA suggested “Where proposals for further impoundments are proposed, these should be carefully considered, assessed, designed and implemented to minimise any potential likely significant environmental effects.”

They further noted that “the abstraction of waters for drinking water purposes need to continue to be carefully considered, effectively implemented and monitored, where those waters support protected species and designated habitats within the Plan area.” They commented that the “Abstraction of water resources should be carried out in accordance with any abstraction licensing legislation, which is currently in draft form with the Department of Housing, Local Government and Heritage (DHLGH).” The EPA commented that Uisce Éireann “should be mindful of the Water Framework Directive-related environmental objectives for surface waters and groundwaters, with regards lakes and proposed further abstractions and for any new abstractions. Any increased abstraction should not cause deterioration of water quality status.”

The EPA acknowledged the consideration of cumulative effects provided in Chapter 9 and also welcomed that the EPA guidance ‘Good Practice Guidance Note on Cumulative Effects in Strategic Environmental Assessment’ (EPA, 2020) has been taken into account.

The EPA welcomed the inclusion of Table 9.2 – Cumulative Effects with other plans and programmes and suggested considering the draft National Policy Statement on Geothermal Energy for a Circular Economy (Department of Environment, Climate and Communications).

The EPA suggested that when the RWRP-NW is adopted an SEA Statement should be prepared that summarises the following:

- How environmental considerations have been integrated into the Plan;
- How the Environmental Report, submissions, observations and consultations have been taken into account during the preparation of the Plan;
- The reasons for choosing the Plan adopted in the light of other reasonable alternatives dealt with; and,
- The measures decided upon to monitor the significant environmental effects of implementation of the Plan.

A copy of the SEA Statement with the above information should then be provided to any environmental authority consulted during the SEA process. Guidance on preparing SEA Statements is available on the EPA website at the following link: <https://www.epa.ie/publications/research/environmental-technologies/research-306-guidance.php>

The EPA commented that in Chapter 4 – Current Status of Infrastructure Uisce Éireann should continue to focus on addressing issues related to supplies currently on the EPA’s Remedial Action List and any future additions, as applicable. They noted that currently, there are 58 water supplies on the latest EPA’s Remedial Action List for Q4 2022 (published 2023), some of which are present within the area covered by the RWRP-NW.

Roscommon County Council (RCC) noted that both the Strategic Environmental Assessment and the Natura Impact Assessment are comprehensive. However, “potential adverse impacts need to be assessed in the development of an additional ground water source at Longford Springs, Castlerea.”

Furthermore, RCC requested that “development of additional ground water sources at Longford Springs, Castlerea will need to be assessed with respect to existing groundwater source protection areas.”

Meath County Council (MCC) would welcome the sharing of water related environmental information gathered during its ongoing activities associated with the RWRP-NW and EM regions to support the preparation of Meath County Council’s Local Area Plans, Development Plan(s) and associated core strategy. Similarly, “such information will assist with the preparation of environmental reports (Strategic Environmental Assessment, Appropriate Assessment) and support environmental monitoring of our land use plans.”

The Department of Communities Northern Ireland Historical Environment Division (HED) suggested that the SEA Criteria as outlined in Table 6.2 of the draft RWRP-NW “should also include undesignated heritage assets, toward a more comprehensive assessment of potential effects on cultural heritage, particularly industrial heritage assets located along watercourses in the border region.”

DAERA Inland Fisheries noted that 26 locations for surface water abstraction are to be decommissioned as part of the draft RWRP-NW and commented that “any such sites should have a fish passage assessment conducted and restorative action taken if necessary.”

DAERA Inland Fisheries commented that in Section 5.5.3 Species the SEA noted the species, and in particular the fish species, to be considered within it however it “does not include European eels or migratory trout (sea-trout), any potential impacts are likely to include impacts to these protected species.” Furthermore, in Section 4.2 Key Plans, Policies and Programmes, Inland Fisheries suggested the inclusion of the North Atlantic Salmon Conservation Organisation (NASCO), Convention for the Conservation of Salmon in the North Atlantic Implementation Plan for the period 2019 – 2024 as “this an international commitment for both Ireland (as part of the EU) and Northern Ireland (as part of the UK).” Also, in relation which includes specific fisheries and water abstraction measures.

DAERA-NIEA noted that there is reference to the transboundary catchments, the third cycle of the Water Framework Directive Consultation on the Draft 3rd Cycle River Basin Management Plan 2021 to 2027 | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk), “however it should include particular reference to the measures listed as part of the screening report in relation to the protection of fisheries.”

Furthermore, DAERA Inland Fisheries commented that given the geographical location and the catchments associated with the Draft RWRP-NW the Loughs Agency is the lead body for provision of advice regarding impacts to salmonid and inland fisheries interests within the catchments of Lough Foyle and Carlingford Lough. Therefore, the Lough Agency “should be consulted in relation to this plan. DAERA Inland Fisheries will provide fisheries advice for those areas outside of the catchments of Foyle and Carlingford Loughs.”

The Marine Plan Team in the DAERA Marine & Fisheries Division (MPT) welcomed the inclusion of relevant Northern Ireland and UK marine legislation and policy documents.

MPT suggested Section 5.4 would benefit from including narrative in relation to coastal and marine waters from a Marine Strategy Framework Directive perspective and the achievement of good environmental status. This, they noted “is important particularly in relation to those elements not covered by Water Framework Directive, such as, marine noise, litter, certain aspects of biodiversity and ensuring concentrations and effects of contaminants are kept within acceptable levels.” The

commented that “any outcomes from this exercise could then be drawn out into the issues and opportunities for the water topic in Table 5.12.”

MPT noted that the SEA Objectives and SEA Criteria for Water does not refer to the “prevention in the deterioration of Marine Strategy and Framework Division (MSFD) environmental status of coastal and transitional waters, the meeting of MSFD objectives or whether activities will effect MSFD status” MPT commented that “given that some elements of MSFD are not covered by the Water Framework Directive for coastal and transitional waters, MPT would suggest there could be benefit to including reference to MSFD within the Water Objective and Criteria.”

MPT noted that in Section 5.7 that though Seascape Character Areas are referenced within the Landscape and Visual Amenity the link to seascape is not included as an issue or opportunity in Table 5.12 or the latter sections of the report, particularly the SEA Objectives and SEA Criteria. MPT commented that “whilst the impacts on seascape may have been considered as part of the assessment, this is not clear and there is scope to include references to seascape within both the SEA Objective and SEA Criteria.” MPT recommended the reference to aquatic in the Biodiversity SEA objective on Table 6.1, includes marine as it will “ensure consistency with the language used in Table 6.2 which states ‘aquatic and marine biodiversity.’”

MPT noted that the SEA objective for Material Assets includes the protection to the ecological status of waterbodies. However, MPT suggested “there could be benefit to including protection to the environmental status of coastal and transitional waters, to ensure those MSFD elements not covered by WFD would be included in the assessment under this objective.”

Through the DAERA SEA Team the Marine Conservation Advice (MCA) recommended the following report be considered in Section 4: Review of Relevant Plans, Policies and Programmes:

- The Marine and Coastal Access Act 2009
- The Marine and Coastal Access Act 2009 introduced a revised system of Marine Management and Licensing, including marine planning.
- The eight key elements are:
 - Establishment of the Marine Management Fisheries management and marine enforcement
 - Migratory and freshwater fisheries
 - Coastal access
 - Coastal and estuarine management
- The Marine and Coastal Act 2009
- The Marine Strategy Regulations 2010
- UK Marine Strategy Part 1
- UK Marine Strategy Part 2
- Overview of UK Marine Strategy Part 3
- Marine Policy Statement 2011

- Marine Policy Statement
- The draft Marine Plan for Northern Ireland (consultation 2018)
- Wildlife (Northern Ireland) Order 1985
- The Wildlife (Northern Ireland) Order 1985
- Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995
- Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995
- Marine Act (Northern Ireland) 2013
- Marine Act (Northern Ireland) 2013
- Strategic Planning Policy Statement for Northern Ireland 2015
- Strategic Planning Policy Statement
- An Integrated Coastal Zone Management Strategy for Northern Ireland 2006-2026

The Department of Environment, Climate and Communications Geological Survey Ireland (GSI) recommended using their various data sets, when conducting the EIAR, SEA, planning and scoping processes attributing their data and maps to 'Geological Survey Ireland'. GSI commented that this data can "add to the content and robustness of the SEA process." The following is the list of GSI's publicly available datasets that may be useful to the environmental assessment and planning process:

- Groundwater
- Marine and Coastal Unit
- Coastal Vulnerability Index
- Geoheritage: Geological Mapping
- Geochemistry of soils, surface waters and sediments
- Geophysical data
- Geohazards
- Geotechnical Database Resources
- Historic Mines
- Physiographic Units
- Institute of Geologists of Ireland, 2013. Guidelines for the Preparation of the Soils, Geology and Hydrogeology Chapters of Geology in Environmental Impact Statements.
- EPA, 2022. Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR).

Clare County Council Physical Development Directorate commented that it is "essential that cumulative and/or negatively synergistic impacts are assessed between plan areas." CCC noted there is reference to this in the document (1.2, 1.3 & 6.1 and also an acknowledgement that assessment was to the "extent that data was available." However, CCC noted that "if sufficient data was not available, then further investigation and assessment is warranted...as this is especially important for County Clare as the County is split over two plan areas."

CCC commented that in Section 1.1, the SEA Objective under Water Quality and Resources should be further strengthened to ensure that Water Framework Directive requirements are met. CCC suggested adding the following: “prevent deterioration of the WFD status of waterbodies with regard to both water quality and quantity due to Uisce Éireann’s activities. Contribute towards the “no deterioration” WFD condition and where possible to improvement of waterbody status for rivers, lakes, transitional and coastal waters, and groundwater to at least good status and to not undertake any new action or activity which would further restrict or limit the ability of a Waterbody to achieve “good” or “excellent” status.”

8.6.2 Response to Strategic Environmental Assessment Feedback

We welcome the Environmental Protection Agencies (EPA’s) feedback on the SEA process and the acknowledgment that Uisce Éireann has considered the transboundary impacts and cumulative effects in preparing the RWRP-NW.

Uisce Éireann has referred to the EPA State of the Environment Report Ireland’s Environment – An Integrated Assessment 2020 (EPA, 2020) as relevant and appropriate in the SEA Environmental Report; and will consider the recommendations, key issues and challenges outlined in the report when implementing the Plan and SEA recommendations at project stage.

Uisce Éireann has recognised the importance of minimising the potential for environmental impacts of all proposed developments, including the proposals for additional reservoirs and impoundments in the draft RWRP-NW. We will ensure the ecology of the area is protected by implementing appropriate mitigation measures to manage environmental risks at project level. We have outlined key mitigation measures for the Preferred Approach in Table 7.1 of the Study Area Environmental Reviews which are provided in Appendix H of the SEA Environmental Report

We acknowledge the EPA’s recommendations relating to the SEA Statement and confirm that an SEA Statement and AA Determination will be issued following the adoption of the RWRP-NW. The Statement will outline how environmental considerations have been integrated into the RWRP-NW and how consultation influenced the development of the RWRP-NW. The SEA Statement also outlines the reasons for selecting the Preferred Approach and the measures to monitor the significant environmental effects. The SEA and AA set a framework for identifying mitigation and monitoring so that these can be a part of the decision-making and can inform option design and costing as schemes are developed.

We note the EPA’s reference to the draft National Policy Statement on Geothermal Energy for a Circular Economy (Department of Environment, Climate and Communications). The SEA Environment Report has been updated to account for this draft policy statement in the cumulative effects assessment, and Table 9.2 has been updated to refer to this document. Uisce Éireann will consider this policy as part of the monitoring and feedback process outlined in Section 9. This process involves continual review of assumptions and data as new information becomes

available, to ensure the National Water Resources Plan (NWRP) is up to date. A further review of data will take place at project development stage as outlined in Section 6.4 of the draft RWRP-NW.

In response to the EPA's recommendation that Uisce Éireann continue to focus on addressing issues related to supplies currently on the EPA's Remedial Action List we note that critical projects and programmes to address potential public health issues are on-going and not impacted or delayed by the delivery of the NWRP. Section 7.6 of the draft RWRP-NW outlines the process for developing interim options to address critical water quality and quantity issues while we deliver our Preferred Approaches through the coming investment plans. Using this process, interim, short-term capital maintenance solutions have been identified for all Water Treatment Plants and these solutions are referred to in Section 6 of the Study Area Technical Reports.

The SEA is a strategic plan level assessment but also provides a framework for project level assessments and recognises that the potential adverse impacts for individual projects will need to be assessed further and this will include the any development of additional ground water source at Longford Springs, Castlerea and will need to existing groundwater source protection areas.

The environmental information associated with the RWRP-NW and EM region proposals are provided in the relevant study area Environmental Reviews included as Appendices to the SEA Environmental Report. We also recommend consideration of the environmental information sources used by the SEA directly and as recommended by the EPA as these sources of information are also regularly updated.

The consideration of undesignated heritage assets and archaeological interests have been added to the criteria however in many cases this information is not available for a strategic level assessment. SEA recommendations include the need for further detailed assessments and consultation with relevant authorities to take account of potential impacts on cultural heritage and to identify appropriate approaches for mitigation and this will include cross border consultation where needed.

Consideration of opportunity to address fish passage barriers is recommended as part of mitigation and enhancement measures as part of project level studies including for abstraction decommissioning and has been included in the Environmental Action Plan (EAP12.1) and Monitoring Plan (RMP Bio 2).

Section 5.5.3 European eels or migratory trout (sea-trout) have been added to the species referred to and have been considered as part of the assessment of effects on sustainable abstraction, aquatic biodiversity and potential for creating or removing barriers to species movement.

The importance of the North Atlantic Salmon Conservation Organisation (NASCO), Convention for the Conservation of Salmon in the North Atlantic Implementation Plan for the period 2019 – 2024 and as an international commitment for Ireland is

recognised in section 5.5.3. in relation to commitments to protect and restore fisheries and habitats for salmon and maintain biodiversity.

The third cycle of the Water Framework Directive Consultation on the Draft 3rd Cycle River Basin Management Plan 2021 to 2027 for the North Western, Neagh Bann and North Eastern River Basin Districts, Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk), is referred to in section on the Transboundary baseline as a key source document including measures listed in relation to the protection of fisheries.

We note DAERA identifying the Loughs Agency as the lead body for provision of advice regarding impacts to salmonid and inland fisheries interests within the catchments of Lough Foyle and Carlingford Lough and we have included commitment to consult with the Lough Agency in relation to projects within the catchments for Lough Foyle and Carlingford Lough and DAERA Inland Fisheries for fisheries advice for other shared catchments in Northern Ireland and have referenced this in the SEA Environmental Action Plan (EAP11).

We note that consideration of coastal and marine waters is included in the commitment to support the achievement WFD objectives and avoidance of deterioration expressed in the SEA objectives. As noted above, we note that there are elements addressed in Marine Strategy that are not covered by Water Framework Directive, such as, marine noise, litter, certain aspects of biodiversity and ensuring concentrations and effects of contaminants are kept within acceptable levels but note that the SEA objectives are focused on aspects relevant to the water resource supply proposals, which largely involve ground water and surface water abstraction, drinking water treatment plant and network improvements. The elements mentioned are covered broadly by SEA objectives on biodiversity, water and material assets and Table 5.12 highlights the issues and opportunities considered to be relevant to the plan.

The legislation, strategies and plans suggested by DAERA including NI's have been added to the PPP review where relevant to the proposals in the RWRP-NW.

We note the Department of Environmental Climate and Communication (DECC) recommendations on data sets that would support the fine screening assessment scoring question relating to geology and soils. In response to this, Uisce Éireann confirms that 'Geological Heritage Audited Sites' and 'Geological Heritage Unaudited Sites', 'National Landslide Susceptibility Map', 'Irish Soil Information System' and 'MINES - Solid Waste Heaps' maps were used for fine screening question G1.

In addition, the geological Natural Heritage Areas, Ireland's Geological Heritage Sites, the Irish Soils Information System national soils map and Geological Survey Ireland (GSI) Groundwater Flooding maps and geology maps available on Map Viewer, and GSI's online datasets of bedrock and subsoil geological mapping, were used to prepare descriptions of geology presented in the Study Area Technical

Reports (Appendices 1 to 3 of the draft RWRP-NW) and the Study Area Environmental Reviews.

Uisce Éireann confirms that GSI's advice, data and maps were utilised where available throughout the fine screening assessment, and that hydrogeological assessments of options were completed taking account of groundwater resources provided by the GSI, i.e. wells, drinking water source protection areas; national Aquifer, Vulnerability and Recharge map; subsoil permeability, karst features, tracer test database, turlough water levels (gwlevel.ie) and the Groundwater body descriptions database; and considered cumulative effects on WFD ground water status and interaction with existing Uisce Éireann abstractions. Uisce Éireann acknowledges the disclaimers associated with these datasets and communicates caveats with the datasets in the transition of plan to project level assessment approaches. These assessments supported the options assessment process and considered the following additional data sources: Uisce Éireann recognises the invaluable ongoing contribution of the GSI's Groundwater and Geothermal Unit to the Irish groundwater knowledge base.

Uisce Éireann commends the GW Flood and GW Climate projects for their work in assessing climate change impact on groundwater. The outputs of these projects will inform Uisce Éireann's Flood Risk Assessment and management plans where they are undertaken in the future.

Uisce Éireann is familiar with the GSI's GW3D project and as outputs are developed as part of this project, Uisce Éireann will ensure consideration and integration as plans transition to project level and site-specific investigations occur.

Uisce Éireann acknowledges the recommendation from DECC to utilise additional datasets, i.e., Geotechnical Database Resources, Geo Hazards, Marine and Coastal Unit and Coastal Vulnerability Index and can confirm that further evaluation of options will take place at project level, at which stage the proposed datasets and any new information and data will be considered and incorporated via the monitoring and feedback process in Section 8.3.8 of the Framework Plan. This will include the following data sets identified by the DECC in their submission on the draft RWRP-NW:

- GSIs Groundwater Protection Scheme mapping
- GW Climate' maps and data
- County Geological Sites (available on GSI's Map Viewer)
- National Geodatabase
- National Landslide database and Landslide Susceptibility map
- Historic Site project datasets
- GSI's Coastal Vulnerability Index study
- Integrated Mapping for the Sustainable Development of Ireland's Marine Resource and other GSI Marine and Coastal Unit datasets

The SEA Environment Report has been updated to reference these data sets in the Monitoring Plan provided in Section 10 of the report.

We note Clare County Council Physical Development Directorate comments on the references to identifying cumulative and/or negatively synergistic impacts in the Plan and noting that the assessment is limited by the data available. The SEA Environmental Report addresses potential cumulative effects across plan areas and also sets out commitments for further investigation at project level and for monitoring effects including potential cumulative effects.

The SEA objective for Water has been amended to address previous comments from the EPA to ensure that the Water Framework Directive requirements and objectives are addressed. The approach to the assessment using the current SEA objective is considered to be aligned with the intent in the suggested wording and no further wording change is proposed.

8.7 Transboundary Effects

8.7.1 Summary of Transboundary Effects Feedback

Northern Ireland Department of Communities Historic Environmental Division (HED) commented that “considering the potential for transboundary effects on cultural heritage assets at this plan stage however, particularly for those assets in a riverine context, we would have expected this assessment to be included in para 9.2 Transboundary Effects.”

HED acknowledged that this is a plan level assessment however they advised “the potential for transboundary effects, particularly in relation to SAB -081 at Blacklion, given the number of scheduled monuments around the Lough Maclean Lower area, should be considered further.” For this reason, they further suggested “the criteria for a significant effect in relation to Cultural Heritage as outlined in Appendix D ‘Loss or damage to cultural heritage assets within construction footprint’ is expanded to take into account the potential for significant effects on heritage assets outside the identified area e.g., to include potential impacts on setting or consequential effects.”

The Department of Agriculture, Environment and Rural Affairs (DAERA) noted under Section 9.7 that none of the options identified in proximity to the border are considered likely to have transboundary effects however should any changes which are likely to impact Northern Ireland be included, then DAERA should be re-consulted.

The DAERA SEA Team Marine Conservation Advice (MCA) advised that in Section 5.12 Transboundary Baseline there are 18 Special Protections Areas and East Coast Marine SPA, and Carlingford Marine SPA should also be included.

DAERA Natural Environmental Division (NED) welcomed the acknowledgement and consideration of transboundary environmental effects within the SEA. NED requested that should there be any changes to the current RWRP-NW which could result in transboundary impacts then the relevant authorities in Northern Ireland

should be consulted. NED also noted within Section 7.16 that any project level individual environmental assessments including EIA and AA subject to public consultation should include relevant authorities in NI. NED noted it would be “worth considering the Northern Ireland Landscape Character Assessment 2000 (NILCA 2000) alongside the NI Regional Landscape Character Assessment, for proposals located in border areas.”

DAERA-Water Management Unit commented that are happy “that any potential transboundary issues have been considered and note the findings of the report which state that transboundary effects will be avoided.”

DAERA Inland Fisheries commented that that though transboundary effects are scoped in for the draft RWRP-NW and will be considered further as part of assessing the proposals for the final RWRP- NW there is “no consideration has been given to potential impacts to designated Shellfish Water Protected Areas (SWPAs) or identified Bathing Waters. Although impacts to SWPAs and Bathing waters in the transboundary loughs of Carlingford and Foyle are unlikely, the report would benefit from considering the baseline condition and potential impacts to these designations.”

DAERA Inland Fisheries commented that Study Area A, B, C, E and F have the potential for “transboundary impacts both to migratory fish species but also impacts due to water quality and quantity.”

Northern Ireland Water commented that a “number of ‘Import Water from NI Water’ and ‘Continue to import water from NI Water’ options have been assessed which in the main have been rejected based on deliverability & flexibility. The exception being the preferred approach to maintain the import of water from NI Water at Carrickarnon.” NI Water highlighted that if any of “these decisions are revisited in the future or any new cross border opportunities are identified that NI Water is happy to have discussions in relation to these.” NI Water further noted” that there are two cross border water imports from Northern Ireland, it is unclear however whether there are any exports from the Republic of Ireland into Northern Ireland.” They noted that there are several catchments with a large proportion of the catchment in both jurisdictions and Uisce Éireann “should, where relevant and as appropriate, take account of the whole catchment approach in their water resources planning in collaboration with the relevant cross-border stakeholders.”

8.7.2 Response to Transboundary Effects

We have noted the Northern Ireland Department of Communities Historic Environmental Division (HED) comments on considering the potential for transboundary effects on cultural heritage assets at this plan stage for those assets in a riverine context in para 9.2 Transboundary Effects and have added further clarification on why we consider that effects are unlikely given the proposed preferred options with proximity are rationalisation schemes, ground water abstraction or decommissioning with all construction works taking place within the

ROI. We also clarify that further and more detailed assessment will be undertaken at project level and will include consideration of effects on riverine and other cultural heritage assets.

We note the comment from HED in relation to SAB -081 at Blacklion, given the number of scheduled monuments around the Lough Maclean Lower area. We have highlighted this in section 9.2 and also clarified the basis for considering impacts on these cultural heritage assets in Northern Ireland unlikely. In relation to mitigation measures proposed for Cultural Heritage as outlined in Appendix D we have strengthened this in line with the SEA objectives to include taking account of potential significant effects on heritage assets outside construction footprints and to include significant setting or consequential effects.

We are committed to re-consult with Department of Agriculture, Environment and Rural Affairs (DAERA) should any changes arise which are likely to impact Northern Ireland. We will be undertaking more detailed project level environmental assessments, and these will include appropriate consultation with DAERA and other nominated stakeholders.

We have referred to SPA and marine designations in Northern Ireland in section and amended to specifically include the East Coast Marine SPA and Carlingford Marine SPA and these are added to the relevant figures.

We are committed to re-consult with Department of Agriculture, Environment and Rural Affairs (DAERA) should any changes arise which are likely to impact Northern Ireland. We will be undertaking more detailed project level environmental assessments, and these will include appropriate consultation with DAERA and other nominated stakeholders in Northern Ireland.

Reference has been added to the Northern Ireland Landscape Character Assessment 2000 (NILCA 2000) as a source of information for consideration in more future assessments.

Uisce Éireann welcome the comment by DAERA's -Water Management Unit commented that they are happy that any potential transboundary issues have been considered and note the findings which state that transboundary effects will be avoided.

We note the comments from DAERA Inland Fisheries acknowledging that transboundary effects to Shellfish Water Protected Areas (SWPAs) and Bathing waters in the transboundary loughs of Carlingford and Foyle are unlikely and their recommendation to include consideration in the baseline condition and assessment for these designations. We have added clarification that these designations have been considered but are not considered likely to be adversely affected by the water resource proposals in the plan.

We note DAERA Inland Fisheries comment that Study Area A, B, C, E and F have the potential for transboundary impacts to migratory fish species but also impacts

due to water quality and quantity. However, our assessment is not on the effects of the baseline study area but of the proposals put forward for as part of the Preferred Approaches for the Plan. The options in the Preferred Approaches have been assessed taking account of their characteristics, locations and the sensitivity of the environment. These are discussed in section 9.2 of the SEA Environmental Report. Further clarification has been added to section 9.2 to explain how impacts on migratory fish, water quality and water quantity have been considered.

We note Northern Ireland Water's (NI Water) comment and confirm that if any of the decisions are revisited in the future or any new cross border opportunities are identified we will discuss with NI Water NI Water.

We concur with NI Water's comment that there are several catchments with a large proportion of the catchment in both jurisdictions and confirm Uisce Éireann's commitment to take account of the whole catchment approach in their water resources planning in collaboration with the relevant cross-border stakeholders. We confirm that there are no exports of water from Uisce Éireann to Northern Ireland.

8.8 Conclusions on the Environmental Feedback

Having carefully reviewed the submissions received on the theme of Environment, Uisce Éireann considered that more clarity on certain points should be provided in the RWRP-NW and the Strategic Environmental Assessment Environmental Report. These changes are addressed in the SEA Statement and explained in section 8 response table above and summarise in section 8.8.1 "Clarifications" below. In addition, some of the points made in the submissions will be taken forward in other ways, as explained in section 8.8.2 "Recommendations" below.

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

8.8.1 Clarifications on Environmental Feedback

The following sections of the RWRP-NW has been updated to reflect feedback under the theme of Environment:

Section 2 additional related to tourism and recreation, inland waterways, marine environment and transboundary information updated to include the East Coast Marine SPA and Carlingford Marine SPA. Also, Waterways Ireland has been referenced as a stakeholder for consultation.

- Section 7 and Appendix 2, 3 and 6: Section 5 – the Preferred Approach for ten WRZs has been updated:
 - Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale WRZs will continue to be supplied from the existing GWSs.
 - Monaghan WRZ will maintain the current abstraction source and the existing WTP will be upgraded for water quality improvement.

- Cavan WRZ and Ballyjamesduff WRZ: Cavan WRZ will be connected to Ballyjamesduff WRZ, and spare capacity will be supplied from Ballyjamesduff to Cavan only. The connection of Ballyhaise to Ballyjamesduff will no longer form part of the Preferred Approach.

The Strategic Environmental Assessment (SEA) Environmental report was updated to reflect feedback under the theme of Environment as indicated in the response tables in section 8 and more information on this can be found in the SEA Statement.

8.8.2 Recommendations on Environment Feedback

Uisce Éireann will:

- Update the Supply Demand Balance (SDB) to take into account improved data on tourism demand when available. Updates to the SDB will be incorporated via the monitoring and feedback process in section 8.3.8 of the Framework Plan
- Communicate the disclaimers and associated caveats with national mapping datasets in the transition of plan to project level assessment approaches.
- Use the outputs of the GW Flood and GW Climate projects in development of Flood Risk Assessments and Flood Risk Management Plans and incorporate into Asset Management Plans where need is identified.
- Use the datasets currently in development by the Department of Environment, Climate and Communications and further evaluate of options at project stage with this new information and including the following data sources as relevant:
 - Geological Survey Ireland's (GSI) Groundwater Protection Scheme mapping
 - 'GW Climate' maps and data
 - County Geological Sites (available on GSI's Map Viewer)
 - National Geodatabase
 - National Landslide database and Landslide Susceptibility map
 - Historic Site project datasets
 - GSI's Coastal Vulnerability Index study
 - Integrated Mapping for the Sustainable Development of Ireland's Marine Resource and other GSI Marine and Coastal Unit datasets
 - National Land Cover Mapping
- Consult with DAERA and the relevant organisations for potential transboundary effects as options with potential cross border impacts are developed and take a whole catchment approach to identifying potential issues and potential opportunities for environmental enhancement for

example on fish migration and related to the decommissioning of existing abstractions.

- Where the Preferred Approach is to connect to a GWS or utilise GWS infrastructure, Uisce Éireann will consult and engage with the NGWS as we progress the plan level Preferred Approach to project stage.
- As the abstraction legislation is implemented, Uisce Éireann will continue to work with GWSs to secure sustainable supplies for our customers into the future.

9. Need

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Need”. Within the overall Need theme, we identified four sub themes, which we set out in Figure 9.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

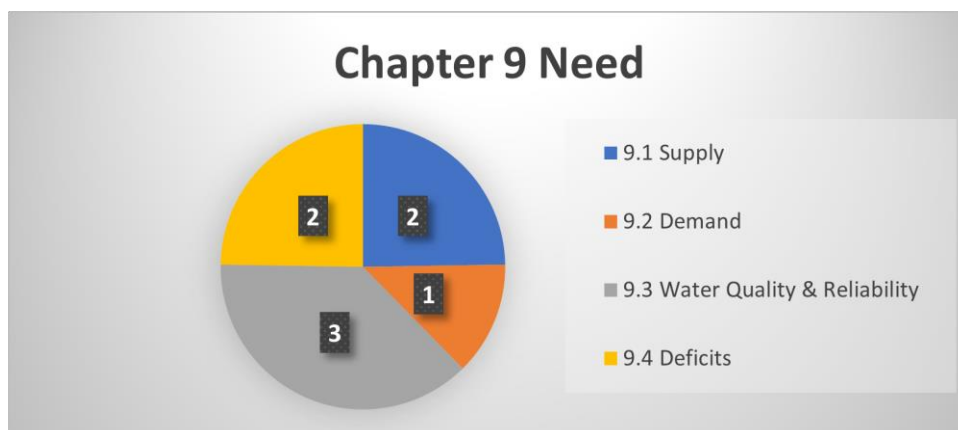


Figure 9.1 Need Theme

9.1 Supply

9.1.1 Summary of Supply Feedback

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

Clare County Council’s Planning Department, Economic Development Directorate said that maintaining a secure water supply to customers should be a critical function of Uisce Éireann. The Council pointed out that in Co. Clare, where there can be peak demands associated with Tourism offerings and during the peak tourism season, “the maintenance of supply has proven difficult in a number of locations such as in Carron in North Clare.”

The Council highlighted that addressing deficiencies in the infrastructure must be a key consideration in the formulation of this plan and a programme for investment must align with geographical needs. The Council welcomed the interim plans to upgrade a number of water sources and water treatment plants in the part of the County that is covered by the RWRP-NW.

9.1.2 Response to Supply Feedback

In response to AFU, we acknowledge the importance and our dependence on imports from group water schemes in the North West Regions. Uisce Éireann has a

good working relationship with the National Federation of Group Water Schemes (NFGWS). The NFGWS are a stakeholder in the NWRP, and we have consulted with them in the development of the NWRP.

Secure water supply is dependent on the resilience and quality of the raw sources therefore, UÉ will continue to work with the NFGWS to maintain existing resilient sources. The NFGWS are running a number of great initiatives in regard to source protection, and we welcome the recent publication of their final report on phase II of the Drinking Water Source Protection Pilot Project. Uisce Éireann are working with NFGWS and other key stakeholders as part of the National Pesticides Drinking Water Action Group (NPDWAC) which includes focus on sites with pesticide issues in Newport, L. Forbes and Belturbet. We will also be working with NFGWS in the coming years to secure our supplies as the Design Build Operate (DBO) contracts at their existing WTPs come up for renewal.

In response to CCC, in planning our water resource infrastructure, we do consider the increase in water demands resulting from the influx of tourists, particularly during summer months when local demand is elevated. In cases where the holiday population is high relative to the resident population these demand peaks may be pronounced during hot, dry weather periods in the summer season. We have already accounted for the impact of tourism in our water demand forecasts which feeds into the Supply Demand Balance. As our data improves, we are gaining a better understanding of the annual demand across our water resource zones and we have noticed peaking for prolonged periods in summer at certain tourist destinations. We will use this improved data to update the Supply Demand Balance as set out in our monitoring and feedback process in section 8.3.8 of the Framework Plan.

9.2 Demand

9.2.1 Summary of Demand Feedback

Clare County Council's Planning Department, Economic Development Directorate highlighted that the projects and themes presented in this submission demonstrate that the population projections for the County reflect potential domestic demand. However, they noted there are a number of major strategic plans and projects in the County which are identified as key economic drivers and will generate significant non-domestic demand. They stated that "Uisce Éireann must ensure a water supply that has the capacity to serve future demand for non-domestic use.

9.2.2 Response to Demand Feedback

We acknowledge the submission from Clare County Council's Planning Department, Economic Development Directorate and their queries in regard to allowance for non-domestic growth. Growth projections used within the RWRP–NW are based on best available data from the National Planning Framework (NPF) and Regional Spatial Economic Strategies (RSESs). Within our Framework Plan and draft RWRP–NW, we recognise that growth does not always result in an increase in non-domestic demand, and even though the population and economy are forecast to grow

considerably over the coming years, we have limited non-domestic water demand to the regional Cities. We have also capped non-domestic growth within other settlements. In these areas, we will try to facilitate growth in non-domestic water use via efficiency improvements and water conservation. We will review policy and trends in relation to this over the coming years and refine our forecasts as per the monitoring and feedback process set out in section 8.3.8 of the Framework Plan.

As outlined in Section 4.4 of the Framework Plan, we have included a headroom allowance in our estimation of demand. Headroom is the safety margin which is applied to demand forecasts to allow for uncertainties in our calculations on both the demand side and the supply side. The allowance is calculated and added to estimated demand to provide a buffer in the supply demand balance (SDB) and to ensure that the preferred approach is sized appropriately to meet future required needs.

Furthermore, Uisce Éireann will update the SDB in line with the data received. This will allow Uisce Éireann to respond to growth and development needs and prioritise water supply investment in collaboration with local authorities and with reference to the County/City Development Plans and Local Area Plans and Metropolitan Area Strategic Plans (MASPs).

9.3 Water Quality and Reliability

9.3.1 Summary of Water Quality and Reliability

An Forám Uisce (AFU) refer to the following statement in the draft RWRP-NW 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.” AFU highlighted that the OPW flooding maps indicate a high possibility of flooding in some areas across the North West region, and that 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. AFU recommended “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.” They further recommended that if flood management plans are not yet ready for the North West 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.”

Roscommon County Council highlighted that the protection of Arigna regional, Boyle, North east regional, North Roscommon, Castlerea, Roscommon central, Knockcroghery and Lecarrow water sources “requires early action and stable long-term planning of protective measures.”

The Council referenced the Water Framework Directive Article 7.3 that member states must; “ensure the necessary protection for the bodies of water identified ... with the aim of avoiding deterioration in the quality of water to reduce the level of purification treatment required”. They noted that the Article also requires that

Member States may establish safeguard zones for those bodies of water. The Council suggested that continuous raw water monitoring of applicable parameters should categorise Arigna regional, Boyle, North east regional, North Roscommon, Castlerea, Roscommon central, Knockcroghery and Lecarrow water resources and assess how they perform in extreme weather events. They recommended that such data should feed into future water resource planning.

The Council recommended that “the balance needs to be struck between water quality and cost of treatment, and that careful consideration should be given to the use of surface water sources (Lough Gara and Grange Lake) and the resulting cost to treat this water to drinking water standards.”

The Council noted that the ability and robustness of Castlerea temporary WTP to deal with the variability in ground water quality during weather events needs to be determined.

Ibec stated that “As towns and villages have grown in size over time, it has meant that some of the existing supply sources now experience problems, particularly during extended spells of dry weather.” They agreed that the assessment criteria used by Uisce Éireann is appropriate. However, a “more integrated approach could be beneficial, for example in catchment management.”

Ibec further noted that the reliability of North West water supplies is also dependent on the standard of existing network infrastructure, and that the Study Area Technical Reports have appropriately identified critical assets which require immediate upgrades.

9.3.2 Response to Water Quality and Reliability

When considering the Preferred Approach, we assessed the resilience of each option to climate change by considering the available yields from the proposed new source in the future and considering the location of our infrastructure in relation to flood zones. 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 assessments at plan level are based on desktop information. All assessments are carried out in a uniform and consistent manner and the purpose of the assessments are to allow a comparison between solutions, rather than an absolute evaluation of a proposed solution. Solutions will be assessed in more detail at project level.

As part of our DWSP we consider flood risk to our sources via our Source Risk Assessment Methodology. The Risk Mitigation pieces of this work will begin once the methodologies are complete and the risk assessment to existing sources has been carried out, these risk assessments which will include any Flood Risk Management Plans which are deemed necessary to feed into our project level assessment. Subsequent iterations of the NWRP will include for Flood Risk Management Plans.

Further to Roscommon County Council's comment on source protection and the impact poor water quality can have on the cost of water treatment. As part of the rollout of the DWSPs, we will consider nature-based solutions and catchment measures to reduce source risk to our supplies and reduce the cost of treating water, and we will actively engage as a stakeholder in catchment initiatives. Further information on our source risk assessment is included in Box 5.2 in Section 5.5 (and cross referenced in Section 5.9) of the Framework Plan.

Source protection and management is a feature of the recast Drinking Water Directive and our national transposing legislation, the European Union (Drinking Water) (Amendment) Regulations, 2023. There is a working group set up in relation to this. Implementation of source protection measures will require further collaboration with several stakeholders including, riparian owners, industry groups, the agricultural, forestry and environmental sector and Agriculture and Food Development Authority (Teagasc), especially in terms of enforcement and responsibility for the actions of third parties which are outside of Uisce Éireann's control.

As Ibec noted in their submission, development has occurred in towns and villages and water treatment infrastructure has often not been upgraded in line with this growth. This is illustrated in the RWRP-NW by the large number of WRZs where we are currently not providing the 1 in 50 level of service. The Preferred Approach as set out in the RWRP-NW will look to improve the Level of Service and resilience issues. As mentioned above, catchment management measures such as source protection will be considered alongside the development of our preferred approaches, however, while catchment management measures can improve the water quality issues it will not resolve the large deficits that exists across many of our supplies. In addition, the implementation of many catchment measures would be outside of Uisce Éireann's control as they will be the responsibility of third parties, for instance, local landowners.

9.4 Deficits

9.4.1 Summary of Deficits Feedback

Roscommon County Council (RCC) commented that a breakdown of the deficit figures in Table 2.3 in Appendix 6 Study Area F Technical Report should be provided, and that hydrological yields from our water sources "need to be determined more accurately."

The Council highlighted that Water Treatment Plant assessments are required to check design capacities and accurately determine available headroom, and that process losses need to be accurately determined. They acknowledged that significant progress has been made in reducing Unaccounted for Water (UFW) and in the methodology in determining UFW. However, "there is a gross underestimation of unmetered or illegal connections (apparent losses) that are not accounted for."

AFU noted they broadly supported the proposal for the construction of 12 new Water Treatment Plants (WTPs), upgrading capacity at 45 WTPs and improving barrier performance at 105 existing WTPs to reduce water quality risk across all Water Resource Zones in the North West Region. AFU supports this proposed capital maintenance “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.”

AFU acknowledged that Uisce Éireann “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 Uisce Éireann.”

9.4.2 Response to Deficits Feedback

In regard to the Roscommon County Councils submission on the level of detail provide in the Technical Appendix we note that the information provided in the technical reports is summary information. A more detailed breakdown of the supply demand balance is provided in Appendix L of the NWRP Framework Plan https://www.water.ie/projects/strategic-plans/national-water-resources/NWRP_FP-Appendix-L-Merged-final.pdf and a detailed breakdown of how the supply demand balance is calculated is provided in Sections 3 to 6 of the NWRP Framework Plan. Reference to Appendix L is provided in the technical reports in the text explaining the table which contain the WRZ deficit summary.

Uisce Éireann recognise that more accurate data on WTP capacities and outages would improve our estimate of headroom allowance. We have therefore committed to the following two actions (as stated in Appendix I of the Framework Plan):

- Develop our own headroom methodology, which is likely to be based on the UK Water Industry Research (UKWIR) methodology¹; and
- Improve our data collection to facilitate a more robust headroom analysis.

We note Ibec’s comment that the current estimate of apparent loss is an underestimate. As we progress optimization of our District Metered Area’s we will refine data in relation to this. Updated data, such as loss estimates, will continue to be incorporated in our supply demand balance estimates via the monitoring and feedback process in section 8.3.8 of the Framework Plan.

9.5 Conclusions on Need Feedback

Having carefully reviewed the submissions received on the theme of Need, Uisce Éireann considered that no updates to the RWRP-NW are required. However, some of the points made in the submissions will be taken forward in other ways, as explained in section 9.5.1 “Recommendations” below.

¹ UKWIR, 2002. An improved methodology for assessing headroom.

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

9.5.1 Recommendations on Need Feedback

- Where the Preferred Approach is to connect to a GWS or utilise GWS infrastructure, Uisce Éireann will consult and engage with the NGWS as we progress the plan level Preferred Approach to project stage.
- As the abstraction legislation is implemented, Uisce Éireann will continue to work with GWSs to secure sustainable supplies for our customers into the future.

10 Solutions Methodology

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Solutions Methodology”, these are submissions about the methodology used to find a preferred solution. Within the overall Solutions Methodology theme, we identified three sub themes, which we set out in Figure 10.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

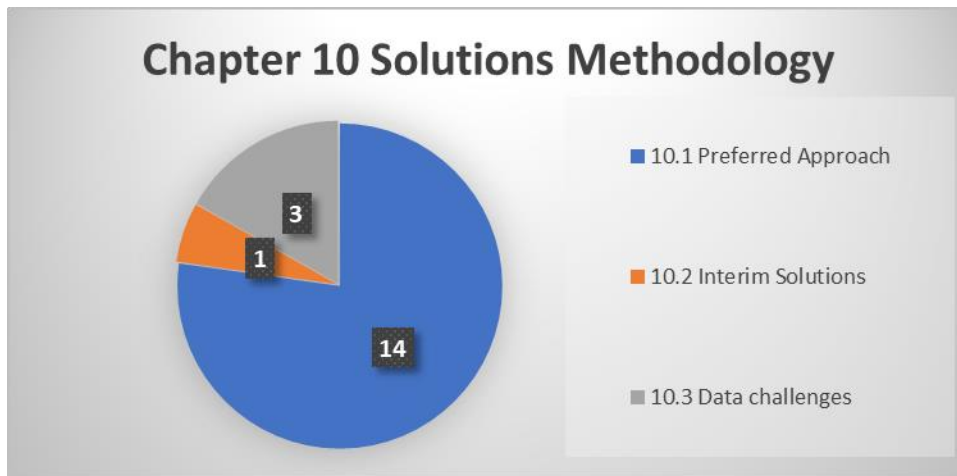


Figure 10.1 Solutions Methodology Theme

10.1 Preferred Approach

10.1.1 Summary of Preferred Approach

Councillor Patrick McGowan commented that the local main water reservoir at Lough Mourne needs a new connection to Meenglas / Goland and is not included on any maps. Cllr McGowan further noted “Ballybofey, Castlefinn, Convoy and Killygordon areas need water mains replaced urgently and the secondary storage reservoirs in Convoy and Castlefinn need upgrading to meet local demand.”

Glaslough-Tyholland Group Water Scheme (GTGWS) supported the option to maintain the existing imports from Glaslough-Tyholland GWS for both villages. They noted that Uisce Éireann is looking at alternative options for both villages due to the concern that the existing raw water source at Emy Lake “would not achieve Water Framework Directive objectives due to the risk of over abstraction from Emy Lake particularly taking into account future demand”. GTGWS commented that by making improvement in a range of areas the sustainability into the future raw water sources at Emy Lake would be greatly improved.

GTGWS commented that the proposed option to connect Glaslough and Emyvale villages to Monaghan town supply “would be a huge infrastructural cost to Uisce Éireann for a reasonably small quantity of water and wouldn't appear a financially viable option in terms of capital and operational costs. In addition, this pipe (which

would be circa 450mm diameters), would dissect Glaslough - Tyholland GWS's existing network causing serious infrastructural disruption as our network extends from the reservoir in Emyvale to within 50m of the Monaghan Town supply.”

Roscommon County Council (RCC) commented that “the Regional Preferred approach offers benefits in that it can allow for existing small/temporary problematic WTPs to be rationalised. They agreed “this will create a safer, secure, resilient and sustainable Water Supply Zone in the long term.”

Roscommon County Council (RCC) also noted that “if forth coming abstraction licensing allows and hydrological yields are determined quantity and resilience can be achieved by interconnectivity of water supply zones and rationalisation of poor unreliable sources in the short to medium term.” RCC noted that interconnectivity between water supply zones is critical in the short to medium term and “relatively easily achievable in some cases, e.g., connect Arigna Regional to Boyle Water Supply Zone (WSZ) to provide increased headroom at Boyle Water Treatment Plant during periods of dry weather, and interconnect Roscommon central with Knockcroghery WSZ would allow for the rationalisation of both Knockcroghery and Carrow WTPs.” RCC noted that there is a significant ground water resource at Ballinagard which could also be utilised to enhance resilience in WSZ’s in west Roscommon.

They further noted that the critical requirements listed in Table 2.4 *Study Area 5F Critical Infrastructure Projects and Need Identification* does not contain projects for Roscommon but that there is an “extensive list of capital programmes are under way to address infrastructure deficits and water quality issues in Roscommon” such as;

- The completion of the four regional water supply schemes which included five new WTPs and associated interconnecting pipework.
- The completion of the Grange WTP on the North East Regional Water Supply scheme.

RCC commented that “this section also fails to identify the temporary nature of the Castlerea temporary WTP...the long-term plan for Castlerea was to extend the Lough Mask supply from Williamstown to Castlerea...there is a tentative mention of this in section 4.3.4, but it is not definitive.”

RCC provided further comments on the following:

- Roscommon Central Public Water Scheme (PWS) and the “opportunity missed to avail of the significant ground water resource and expand into other WSZs with potential to rationalise existing small WTPs.”
- Castlerea PWS and the need for additional Ground Water abstraction which is currently being evaluated under the supply demand balance programme. A new WTP is urgently required if supply from Lough Mask not feasible.

- North Roscommon PWS: Query Lough Gara as a long-term source due to its extremely poor raw water quality and cost of treatment. The WTP underwent an upgrade in 2017/2018.
- Arigna Regional PWS: WTP constructed in 2014/2015. Potential to extend WSZ to Boyle WSZ by constructing 1km of interconnecting pipework which would provide additional resilience during drought periods.
- North East Regional PWS: New WTP constructed in 2017.

Coiste Cosanta Soláthraithe Uisce Loch Bhoth Loiscthe (íochtarach) objected to any further extraction From the Spiddal Water Supply, Spiddal Waterworks, at Sheanaghuráin Water Treatment Plant and all associated works from Lough Boliksa catchment area on the following basis:

- That it defies the initial correspondence from Galway County Council in 1974 which indicates the max extraction would be of the order of 600,000 gallons = 2271.247 litres per day as all landowners had agreed too.
- That it is detrimental to Special Protection Areas (SPA's) on the lake and river system which would be completely submerged and compromised.
- That Lough Bouliska is within or adjacent to the Connemara Bog Complex SAC and the Moycullen Bog NHA.
- River pollution could wipe out the remaining wild salmon/sea trout spawning ground and brown trout, otters, birds, migratory birds, geese, some transcontinental and water lilies/orchards and reeds that are dependent on this unique habitat and its wider catchment area.
- Loss of the Snipe, Herron, curlew and cormorant and other rare species and migratory area for birds.
- Security of supply to existing capacity for consumers from Furbo to Ros a`Mhíl and a threat to security of existing consumers, commercial business as well as tourism and new consumers within the existing catchment area.
- Threat to public health since extraction order has been exceeded as per recent crisis with manganese as noted in a recent EPA report of organic chemical matter within the surface water of the lake.
- Risk of release from bog and stone because of excess water /submersion of stone and bog (a previous issue where the backfill of dam was never maintained which resulted in polluted bog water discharged downstream to one of the main Wild salmon fisheries in the west of Ireland and also the loss of a Blue Flag to Spiddal beach resulting public bathing safety risks).
- Because of recent level rise in the lake on a few occasions it has flooded onto or near the road which damaged the phones line, which are in underground cabling ducting beside the road.
- That any excess pipe omitting excess effluent with treatment chemicals, could pollute one of the last indigenous oak forests in Ireland as well the salmon migrating upstream to spawn.
- Local Planning permission will be greatly curtailed for local inhabitants.
- The local road is not a designated or to a haulage road standard for heavy vehicles usage that are already accessing the water treatment plant.

- Access has been denied to local residents from leaving or accessing their houses due to intermittent flooding of the road.
- No health and safety risk assessment of the bridge (which was built in 1938) and the impact of rising water levels/erosion.
- Raising the lake/water levels any further will contribute to Soil erosion/leeching from bog on an industrial level that will have detrimental effects on public health, the natural sensitive eco system of the lake.
- Local land owners will be greatly affected around the lake/river catchment area as they will lose hectares of land.
- Higher risk of uncontrollable polluting due to human activity.

Another stakeholder who is a landowner on the shores of Lough Bouliska highlighted, that at the “time of the construction of the Spiddal water scheme the land owners were given a guarantee that only a finite volume of water would be extracted from the lake...it was on this basis that a lot of the land owners agreed to sign to allow the scheme to go ahead.”

The stakeholder went on to note that this limit of water was passed several years ago. They further requested what the daily abstraction from Lough Bouliska is today and why engagement with landowners did not take place

Ibec commented that “if all the Options identified in the Regional Preferred Approach are delivered there should be no supply deficit for any of the WRZs in the North West Region.” Furthermore, “additional benefits of utilising sustainable sources for supplies, delivering leakage reduction measures, balancing peaking and variability in demand across a larger baseline should continue to underpin this strategy.” Ibec further commented that the delivery of the Regional Preferred Approach should not be undermined by budgetary and regulatory constraints and that “Uisce Éireann should be fully supported by the Government and other oversight bodies.”

The Department of Communities Northern Ireland Historic Environmental Division (HED) reviewed the environmental report and the Preferred Options identified along the border region in study areas A, B, C and E. They noted “as outlined in paragraph 7.16, that options arising from the plan will require further environmental assessments at the project level to inform site specific proposals, alongside relevant stakeholder consultation.”

DEARA - Inland Fisheries noted “that the scores for the biodiversity impacts are derived from the Best Appropriate Assessment approach, this will only consider environmental impacts to sites designated under Special Areas of Conservation or Special Protected Areas, this may not give an overall impact to fisheries interests within the impacted catchments.”

Inland Waterway Association Ireland (IWAI) noted several references to the decommissioning of Water Treatment Plants (WTPs) and the increase in capacity of surface water abstractions on the inland navigable waterways once the Preferred Approach has been commissioned. IWAI advised “that any capacity limits identified

should not have a detrimental impact permitted water levels for navigation as this in turn will reduce the economic development potential of water-based tourism.”

Clare County Council Physical Development Directorate (Clare County Council) noted as detailed in the dRWRP-NW the regionally significant source and water treatment plant (WTP) for Study Area G is the New Doolough WTP. The WTP has been a regional provider of treated drinking water to the West Clare region spanning from Milltown Malbay in the north to Loop head in the south, supplying Kilrush, Kilkee and a large rural area. CCC highlighted that a project to upgrade the New Doolough WTP was recently completed, as noted in page five of the draft RWRP-NW. This project was commissioned with a design capacity of 16,300 m³/day over 20 hours and subject to redesign and further investment, for the plant to produce 18,000 m³/day over 22 hours. CCC noted that peak demand from the Moneypoint power generation station in its current operational form is approximately 6,000 m³/day.

CCC highlighted that a second WTP draws from the Doolough source and is named the Old Doolough WTP. This plant has the capacity to supply 5,000 m³/day into the regional network. It has a separate supply area but with network interconnections which can allow some redundancy to either network as required. CCC noted that it is proposed to take Old Doolough WTP out of service, with the New Doolough WTP to provide water to allow the rationalization of the Kildysart supply, a demand of approximately 1,500 m³/day. It is “further expected that this supply will be used to supplement the North Clare Regional supply, currently fed from Ballymacraven WTP, located just north of Ennistymon, in the medium to long term.”

However, CCC commented that “under the current Moneypoint demand scenario, with 6,000 m³/day required and no generation closure past the originally scheduled 2025 date, and should Old Doolough be decommissioned, there is an immediate deficit concern during summer drought period.” CCC further commented that the “ESB Generation have a strategy for a new phase of power generation at the Moneypoint site. This strategy will have a significant influence on any future plan for the regional water supply scheme. Hydrogen generation, or another large volume water consuming generation technology may form part of that future strategy, intended to be delivered within the next seven years. The continuation of the current 6,000m³/d demand, or an increase in this demand would have significant ramification for the Uisce Éireann strategy proposed regardless of leakage target achievement. It is vital that this is considered, with ongoing appropriate consultation with ESB Generation, to ensure adequate provision is made for the future water demand needs of this region.”

CCC noted that the draft RWRP-NW highlights a target of 21% leakage in the network to achieve headroom for rationalization of Kildysart (1,500 m³/day), provision of supplemental supply to the Ballymacraven regional scheme and provision of overhead for future development in the West Clare region. CCC commented however that “achieving and maintaining this target will require sustained and significant investment in leak detection and repair and watermain rehabilitation,

network extension and upsizing. CCC further commented that “There is no evidence to date that Uisce Éireann’s network investment programme is adequately resourced to deliver this ambitious target given the limited investment in mains rehabilitation and replacement evidenced in Clare since the Authorities formation.”

The Office of Public Works (OPW) welcomed the preferred approach to the planning of regional water resources to 2044 through a comprehensive and systematic review of the evidence-base, informed by SEA and AA. The OPW considered “the preferred approach to be a rational and strategic approach to providing a sustainable, secure and reliable water resource for the region. In particular, the Office acknowledged the strategic approach to improving resilience and flexibility on a regional and inter-regional basis through the merging of the proliferation of existing supply systems to form 17 new interconnected Water Resource Zones (WRZs) through the construction of 733km of trunk mains, and the reduction of WRZs from 119 to 78.”

The Office also acknowledged the potential benefits that would arise “in terms of quality and quantity of water supply and the improved ability of water resources to support population growth and economic development across the North West region, the majority land area of which forms part of the Northern and Western Regional Assembly (NWRA) area.”

The National Federation of Group Water Schemes (NFGWS) noted the proposed options in relation to the six Group Water Schemes (Erne Valley, Dhuish, Gowlan, Annagh, Glaslough-Tyholland and Doobally) that are currently supplying water to nine towns and villages are to maintain imports for two and move away from importing for the other seven towns and villages (Arva, Gowna, Killeshandra, Shercock, Blacklion, Ballyhaise, Glaslough, Emyvale and Dowry). “We understand that one of the main reasons why Uisce Éireann is proposing to move away and consider alternative options is the concern that the existing raw water sources would not achieve Water Framework Directive objectives due to the risk of over-abstraction, particularly taking into account population growth and increased demand.” The NFGWS commented that by making some improvements in a range of areas, the sustainability of these abstractions could be greatly enhanced, by considering the following: water abstraction, current water treatment status, source protection and water conservation.

The NFGWS commented on the proposal to address the needs of Smithborough village, Co. Monaghan includes a proposal to seek supplementary supply from Stranooden GWS. They noted that Stranooden GWS “raised concerns in relation to capacity to supply the deficit to Smithborough... as its treatment plant is already at max capacity and the GWS has had supply issues during dry spells to meet the demand of its own members.” Stranooden GWS is part of the Monaghan DBO bundle and, similar to the other schemes listed above, its contract will be expiring in the next few years. A treatment process review will be required.

The NFGWS reiterated that GWSs are community-owned, democratically controlled, private supplies and “therefore must never be assumed that individual GWSs will automatically agree and willingly participate in a preferred option identified by UÉ, without due consultation being undertaken between both UÉ and the GWS’s own members/shareholders.”

Monaghan County Council (MCC) Water Services Department highlighted the opportunity of Uisce Éireann partnering with Stranooden Private Group Water Scheme (GWS) to fulfil long and medium-term goals as per the proposed Strategic Water Resource Plan.

The Council indicated the possible serving of Smithborough and Newbliss public supplies from the Stranooden GWS. They further noted that at present this is not possible as the plant currently is at design capacity of 1800m³ per day and often exceeds this during periods of drought and severe freezes. MCC highlighted that the Stranooden GWS is in a strategic location geographically and at an altitude to serve these settlements if it had the capacity to do so. It would also be able to serve the Threemilehouse settlement leaving more reserves to serve Monaghan town.

MCC noted that to increase the output of the plant to serve the additional settlements the diameter of the rising mains and pump capacities will need to be increased, and for the GWS to cater for its own future demand, “increasing the output capacity of the system will be required.” They further noted that “In addition to having the above public networks served by the GWS there may also be an opportunity to serve the existing public Togan treatment plant with raw water from the White Lake source.”

MCC acknowledged that with the imminent Water Abstraction Bill coming into law, abstracting the required amount from existing sources of Corcaghan and Greagh lakes may be restricted. They suggested that “By switching to the White Lake source, this could allow for an increased raw water supply. This would allow Uisce Éireann to cease abstraction from Greagh/Corcaghan (Monaghan supply) and Feagh lake (Newbliss supply) and also abandon the Bore hole supply to Smithborough.”

It was the opinion of MCC Water Services that the above possibilities should be assessed, and that possibly there are mechanisms and agreements that can be mutually beneficial for Uisce Éireann, Stranooden GWS and the department. They noted that it is likely that a new Design Build and Operate (DBO) agreement will be entered into in 2026 when the existing DBO agreement comes to an end. They further noted that the Department will be commencing soon to look at procuring for the next operate phase. In addition to the operate phase schemes “will be looking at their current capacity, expected demand and upgrading of systems to cater for this.”

MCC concluded that now is the time to look at the possibility of a partnership approach with Uisce Éireann and Stranooden GWS to allow for future demands for both public and private schemes but also in a way that is “sustainable with the environment, provides a safe and secure supply and will comply with the proposed abstraction bill and recast drinking water directive.”

Stranooden Group Water scheme (SGWS) noted that the scheme is under significant pressure to cope with demand at all times, with this issue being magnified at times of extreme weather events which are “undeniably becoming more and more frequent.”

SGWS were acutely aware that future plans to further expand the schemes catchment or to allow for future growth within the existing scheme catchment will only increase existing pressure. They further noted that options to allow for growth had been addressed in some way by the scheme with the addition of storage reservoirs and water conservation works but the obvious answer is increased extraction and treatment plant capacity.

The Scheme commented that Stranooden is fortunate to extract from a very expansive body of water and despite pressure on the demand side, the supply side is more than adequate. They pointed out that “sooner or later increased extraction and treatment is the only real solution to allow for future development. Coupled with the need for water in the adjoining villages and town on existing public supplies, this regional resource plan is an ideal time to look at the options available.”

SGWS estimated that to facilitate the extra demands in the RWRP-NW plan an additional 400m³ per day would be needed, not taking into account the future growth within their existing catchment. They highlighted that they had a sufficient raw water supply but not “the ability to extract or treat the amounts required to meet these demands.” They further highlighted the possibility of incorporating treatment using both water treatment plants (Togan and Monaghan) may also be an option worth investigation if it could lead to increased treated water capacity.

The Scheme concluded that “Due to the continued growth in demand for water services in the area, options to future proof our scheme are to the forefront in our decisions and appropriate actions will be needed in the very near future.”

10.1.2 Response to Preferred Approach Feedback

The Preferred Approach for all Water Resource Zones across the region has been selected using the robust Option Development and Assessment process outlined in Section 8 of the Framework Plan. If at project level, further investigations determine these solutions to be unfeasible, Uisce Éireann will consider the alternative feasible options identified through our optioneering process. These are listed in Table 5.5 of the Technical Appendices 1 to 7 of the draft RWRP-NW.

As noted by Councillor Patrick McGowan, the Preferred Approach for WRZs may require additional distribution infrastructure to secure supplies to local demand centres within the WRZ. The locations of any required mains, network upgrades and service reservoirs will be determined at project level and for this reason the maps in the draft RWRP-NW do not present this detail.

Regarding water mains replacement, Section 5 of the draft RWRP-NW explains that we are undertaking large-scale targeted water mains replacements as part of our

National Leakage Reduction Programme. Uisce Éireann aims to reduce leakage levels to 21% of demand in WRZs with demand more than 1,500 m³/day. Within the Lough Mourne WRZ, our total leakage target is approximately 1,700 m³/day.

We applied our option development process to identify a range of solutions to address water supply needs across the region. Opportunities to interconnect supplies and rationalise infrastructure were considered when developing the options. In response to Roscommon County Council's (RCCs) submission on opportunities for interconnection, we confirm that the suggested connection of Arigna Regional public water supply (PWS) to Boyle Regional was assessed and compared against other alternative options using the option assessment process described in Section 8.3 of the Framework Plan. The Preferred Approach is to interconnect Boyle Regional with Carrick-on-Shannon WRZ to provide resilience and address the water supply needs of these WRZs. This option was determined as the best value solution when assessed against the NWRP planning objectives.

The Roscommon Central WSS is forecast to maintain a surplus throughout the planning period. For this reason, a supply option is not required for this WRZ. However, as noted in Table 5.9, Uisce Éireann are proposing to conduct pump tests to prove the high yield spring and boreholes at Ballinagard. If the yield is proven, there may be opportunities to rationalise existing small WTPs such as Knockcroghery and Lecarrow, as suggested by RCC. This will be considered at project level.

Regarding the supply for Castlerea, we confirm the Preferred Approach is to increase the groundwater abstraction and upgrade the existing WTP. Prior to the delivery of this project, a site-specific assessment of the available water will be completed. If it is determined at project level that the required yield from the groundwater source is available, the scope and scale of the WTP upgrade or WTP replacement will be determined. If it is determined that the yield is not available, consideration will be given to other feasible options which includes an option to supply Castlerea from Lough Mask. This project level assessment is set out in Section 6.4.3 and 6.4.4 of the Plan.

Uisce Éireann notes the concern expressed by RCC regarding the viability of Lough Gara as a long-term source for the North Roscommon PWS due to poor water quality and consequent treatment costs. When developing the Preferred Approach, we assessed options against a range of criteria that included quality, treatment and cost considerations. When compared with alternative options, the Lough Gara source was determined as the Preferred Approach that delivered the best value solution. Uisce Éireann will seek to improve source water quality through our Drinking Water Safety Plan Approach which focuses on managing water quality risks from source abstraction through to the consumer tap.

We note and welcome the numerous submissions received from the residents in An Spidéal on the issues at Lough Bouliska. Due to the number of submissions and

concerns raised we held a meeting with the residents on the 5 July 2023. Valuable site-specific information was obtained at the meeting through the submissions received. This information will be used at the project level assessment stage.

At plan level, the proposed preferred approach for the Rosmuc, Teeranea Lettermore and Carraroe supply is to connect them to the An Spidéal Supply and increase our abstraction from Lough Bouliska as this has been determined as the most sustainable source of supply for the area.

Project level assessments including a review of the potential impact the increase in abstraction will have on fish passage and the surrounding environment will be completed prior to the delivery of the preferred approach. As part of this process UÉ will have to obtain regulatory consents – both planning permission and an abstraction licence under the new Water Environment (Abstraction and Associated Impoundments) Act 2022. More detailed information on the proposal will be provided to the residents at that time and there will be an opportunity for the residents to make submissions through the consenting process. The proposed abstraction will be less than 6% of the average flow to the lake and there are no proposals to increase water levels or increase the height of the gates to facilitate the proposed abstraction.

In response to submissions related to Lough Bouliska, Uisce Éireann is engaging with the residents in An Spidéal in relation to concerns raised about the management of water levels at Lough Bouliska. Uisce Éireann is currently carrying out hydrological and hydraulic surveys at Lough Bouliska and we will continue to provide updates to the residents as this work is carried out.

Uisce Éireann appreciates Ibec's support for continued capital investment in the provision of sustainable water services. We will continue to collaborate with regulators and key stakeholders through the progression of the NWRP to facilitate priority investment in water infrastructure and to secure supplies across Ireland.

In response to the Department of Communities Northern Ireland Historic Environmental Division (HED), Uisce Éireann confirms that preferred approaches progressing to project level will be subject to Environmental Impact Assessment and Appropriate Assessment (as required), in support of planning applications (for example, for new abstractions). Any such, applications will also be subject to public consultation. Typical types of project level assessment are identified in the SEA Environmental Report. The list of assessments is non-exhaustive and must be reviewed at the project stage, considering project-specific survey information or studies. More detail on project level assessments is provided in Section 6.4 of the draft RWRP-NW.

In response to DAERA - Inland Fisheries, the impact of proposed projects on fisheries is considered through both the Appropriate Assessment and the Strategic Environmental Assessment criteria. The fine screening criteria and associated scores include 19 Strategic Environmental Assessment (SEA) questions. This informs the identification of feasible options and ultimately the selection of the

Preferred Approach. The questions assess the options against SEA objectives which include preventing the deterioration of the Water Framework Directive (WFD) status of waterbodies, and protection (and where possible) enhancement of aquatic biodiversity. Furthermore, any projects that are progressed will require individual environmental assessments, as noted above.

In response to the submission made by Inland Waterways Ireland, in Section 2.3 of the draft RWRP-NW, Uisce Éireann acknowledges that waterbodies not only supply drinking water needs but support many other uses including navigation. We note in the report that the River Shannon, River Earne and Moy are important rivers for transportation.

The new licensing regime, which will be adjudicated by the EPA, will take account of existing water requirements such as water levels for navigation and environmental flow requirements. Uisce Éireann will initiate the process of obtaining licences for new abstractions and regulating the licensing position of existing abstractions once the abstraction legislation has been enacted and the applicable regulatory process is in place.

Any additional legislative and regulatory requirements will be incorporated into the NWRP based on the monitoring and feedback process set out in section 8.3.8 of the Framework Plan.

In response to Clare County Council, Uisce Éireann acknowledges that potential increased water supply for energy production may be required in the West Clare region. We will continue to work with ESB Generation to secure supplies for all future water supply needs across the region. As described in Section 5 of the draft RWRP-NW, sustainability is at the core of our approach to developing solutions to meet future water demand. Where feasible, we therefore prioritise leakage reduction to reduce the pressure on our water sources.

Our Preferred Approach to meet the water need for West Clare, Kildysart and Ennistymon combines an increased abstraction from the Lough Doo source with leakage reduction measures. Leakage reduction will reduce demand by an estimated 9,000 m³/day. This investment in leakage will help to secure sustainable supplies for the West Clare region and enable the rationalization of the old Doolough WTP.

Uisce Eireann's National Leakage Reduction Plan is already in place and includes activities based on industry best practice such as improved operational control, pressure management, calm networks, active leakage control and targeted mains replacement. We are also trialing innovative acoustic logging technology, data intelligence systems technology, the use of satellite imaging, sniffer dogs and non-destructive testing. The development of improved data on our distribution networks will allow us to optimise our leakage reduction activities, and to facilitate an expanded programme of targeted water mains replacement. These measures are set out in section 7.3.1 of the Framework Plan. Investment in leakage reduction is also a

continuous activity and will endure beyond the delivery stages of major infrastructure project.

As outlined in Section 9 of the draft RWRP-NW, Uisce Éireann commits to continuous monitoring of the NWRP and will formally review the plan every 5 years. Our monitoring plan will consider growth in demand for non-domestic use, such as energy production, and the effectiveness of our leakage reduction programme. If changes to these components impact the Preferred Approach, the change will be assessed at project level or considered as part of the next review cycle.

In response to GTGWS, NFGWS, MCC and SGWS, Uisce Éireann currently provides supply and obtains supplies to several Group Water Schemes (GWSs). As part of the option development process for the draft RWRP-NW, where appropriate, we considered meeting WRZ needs by connecting to adjacent GWSs. In these cases, Uisce Éireann will continue to consult with the NFGWS in the development of any Preferred Approach where we are proposing to obtain a GWS supply or utilise GWS infrastructure. We acknowledge that GWS consent would have to be given prior to advancing such an option. Opportunities to partner with GWSs will be explored as we progress the plan level Preferred Approach to project stage.

For some WRZs that are currently supplied by GWSs, Uisce Éireann were not able to assess the potential for existing and future abstractions to exceed sustainable abstraction limits. On these occasions we selected alternative supply options as the Preferred Approach in the draft RWRP NW to avoid the possibility of over-abstraction. However, we acknowledge the improvements proposed by the NFGWS in their submission to the draft NWRP-NW which aim to achieve Water Framework Directive objectives in relation to abstractions. We also recognise that as part of the new abstraction licensing regime, the EPA will adjudicate licence applications and confirm the sustainable abstraction limits. Once the new abstraction legislation and associated regulations are confirmed there will be greater clarity on sustainable abstraction limits. At this stage, if existing abstractions are deemed to be unsustainable by the EPA, GWSs could consider alternative sources to ensure sustainability or Uisce Éireann can reassess the alternative feasible options that we have identified through the NWRP option development process. For this reason, Uisce Éireann has amended the Preferred Approach to continue supplying the following WRZs from GWSs - Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale. As the abstraction legislation is implemented, UÉ will continue to work with GWSs to secure sustainable supplies for our customers into the future.

The update to the Preferred Approach for Glaslough and Emyvale WRZs results in an update to the Preferred Approach for Monaghan WRZ. Given the Monaghan WRZ will be in surplus for the planning period, a new or increased supply is not required. We are therefore proposing in the final RWRP-NW to revise the Monaghan WRZ Preferred Approach to upgrade the existing WTPs for water quality improvements.

Similarly, the update to the Preferred Approach for Ballyhaise PWS WRZ results in a change to the Preferred Approach for Cavan and Ballyjamesduff WRZs. We are proposing to update the Preferred Approach to interconnect the two WRZs and supply spare capacity from Ballyjamesduff RWSS to Cavan RWSS only. Ballyhaise PWS will not connect to Ballyjamesduff but will continue to be supplied from Annagh GWS.

10.2 Interim Solutions

10.2.1 Summary of Interim Solutions Feedback

Roscommon County Council (RCC) commented that “Boyle PWS: While interconnecting with Carrick on Shannon WSZ would provide resilience, a simple interconnection with Arigna Regional would provide the needs in the short to medium term.”

10.2.2 Response to Interim Solutions Feedback

As it will take a number of investment cycles to deliver the Preferred Approach across all Water Resource Zones, Uisce Éireann must continue to deliver safe, secure, and reliable water supplies to meet customers’ needs and enable growth in the region. Therefore, within our draft RWRP-NW we have identified interim solutions for all Water Treatment Plants that will be utilised when needed. These solutions will allow Uisce Éireann time to deliver the Preferred Approach, while maintaining a sustainable and safe water supply. The interim solutions are generally smaller in scale and make the best use of existing infrastructure to avoid stranded assets. This is the case for the Boyle PWS, where the interim solution is to refurbish the existing borehole and spring and upgrade the WTP to Uisce Éireann standards.

A decision to progress an interim solution will be based on urgent or priority need to address water quality risk or supply reliability. Further information on interim solutions is provided in Section 7.6 of the draft RWRP-NW. The specific options for each study area are listed in the corresponding technical reports in Table 6.1.

10.3 Data Challenges

10.3.1 Summary of Data Challenges Feedback

An Fóram Uisce (AFU) recommended “that measures to increase the transparency in data available to or used by Uisce Éireann in the assessment of their proposed plans for the North West Region are included in the final Plan.” They further commented that “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.”

AFU highlighted that “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, AFU noted that the accumulative impacts of abstractions should be

assessed in an integrated catchment management approach for greater resilience and environmental protection. They further noted that “A better estimate of the hydrological balances in WRZs, would allow the perspective of the water quantity management to change from ‘Water Quantity that Uisce Éireann can provide’ (p.5 of the assessment of need), to ‘Water Quantity that each water body can provide.’”

AFU recommended that Uisce Éireann “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”. Furthermore “details should be included of the relevant external cooperation requirements e.g., formal collaboration between UÉ and the EPA, GSI, ongoing projects such as the GW3D project.”

Ibec commented that “data transparency and accuracy is crucial when assessing environmental and regional needs; further data should be incorporated in the final RWRP-NW as it becomes available. Any emerging data relating to catchment-based assessment, supply-demand estimates, and hydrology would be of particular value.”

Roscommon County Council (RCC) noted that the methodology used to assess need, quality, reliability and sustainability is detailed. However, they commented that some of the inputs used required detailed assessments and “the actual options considered at the course and fine screening stages are not presented and are therefore not available for comment.” They further commented that “it is crucial that the information and data used in the approach development is the best available in order to provide meaningful outputs to be used in the preferred approach development.”

10.3.2 Response to Data Challenges Feedback

With reference to the submissions outlining the data gaps, a further review of data will be carried out at the project development stage outlined in Section 6.4. Baseline forecasts and data feeding into the NWRP will be reviewed as new data is made available. Section 8.3.8 of the Framework Plan sets out the process for reviewing and responding to new data as it becomes available.

Existing abstractions are considered in the cumulative assessment undertaken by Uisce Éireann of their abstractions and proposed new abstractions. The potential in-combination effects from surface and groundwater abstraction on European sites, are considered in the in-combination assessment undertaken in the NIS (Section 7 and Appendix E). As part of the new abstraction licensing regime, the EPA will adjudicate licence applications in the context of all existing water users.

As outlined in Section 6.4 of the RWRP-NW, yield assessments will be carried out at project level prior to the development of any new source and outputs from the hydrological and hydrogeological assessments will be a key factor in the determination of the level of environmental assessments required, as these will provide more information on the boundary of any potential environmental impacts and the availability of water across the catchment.

Uisce Éireann recognises the potential for gaps within our data sets and that greater certainty in our estimates can be gained through improved data for our baseline supply assessments and forecasts. Uisce Éireann is committed to the development and delivery of a 5 to 10-year data and intelligence improvement strategy on data related to the Supply Demand Balance, water quality, asset registers, outage allowances, headroom and performance of assets, including network models. These improvements will include regular maintenance of instrumentation to ensure the accuracy of data. New data will be used to modify our Supply Demand Balance as appropriate and feed into Preferred Approaches.

Uisce Éireann will incorporate information from the Geological Survey of Ireland (GSI) regional assessments into our options assessments as it becomes available. Emerging data and information will be incorporated into the NWRP through the feedback and monitoring process set out in section 8.3.8.

To facilitate data sharing on groundwater source protection, Uisce Éireann will continue to engage with the EPA Hydrometrics Team and GSI, as part of the development of further studies on existing and potential future groundwater supplies.

In certain circumstances, monitoring and feedback will identify the need for a variation of the NWRP - Framework Plan or a RWRP. This assessment will be carried out on a case-by-case basis depending on the materiality of the impact of the relevant new data or change in circumstances

In response to the submission from AFU recommending that Uisce Éireann include scheduled actions to address current data gaps, we refer to the commitments to data improvements set out in Section 9 of the draft RWRP-NW and discussed above.

In terms of data gathering, as set out in Section 9.4 of the RWRP-NW we are committed to; Development of a strategy to improve understanding of supply risk including Source Risk Assessment studies, supply assessments, source surveys, source monitoring, and source models to facilitate greater understanding of supplies and roll-out of appropriate studies.

Uisce Éireann will integrate GSI Regional Groundwater Availability Assessments into the NWRP desktop studies as the information becomes available. The GSI data that has been considered in the development of the Preferred Approach is outlined in our response to feedback on the Strategic Environment Assessment (SEA) in Section 8.5.2 of this report.

10.4 Conclusions on Solutions Methodology Feedback

Having carefully reviewed the submissions received on the theme of Solutions Methodology, some of the points made in the submissions will be taken forward as explained in sections below. For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

10.5.1 Clarifications on Solutions Methodology Feedback

The following section of the RWRP-NW has been updated to reflect feedback under the theme of Solutions Methodology:

- Section 7 and Appendix 2, 3 and 6: Section 5 – the Preferred Approach for ten WRZs has been amended:
 - Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale WRZs will continue to be supplied from the existing GWSs.
 - Monaghan WRZ will maintain the current abstraction source and the existing WTP will be upgraded for water quality improvement.
 - Cavan WRZ and Ballyjamesduff WRZ: Cavan WRZ will be connected to Ballyjamesduff WRZ, and spare capacity will be supplied from Ballyjamesduff to Cavan only. The connection of Ballyhaise to Ballyjamesduff will no longer form part of the Preferred Approach.

10.6.2 Recommendations on Solutions Methodology Feedback

1. Uisce Éireann will incorporate information from the Geological Survey of Ireland (GSI) regional assessments into our options assessments as it becomes available.
2. To facilitate data sharing on groundwater source protection, Uisce Éireann will continue to engage with the EPA Hydrometrics Team and GSI, as part of the development of further studies on existing and potential future groundwater supplies.
3. As the abstraction legislation is implemented, Uisce Éireann will continue to work with GWSs to secure sustainable supplies for our customers into the future.

11 Regional Plan Consultation Process

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Consultation Process.” We deal with the theme in this Chapter, by setting out first a summary of the relevant mentions in the submissions, followed by our response. There were two submissions in relation to the Regional Plan Consultation Process.

11.1 Regional Plan Consultation Process

11.1.1 Summary of Regional Plan Consultation Process Feedback

Roscommon County Council noted that all communication to date regarding the NWRP has been via email, and that “This has been satisfactory and should continue as the RWRP-NW progresses.”

Clare County Council - Physical Development Directorate welcomed the recent consultation with Councillors and senior staff in Clare. The Council requested that further consultations be arranged as options emerge and are actioned into projects, “to ensure appropriate interaction between local government and the water authority.”

11.1.2 Response to Regional Plan Consultation Process Feedback

Uisce Éireann commits to continuing to provide communications and public consultations that are accessible, meaningful, transparent, proportionate, and accountable for all stakeholders, including those without a technical background. These principles have underpinned the approach Uisce Éireann has taken to the communications and public consultation for the NWRP to date relative to Phase 1 NWRP Framework Plan and Phase 2 NWRP, the four Regional Water Resource Plans.

11.2 Conclusions on Regional Plan Consultation Feedback

Having carefully reviewed the submissions received on the theme of Regional Plan Consultation Feedback Uisce Éireann considered that no updates or further recommendations to the RWRP-NW are required.

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

12 Plan Implementation

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Plan Implementation.” Within the overall Plan Implementation theme, we identified the following three sub themes:

- Phasing;
- Cost; and
- Funding.

We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

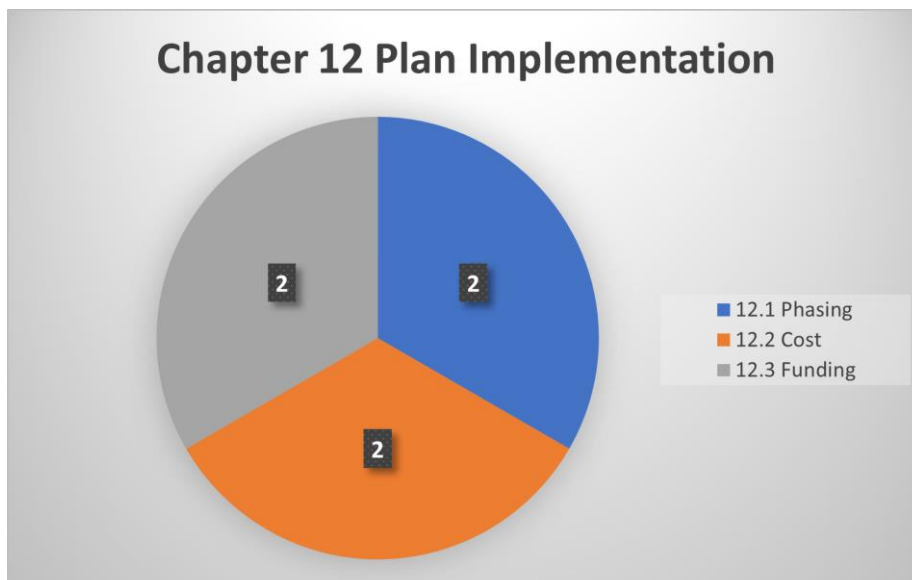


Figure 12.1 Plan Implementation Theme

12.1 Phasing

12.1.1 Summary of Phasing Feedback

Roscommon County Council acknowledged that the project consultation roadmap was clearly defined however they queried whether “This timeframe may be ambitious, given the inputs expected from all stakeholders effected.”

Clare County Council requested clarity and further information be provided around the suggestion “that there are significant deficiencies across the study area which may not be met or will only partially be met by Uisce Éireann during the period considered in the strategy up to 2044.” They Council also requested indicative timeline for how this strategy will be achieved.

12.1.2 Response to Phasing Feedback

In response to RCC, the Preferred Approaches identified through this process will be prioritised on a national basis and progressed through Uisce Éireann’s Capital Investment Plans. The phasing and timeframes for delivery of individual projects will be determined through the capital investment process. When prioritising growth

projects through Uisce Éireann’s Capital Investment Plans, we will ensure that these decisions are based on dialogue and continuing partnerships with the Regional Assemblies and the Local Authority housing and planning functions.

In response to CCC, the scale of investment required to transform our water supplies is undoubtedly considerable. However, the outcome in terms of increased ability to protect the environment, provide a good Level of Service for all customers, support growth and economic development, and adapt to climate change impacts will be substantial.

The development of the NWRP will enable us to understand the scale of strategic investment required across our supplies, and to propose the right solutions and the appropriate level of investment needed within the context of the National Planning Framework. It also enables us to identify data gaps and commit to pilot projects and schemes to improve our information. This will not only help Uisce Éireann but also the EPA, AFU, the Government, and other bodies in terms of coordinated thinking.

Critical projects and programmes to address potential public health issues and supply deficit issues are on-going and not impacted or delayed by the delivery of the NWRP. Section 7.6 of the RWRP outlines the process for developing interim options to address critical water quality and quantity issues while we deliver our Preferred Approaches through the coming investment plans. Using this process in the interim, short term capital maintenance solutions have been identified for all WTPs and these solutions are referred to in Section 6 of the Study Area Technical Reports. As outlined in Section 6.1.2 of the RWRP-NW, all options outlined in the RWRP-NW are developed at a plan level. Site specific hydrological and hydrogeological assessments of yield will be required to confirm the volumes of water we can abstract for water supply from proposed aquifers, lakes, and river sources.

Section 6.4 of the RWRP-NW outlines this project development process. The RWRP-NW identifies current and proposed measures to enhance supplies in the North West region and potential interim solutions that might be capable of being delivered before the Preferred Approach alongside ongoing leakage reduction, capital maintenance and water conservation programmes. These interim measures will help keep water services in the region functioning in the medium to short term but a large supply to address the deficit and long-term resilience is needed to meet the long-term water supply requirements to 2050 and beyond in a sustainable manner.

12.2 Cost

12.2.1 Summary of Cost Feedback

ICMSA noted it as essential that “the funding of these projects is clear and transparent and that business owners are not burdened with the cost of these upgrades which are principally for domestic users.”

They further noted that it must be ensured that landowners who have a water source on their land that supplies water to the surrounding area are not negatively impacted by the draft RWRP-NW, and “it must be ensured that their land surrounding the water source is not sterilized from agricultural activity or if it is, the farmer must be compensated for their loss as part of the cost of supplying water (as per the National Federation Group Water Schemes new policies).”

Clare County Council asked the following questions:

- What is the total anticipated cost of preferred option projects for each study area?
- What is the anticipated cost of water conservation measures?
- What is the total cost of interim solutions proposed?
- How do these costs compare to the Uisce Éireann historical capital spend for capital cycles to date in its lifespan?

12.2.2 Response to Cost Feedback

Uisce Éireann acknowledges ICMSA’s concern regarding the potential impact of source protection measures relating to abstractions on surrounding landowners. We recognise the importance of working in partnership with key stakeholder when developing and implementing catchment management activities for drinking water source protection and will continue to work with local landholders and consider implications on the surrounding land use.

Any projects that are progressed through the implementation of the NWRP will require various project level environmental assessments in support of planning applications or in support of licensing applications. These applications will be subject to public consultation.

In response to Clare County Council, a key aspect of the NWRP is understanding the current and future need across all our supplies. The NWRP Framework Plan sets out a methodology used to determine need across our supplies. This methodology was developed through consultation with stakeholders and further to consideration of government policy and legislation on domestic and economic growth, climate change, water quality and the environment. Further to the application of this methodology, the NWRP has identified significant need across all our supplies. This need is associated with the lack of historical investment in water supply. The Preferred Approaches identified through this process will be prioritised on a national basis and progressed through Uisce Éireann’s Capital Investment Plans. The phasing and timeframes for delivery of individual projects will be determined through the capital investment process.

At plan level, an outline design and estimated cost is developed for each feasible option, which captures the scale of the project and allows for a comparison of costs between other feasible options. At this stage, designs, costings, and environmental assessments are desk-based and considered at plan level. As preferred approaches progress to project level, we conduct more detailed costings and cost benefit

analysis. These are to meet the requirements of the Department of Public Expenditure and Reform and our regulator, the CRU. Regional options include for the costs involved in connecting to all of the fragmented water resource zones. Therefore, when comparing a local option to a regional option, the total costs are comparable. Costs are not the only factor considered when determining the Preferred Approach. As set out in section 7.2, all feasible options are assessed against a number of categories including: Least Cost, Best Appropriate Assessment (AA), Best Environmental, Most Resilient, Lowest Carbon and Quickest Delivery.

At project level the Preferred Approaches will be developed to ensure that all potential opportunities that can be afforded by the solutions identified are realised. This might include an augmentation of the Preferred Approach in line with our Biodiversity Action Plan, or Energy Efficiency Plan.

12.3 Funding

12.3.1 Summary of Funding Feedback

Ibec recommended that the existing approach of achieving Quality, Quantity, Reliability and Sustainability should be continued. They commented that “The proposed capital maintenance programme is particularly important for the NW region as 97 out of the 142 WTPs are currently under the risk category.”

Ibec further commented that funding received by Uisce Éireann should be adequate for projects approved by the Commission for the Regulation of Utilities, and that “the proposed Value Framework, aimed at prioritising projects that offer the most value to Uisce Éireann customers, should consider enterprise activity and needs in the region.

Clare County Council asked the following question: Given the project to bring water from the Parteen Basin to Dublin will absorb a considerable part of the future capital expenditure budget, how will the progression of this project impact the funding availability and timelines for delivery for all other projects noted in these reports?

12.3.2 Responding to Funding Feedback

The scale of investment required to transform our water supplies is undoubtedly considerable. However, the outcome in terms of ability to protect the environment, provide a good Level of Service for all customers, support growth and economic development, and adapt to climate change impacts will be substantial. The development of the NWRP will enable us to understand the scale of strategic investment required across our supplies, and to propose the right solutions and the appropriate level of investment needed within the context of the National Planning Framework.

The Preferred Approaches identified through this process will be prioritised on a national basis and progressed through Uisce Éireann's Capital Investment Plans. The phasing and timeframes for delivery of individual projects will be determined through the capital investment process. Uisce Éireann is funded through central

government and submits business plans to the CRU for both operating and capital costs for our revenue controls periods, which typically cover 5-year periods.

The outputs the NWRP will be used in future submissions for funding. It is envisaged that it will take several funding cycles to deliver all works required, so the proposed works will need to be prioritised over future funding cycles.

It is important to note that this consultation is for the draft RWRP-NW. It covers all 119 Water Resource Zones in the North West region, and it is not a consultation on the Water Supply Project-Eastern Midlands (WSP-EM) project.

12.4 Conclusions on Plan Implementation

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

13 Option Types

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Option Types”. Within the overall Option Types theme, we identified six sub-themes, which we set out in Figure 13.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

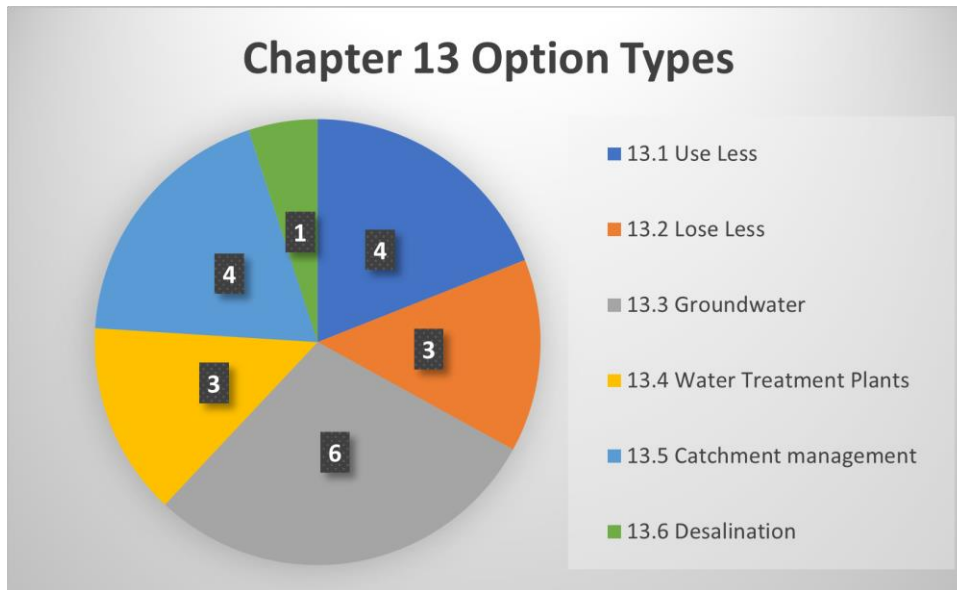


Figure 13.1 Option Types Theme

13.1 Lose Less

13.1.1 Summary of Lose Less Feedback

Clare County Council Physical Development Directorate (CCC) recognised that leakage reduction is an important part of future demand and supply consideration. However, they commented that “achieving the SELL target of 21% of overall demand will require a considerable increase in the current level of funding provided by Uisce Éireann for leak detection and repair and rehabilitation of the network.” Furthermore, they commented that “pipework rehabilitation and leak repair works will be required at an unprecedented intensity to meet this target in the next eleven years...and the level of economic and social disruption that this work will cause over such a short timespan must be considered against the benefits accruing.” CCC highlighted that achieving 21% leakage “is a target which many international water supply companies struggle to maintain after decades of modernisation of the supply network and ongoing leak detection and repair.” They went on to note that the “more onerous the target leakage level, the higher the marginal cost to deliver that target level.”

CCC cited The European Commission’s EU Reference document ‘Good Practices on Leakage Management (Water Framework Directive Common Implementation Strategy Working Group Programme of Measures Case Study) whereby a “A well-managed water loss programme should always include an allowance for selectively replacing mains and/or service pipes specifically to reduce leakage and

the cost of ALC, when further pressure management to remedy the situation is not a feasible option.” CCC requested that “further consultation is required to ensure that the disruption of a decade of intensive pipework replacement and leakage reduction measures required to achieve 21% leakage is communicated in a clear and transparent manner to Public Representatives in Clare.”

CCC highlighted that there is 218km of asbestos cement pipework in County Clare whereby these mains are prone to joint failure and longitudinal cracking. They further noted that the network includes 97km of cast iron pipework older than fifty years. CCC commented that in 2021 UÉ replaced 7km of watermain in County Clare and that “the strategy and investment to date does not indicate that achieving this leakage target will be sufficiently supported by Uisce Éireann”.

Clare County Council’s Planning Department, Economic Development Directorate highlighted that there are many locations across County Clare where Uisce Éireann infrastructure is constrained because of the age, condition and nature of the water supply distribution infrastructure. They commented that “Resources and investment are required to address these deficiencies and to modernise the supply network.” They further commented “The RWRP-NW should address the need for a programme of investment to be dedicated to the rehabilitation of existing networks, which in turn will reap benefits in terms of addressing water loss and system leakage.” The Council welcomed the opportunity to work with Uisce Éireann to develop objectives for inclusion in the RWRP-NW that would address rehabilitation and water loss from within the existing system.

ICMSA acknowledges that within the Plan there is a goal to reduce the amount of annual leakage of treated water from 38% to 23%, ICMSA is in support of this goal as it is essential to reduce the amount of leakage as much as possible but does believe that the target should be much more ambitious.

13.1.2 Response to lose Less Feedback

Uisce Éireann acknowledge CCCs appreciation of the scale of the leakage reduction target given the age and condition of the pipework and agree that significantly increased resources will be required to meet these targets. We recognise that leakage reduction requires significant funding and resources, permissions (including road opening licences and land access), excavation works, pipeline construction, investigative works and traffic disruption. In respect of these challenges, Uisce Éireann will work closely with regulators and key stakeholders to minimise the impact of our activities on the population and environment. We aim to prioritise leakage reduction to achieve the greatest benefit and for this reason, we propose to focus our programme on high demand areas.

Leakage reduction activities are delivered via the National Leakage Reduction Programme which includes improved operational control, pressure management, calm networks, active leakage control and targeted mains replacement are based on industry best practice. We are also trialing innovative acoustic logging technology,

data intelligence systems technology, the use of satellite imaging, sniffer dogs and non-destructive testing. The development of improved data on our distribution networks will allow us to optimise our leakage reduction activities, and to facilitate an expanded programme of targeted water mains replacement. These measures are set out in section 7.3.1 of the Framework Plan.

In 2018 (following the roll out of the Leakage Reduction Programme), the rate of leakage annually was 46%. By the end of 2020 it was 40% and by the end of 2021, we had reduced leakage further to 38%. This equates to approximately 2,000 leaks being fixed every month and 166 million litres of water saved every day by the end of 2021.

Uisce Éireann welcome the Irish Creamery Milk Suppliers Association (ICMSA) in supporting our leakage reduction targets. Uisce Éireann can confirm as we approach the 2034 targets, our knowledge of the condition and responsiveness of our networks to leakage reduction activities will have improved and as we move towards 2034, we will set further leakage reduction targets based on Appropriate Level of Leakage (ALL) for each supply. This will require WRZ Level and site-specific assessments. These assessments will require data which is not yet available to Uisce Éireann and as such, these targets will be developed as we move closer to 2034 (Section 5.2.1.3 of this Plan).

13.2 Use Less

13.2.1 Summary of Use Less Feedback

An Fóram Uisce (AFU) commented that Uisce Éireann (UÉ) “needs to place a stronger emphasis on water conservation in the North and West Regional Water Resources Plan, 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 UÉ.” AFU acknowledged that Section 5.3 in the Regional Plan “mentions the Use Less Pillar and water conservation, the Forum is of the view that this Section is short and weak.” AFU commented that “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”. AFU commented 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”. AFU recommended 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, AFU highlighted that the draft RWRP-NW stated that growth in non-domestic demand outside of Regional Growth Cities, is assumed to be offset by water efficiency. AFU recommended that UÉ “should provide more information on how they plan to increase water efficiency, in addition to their ‘business-as-usual’ water conservation initiatives.”

In 2021, AFU commissioned research on A Framework for Improving Domestic Water Conservation in Ireland, (Cotterill and Melville-Shreeve, 2021). 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 UÉ, and the Use-less Pillar and the Forum recommends they are incorporated into the Regional Plan.” Recommendations included:

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. AFU suggests UÉ 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.

AFU acknowledged that UÉ have cited this research in the published RWRP-EM, where UÉ supports the need for updated building regulations. However, AFU raised concerns with the statement in the RWRP-EM plan “It is therefore difficult at this time to assess the potential benefit of water conservation activity in Ireland.” AFU acknowledged “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).” AFU recommended that UÉ include actions to “both increase the ambition of water conservation initiatives in the Regional Plans and identify where regional pilot projects could support UÉ to start to quantify the volumetric impacts on water demand.”

AFU commented that “there is still poor communication around water scarcity and droughts in Ireland.” AFU noted researched they commissioned that “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.” AFU highlighted one key recommendation for UÉ “to improve their coverage of drought events to increase public interest and conservation action.” AFU further recommended that UÉ 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”. AFU offered their support to UÉ.

AFU commented that “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 should also be presented in map-based format to illustrate the areas of highest supply demand in the region.” AFU recommended that 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.”

AFU noted that to increase efforts on community engagement and demand management, UÉ should invest in community engagement through the appointment of community liaison officers across the country to support awareness campaigns and allow two-way communication between UÉ and the public at local level. This they commented “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, AFU recommended that UÉ “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”.

AFU welcomed future engagement and collaboration with UÉ in relation to water conservation initiatives. They commented that “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.” AFU offered their support to UÉ in future initiatives and communications around water conservation and made several further recommendations in regards 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).
- 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 UÉ in planning and developing future information campaigns.

- Include actions to both increase the ambition of water conservation initiatives in the RWRP-NW and identify where regional pilot projects could support UÉ to start to quantify the volumetric impacts on water demand.

The Forum recommends that UÉ 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. Ibec welcomed the upgrades to 105 existing WTPs and provision of 12 new WTPs in combination with the ambition to reduce leakage to 23% of regional demand through pressure management, leakage control and asset replacements. They also noted that "further Uisce Éireann investment into personnel recruitment is a huge positive" and that "recruitment and retainment of specialised staff is key". Ibec further recommended that Uisce Éireann continues "to receive revenue to hire skilled personnel with expertise in science, planning, quality control and catchment management."

Ibec noted that "considering existing deficits in the supply demand balance in the North West region, Uisce Éireann should devise a practical approach in addressing potential future challenges concerning demand and water conservation". It makes obvious sense to continue to publicise and promote the company's resource management philosophy of 'use less, lose less' to prevent outages and quality problems.

Furthermore, Ibec commented that "considering the impact of climate change and increased resource pressures, Uisce Éireann should focus on pre-emptive frameworks as well as crisis management strategies." They highlighted that flood management plans and drought management plans should be included within WRZs and more emphasis should also be placed on water conservation and network development. This, they commented enables "the region to become more water resilient is highly desirable." Ibec noted that Uisce Éireann has a "key role to play in educating and engaging with public and private stakeholders in the North West region via communication and public education campaigns."

Northern Ireland Water commented that "in relation to the three "Pillars" used to address the identified Needs they are particularly interested in the 'Use less' pillar which focuses on activities to help to understand water use habits, influence behaviour, encourage change and to promote the use of water efficient devices and appliances." NI Water highlighted they have a similar focus in this area and "would be keen to share any learnings that assist in improving overall water efficiency in both regions."

Glaslough - Tyholland Group Water Scheme (GTGWS) highlighted that they are very dedicated to water conservation on their GWS and have "two Caretakers who are very experienced in step testing and leak detection coupled with online telemetry on our bulk meters which enables us to track leakages and keep them at a minimum." They further noted they have leakage targets set to reduce abstraction volumes from

Emy Lake and all consumers connections are fully metered to help identify excess water usages.

GTGWS welcomed the pillars "Use Less" and "Lose Less" in the regional plan and "would encourage more engagement with your customers in the two villages both those metered and unmetered". Furthermore, they commented that "more communication and educational awareness on a continuous basis is needed on the ground to create behavioural change" and they "would welcome collaboration and improved engagement between Glaslough - Tyholland GWS and Uisce Éireann in this area to improve water efficiencies and ensure protection of our water source and to help meet future challenges particularly in relation to droughts and climate action impacts."

13.2.2 Response to Use Less Feedback

Uisce Éireann have committed to becoming more ambitious regarding water conservation and efficiency as demonstrated in the SEA Environmental Action Plan, Table 10.1 and EAP6 Options and Approach Development Process and Supporting Measures:

- EAP6.2 Consider customer research on the water supply and demand management including water efficiency options development along with local community and stakeholder views.
- EAP6.3 As data is developed to support understanding on water conservation, develop water conservation/water efficiency options to be considered as part of the Options Assessment Methodology for future plan cycles.

Uisce Éireann agrees that water conservation and demand management is extremely important and beneficial. "Use Less" is one of the three "pillars" that we have used to develop options to address identified need. Under the 'Use Less' pillar, conservation activities are underway at present to support our customers to become more efficient in their water use. Presently, Uisce Éireann is actively promoting water conservation in schools, business and communities through activities including:

- National and Local Media Campaigns;
- Targeted Sectoral campaigns;
- Green Schools;
- Water Stewardship Scheme;
- First Fix Free Scheme; and
- Uisce Éireann's new Conservation Calculator.

Detail on our Water Stewardship Scheme is included in Box 5.2 in the draft RWRW-NW. Further information regarding the other listed activities is provided below. We have updated Section 5.3 of the RWRP-NW to include these details.

National and local media campaigns

In addition to the broader water conservation programmes, such as the Green Schools and Water Stewardship schemes, Uisce Éireann promotes water conservation through national and local media campaigns during the year depending on the water demand, weather conditions, and available water. The campaigns raise awareness of the importance of saving water to cope with scarcity and protect the water environment. They include information on how the public can save water over both the immediate and longer term. For example, during periods of hot weather, customers are encouraged to minimise the amount of water used by avoiding power washing and reusing water for the garden or cleaning the car. We also have a water conservation webpage <https://www.water.ie/conservation/> which provides details on why and how to conserve water.

Targeted Sectoral campaigns

Uisce Éireann currently works with developers to determine if water efficiency measures could be taken, and the developer can reduce the projected required water demand. In August 2022, we launched a guide for the construction industry that sets out how builders and developers can achieve water conservation through measures such as innovative technology installations and rainwater harvesting systems. We ran Water Conservation Clinics, developed in partnership with the Construction Industry Federation (CIF), to offer training and guidance on how businesses can conserve water on site. Uisce Éireann is also exploring concepts for potential pilot projects with developers to determine if water efficiency measures could be implemented to reduce projected water demand.

Green Schools

Green Schools is an award programme for primary and secondary schools. It helps students to learn about the environment, including water conservation and efficiency. Uisce Éireann sponsors the water theme of the An Taisce Green Schools Programme which includes student-led Water Forums, Walk for Water events, Water Ambassador Support Sessions and poster competitions. More information on the Green-Schools programme can be found on our website at <https://www.water.ie/about/programmes-sponsorships/green-schools/>

First Fix Free Scheme

The First Fix Free scheme aims to help reduce the amount of water wasted through leaks on customers' properties. The scheme offers a free investigation of potential leaks on external supply pipes and a free repair if the water leak is identified. The scheme is open to domestic or mixed use customer with predominant domestic water. More information on the scheme can be found on our website at <https://www.water.ie/help/leaks/first-fix-free/>

Conservation Calculator

The new Conservation Calculator will assist households to assess their water usage habits and find out how much water they are saving daily. It also offers customers

useful and practical tips on how to reduce water usage and track their progress. The free tool was developed in response to research, which showed that consumers want additional tools to assist them in conserving water. It is available at

www.water.ie/calculator

Uisce Éireann's Use Less pillar also involves investment in the domestic metering network. The existing network covers almost 60% of domestic units and has smart functionality, such as automatic drive-by reading, month-end readings, and continuous-flow (leak) alarms. This functionality will support the achievement of our water conservation ambition and has already been used in our 'First Fix Free' programme.

In 2018 Uisce Éireann carried out a pilot study of sub-metering of apartments, where smart meters were used with fixed radio communications. This trial was primarily to confirm that it is feasible to sub-meter apartment buildings and retrieve usage data. It has also demonstrated how water usage data can be made available to the occupants of the apartments. This work was funded by the CRU.

<https://www.water.ie/about/research-and-innovation/CRU-Report-Pilot-Technology-Trials-of-Water-Metering-Systems-for-Multi-Unit-Development-30th-Sept-2019-Final-Website.pdf>. Uisce Éireann are currently running a 'smart network' trial in the South Dublin Area.

We also work with stakeholders to support policy change, such as developing water efficiency standards in Building Regulations and social housing.

<https://www.water.ie/conservation/business/business-conservation-tips/construction/>

Greywater and rainwater harvesting are private side measures that can potentially result in a reduction in demand (greywater) or a reduction in some peaking in dry conditions. Uisce Éireann actively seeks to incentivise customer-side greywater usage initiatives. We highlight that non-potable water supplies such as greywater, must be kept separate to treated drinking water in distribution networks and domestic-plumbing systems to prevent contamination. A parallel network of pipeline would be required to deliver a non-potable water supply.

Due to the seasonality of rainfall in Ireland, a significant amount of storage would be required to ensure that rainwater harvesting is a viable option to address demand, particularly during dry periods. The space for the storage required to maintain supplies during dry weather would not be available at a typical domestic property. As outlined in Section 9.3 of the draft NWR_NW, Uisce Éireann will progress pilot projects to assess the potential outcomes and benefits of rainwater harvesting over the coming years.

Uisce Éireann supports the Priority Recommendations outlined in AFU's Position Paper on Water Conservation which includes the development and implementation of a government-led water conservation strategy. The RWRP-NW has been updated to provide reference to the research carried out by AFU on a Framework for Improving Domestic Water Conservation in Ireland. We have also included further

detail on the potential reduction of our carbon output that is consequent to reducing demand.

Recent government policy has allowed for the introduction of the Household Water Conservation Charge or Excess Use Charges to highlight high usage to our customers. This may also encourage further uptake of our First Fix Free Scheme, where customer side leakage is the main cause of excessive use. More detail of our current activities can be found in section Chapter 4 of the NWRP Framework Plan and on our website: <https://www.water.ie/conservation/>.

Currently, Uisce Éireann does not have sufficient data to quantify the benefits to the supply demand balance (SDB) of water conservation and efficiency measures. The recent and continuing investment in smart networks and monitoring regimes will enable us to estimate the demand savings from water conservation which we will use to improve our future SDB assessments.

Uisce Éireann welcomes the observations from AFU, Ibec and Northern Ireland Water regarding water conservation initiatives and can confirm that we are committed to developing our Use Less pillar. Our Use Less pillar focuses on activities relating to water conservation and from the outset we need to improve our understanding of water use habits, and how we can influence behaviour, encouraging change and promoting the use of water efficient devices and appliances. Uisce Éireann are committed to a behavioural change campaign that includes national and local media campaigns and Green Schools among others. Analysis of these campaigns will help us to improve our messaging and communication around water conservation. We will continue to engage with stakeholders in driving the need for policy to support water efficiency.

Regarding AFU's recommendation to present the areas of highest deficit on a map, we refer to Figures 3.21 and 3.22 of the draft RWRP-NW, which present the current and future location of WRZs of highest water supply deficit, respectively.

13.3 Groundwater and Surface Water

13.3.1 Summary Groundwater and Surface Water Feedback

A Stakeholder commented on the following areas in Galway, Letterfrack, Inismor and Inishoir. The stakeholder cited previous studies undertaken by Galway County Council that all relate to the period before Uisce Éireann (UÉ).

Letterfrack: The stakeholder highlighted that Galway County Council previously studied Kylemore Lake as a potential source for the Clifden Regional Water Supply Scheme and found that raw water quality in Kylemore Lake was very good. The stakeholder commented it "would be easy to construct a reservoir on nearby lands with a short rising main and feed Letterfrack and Tully schemes by gravity." The stakeholder noted from memory that three people currently own Kylemore Lake.

Inismor: The stakeholder highlighted that Galway County Council previously studied the area immediately south of the existing reservoirs and is an area that floods in

wintertime from underground aquifers. The stakeholder suggested installing a bunded butyl lined lake in this area to pump from this constructed lake to the adjoining existing reservoirs and water treatment plant. The winter excess that flows from the existing source could also be captured in this lake.

Inishoir: The stakeholder highlighted that Galway County Council previously studied the area immediately south of the existing underground spring source and is an area that floods in wintertime from the overflow from the spring source. The stakeholder suggested installing a bunded butyl lined lake in this area to pump from this constructed lake to the adjoining existing reservoirs and water treatment plant. They noted that the high drystone walls would screen such a reservoir and this reservoir could reduce the importation of drinking water from Rosaveel during the summer months.

Glaslough - Tyholland GWS urged Uisce Éireann to await the publication of the abstraction regulations before making a decision on the future of the supply to Glaslough and Emyvale.” GTGWS commented that “the Regulations will give clarity and advice on the assessments required for water suppliers for both those required to apply for an abstraction license, or the sources deemed ‘at risk.’”

Meath County Council (MCC) supported the “flexibility that has been provided for both domestic and non-domestic growth” and acknowledge that “the operation of interconnected networks...will facilitate and support higher growth in connected settlements”. MCC welcomed the “more balanced approach to abstractions across the major catchments of the region” stating this “will make public water supply more sustainable and resilient to future shocks such as drought and climate change.”

MCC further noted that the source of the Drumconrath supply (Lough Brackan) “is unlikely to meet sustainability guidelines during dry weather flows” and that “further investigation between Uisce Éireann, EPA and GSI is proposed to better understand the sustainability of groundwater sources in the region.”

The submission by Ibec commented on the new abstraction legislation and acknowledged that Uisce Éireann “lacks comprehensive data to fully understand the impact of the pending legislation on many of its abstractions.” However, Ibec agreed that “measures identified by Uisce Éireann to address the knowledge deficit are appropriate.” They recommend “exploring whether it would be possible to leverage the research capability of An Fóram Uisce to assess and validate local or regional investment.”

Inland Fisheries Ireland (IFI) commented that “water abstraction (surface and groundwaters) can have detrimental effects on fish species that spawn on the lake shore or in riverine areas where gravels become ‘dried out’ at certain times of the year - in particular Arctic char, Brown trout and Atlantic salmon”. They cited examples of possible issues that can arise through abstraction of water;

- Loss of habitat (including riparian zone) impacts - a smaller stream will support fewer fish, particularly territorial species.
- Blockage of migration pathways.

- Loss of spawning or nursery areas due to reduced flow or ‘dried out’ areas in a waterbody.
- Changes to habitat quality from heating, reduced oxygenation and reduced dilution of effluents and pollution.
- Drying out of riffles (the major food production areas of stream systems).
Entrainment of juvenile and larval fishes in pump intakes, particularly on the upstream migration.

IFI highlighted that during very dry, drought and heatwave conditions, abstractions and associated works (e.g., temporary erection of dams and barriers) have “a significant risk to water quality, quantity, the inland fisheries resource and broader biological diversity” with the risk becoming more acute as the period of drought persists. IFI advocated “a precautionary approach at all times”. IFI commented that “proposals for abstraction must thoroughly consider relevant requirements of Fisheries, Water Framework Directive, Habitats Directive and other relevant legislation.” IFI highlighted that from a fisheries legislative perspective, “the issues of fish entrainment and alterations to free fish passage, migration and habitat are critical issues to consider...notwithstanding this, any abstraction activity (at any volume) must be in compliance with Fisheries and all other relevant legislation at all times.”

Furthermore, IFI commented that “an abstraction may not only impact on the volume of water in the waterbody but may also have a negative impact on the physical habitat and on fish passage. It would be important to address all these impacts when assessing the source.”

The National Federation of Group Water Schemes (NFGWS) urged Uisce Éireann to await the publication of the abstraction regulations before making a decision on alternative supplies for Arva, Gowna, Killeshandra, Shercock, Blacklion, Ballyhaise, Glaslough, Emyvale and Dowra. NFGWS commented that “the regulations will give clarity and advice on the assessment required for water suppliers, including those required to apply for an abstraction licence because of quantity levels and those with sources deemed as ‘at risk’ by the Environmental Protection Agency.” NFGWS suggested that “where sources are deemed at risk by the EPA, the GWSs may consider supplementary supply from groundwater sources to address the issue and help ensure sustainability.”

13.3.2 Response to Groundwater and Surface Water Feedback

As part of our Option Development Process Uisce Éireann investigates the full range of potential solutions that can address the identified need of WRZs within the region. The development of the Preferred Approach is progressed via a workshop attended by engineering, environmental scientists, ecology, hydrology, and hydrogeology experts, operational teams, and local authority operators to ensure the appropriate outcome for a given supply.

In response to comments received on supply options for Letterfrack, Inismor and Inishoir, Uisce Éireann can confirm the:

- Letterfrack Preferred Approach involves a new abstraction from Kylemore Lake and a new water treatment plant. The Tully-Tully Cross WRZ (which currently serves Letterfrack) will be interconnected with Cleggan Claddaghduff and Leenann WRZs offering greater resilience. The solution includes three new storages.
- Inishmore (Inismor) Preferred Approach is to increase the existing groundwater abstraction and upgrade the capacity of the existing WTPs. Storage of groundwater for use during dry summer periods will be considered at project level.
- Inishere (Inishoir) Preferred Approach is to increase the existing groundwater abstraction. Storage of groundwater for use during dry summer periods will be considered at project level.

In response to Ibec, GTGWS and NFGWS, Uisce Éireann can confirm that all relevant legislation and regulatory requirements will be considered for progression of Preferred Approaches under the RWRP-NW region.

Uisce Éireann acknowledges that the licensing regime will identify sustainable abstractions / yields. In the draft RWRP-NW we have stated that we foresee requirements for modifications to the way that we currently abstract from our individual water sources. The effects of the anticipated abstraction legislation are likely to be wide ranging, such that it is not possible to assess them fully until the legislation is published in its final form. Uisce Éireann agrees that sources will not be decommissioned fully until alternative solutions are operational and will develop internal guidance in relation to ensuring that decommissioning of sources is conducted in a strategic way.

For some WRZs that are currently supplied by GWSs, we proposed alternative supply options in the draft RWRP-NW to reduce the potential over-abstraction from the sources serving the GWSs. However, Uisce Éireann recognise that once the new abstraction legislation and associated regulations are confirmed there will be greater clarity on sustainable abstraction limits. We also acknowledge that where sources are deemed to be unsustainable by the EPA, GWSs could consider alternative sources to ensure sustainability. We have therefore updated the Preferred Approach in the final RWRP-NW to continue supplying some WRZs from GWSs - Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale. These amendments are detailed in Section 5.5 and 10 of this report.

Uisce Éireann can confirm that Preferred Approaches progressing to project level will consider potential impacts to other water users and information on existing private local wells will be sought as part of key stages of project development.

Uisce Éireann can confirm to Meath County Council that Preferred Approaches progressing to project level will consider more detailed investigations to support water resource assessments.

Uisce Éireann acknowledges the impact unsustainable abstraction has on aquatic life and we will engage fully with the requirements of the new legislation on abstraction. It is envisaged that site-by-site assessments utilising historical data will be required as part of the proposed abstraction licensing regime. Uisce Éireann will initiate the process of obtaining licences for new abstractions and regularising the licensing position of existing abstractions once the relevant abstraction legislation is in force and the applicable regulatory process is in place.

Uisce Éireann will consult with IFI when undertaking emergency works in low flow situations and confirm that appropriate methodologies will be agreed in advance of completing such works. Uisce Éireann are identifying all potential barriers that are associated with our infrastructure. Internal information and international research in this area (<https://amber.international/>) is supporting this task. Where abstractions dependent on barriers are determined by the EPA to be unsustainable, Uisce Éireann will, in collaboration with the EPA, establish a programme to move away from such abstractions. For locations where the Preferred Approach is to continue the abstraction, UÉ is engaging with IFI to develop fish passage at weirs associated with our abstractions to address fish movement throughout the year.

We can confirm that river hydro-morphology has been assessed at the fine screening stage of the options assessment for the plan level and will be reassessed at project stage in greater detail.

13.4 Water Treatment Plants

13.4.1 Summary of Water Treatment Plants

An Fóram Uisce (AFU) commented that the link to the Overview of Water Treatment Plants (WTPs) provided with the consultation documents is very useful. AFU recommended 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.” Furthermore, they noted it also indicates the interim and long-term plans for the WTPs. AFU noted their support of the water supply register available on UÉ’s website, which gives an indication of the available capacity for water supply in each Local Authority area.

Following on the transition from the current service level agreements with Local Authorities to UÉ being the single public utility, the Forum recommended that UÉ “outline their planned quality control of the production of drinking water, in particular the quality control for the operation of water treatment plants.”

The Forum also recommended that “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.” AFU noted that UÉ “should provide detail on their planned quality control of the production of drinking water and operation of water treatment plants, following the transition to Uisce Éireann being single public utility for public water.”

Roscommon County Council (RCC) highlighted that Appendix 6, study area technical report, table 1.1 contains incorrect data;

- Castlerea (Longford Springs) is a temporary WTP.
- Lecarrow (Toberreoge) WTP should read Lecarrow (Toberdan) WTP.

Furthermore, RCC noted that “Castlerea (Longford Springs) temporary WTP would be considered high risk in terms of quality, reliability and potential sustainability”. They also highlighted that Lough Gara WTP “would not be considered high risk in terms of quantity but would be considered high risk in terms of quality, and potential sustainability.” RCC commented that “raw water quality in Lough Gara is considered one of the worst in the country with the resulting high cost of treatment.” Finally, RCC noted that Knockcroghery (Toberreogue) WTP is not considered high risk in terms of reliability.

The National Federation of Group Water Schemes (NFGWS) noted that all of the six Group Water Schemes; Erne Valley GWS, Annagh GWS, Gowlan GWS, Doobally GWS, Dhuish GWS, Glaslough Tyholland GWS, currently supply Arva, Gowna, Killeshandra, Shercock, Blacklion, Ballyhaise, Glaslough, Emyvale and Dowra and are part of an operation and maintenance contract (20 years) with a Design Build Operate contractor. NFGWS noted” that the contract for the operation and maintenance for these treatment plants are all due to expire over the next few years and an extensive process review on all treatment plants will be required in advance of any future operation and management contracts.” NFGWS commented that “this will help to ensure that future capacity needs are met, and water quality will meet legislative standards required under the recast Drinking Water Directive.”

13.4.2 Response to Water Treatment Plants Feedback

Uisce Éireann welcomes AFU comments on the Overview of Water Treatment Plants (WTPs) provided with the consultation documents. The Overview supports the information presented in Figures 3.21 and 3.22 of the draft RWRP-NW, which present the current and future location of WRZs of highest water supply deficit, respectively.

Section 6.3 of the NWRP Framework Plan outlines our approach to managing risk to drinking water supplies which will support quality control of the production of drinking water. Uisce Éireann is adopting the World Health Organisation’s Drinking Water Safety Plan (DWSP) approach. This encompasses a hazard assessment process that allows us to understand and manage current and future risks across our supplies from source abstraction to the consumer tap, which is the point of compliance in Drinking Water Regulations. We have progressed towards the DWSP by undertaking an interim Barrier Assessment which evaluates risks at our water

treatment plants against existing controls (barriers). Further details for the north-west region are provided in Section 3.3.2 of the draft RWRP-NW.

Uisce Éireann acknowledges that Castlerea (Longford Springs) WTP was installed in 2015 as a temporary WTP. For this reason, the Preferred Approach includes an upgrade of the existing WTP to create a permanent treatment facility with increased water treatment processing capability. At project level the scope of the WTP upgrade will be determined from a review of raw water quality and by reviewing the hazards in the catchment.

We note the error in the name of Lecarrow (Toberreoge) WTP (as listed in Table 1.1 of Appendix 6) and will amend this to Lecarrow (Toberdan) in the final RWRP-NW.

Uisce Éireann notes the concern expressed by RCC regarding the viability of Lough Gara as a long-term source for the North Roscommon PWS due to poor water quality and consequent treatment costs. When developing the Preferred Approach, we assessed options against a range of criteria that included quality, treatment and cost considerations. When compared with alternative options, the Lough Gara source was determined as the Preferred Approach that delivered the best value solution. Our DWSP approach will focus on managing water quality risks from source abstraction. We will work in partnership with catchment stakeholders to support initiatives such as native tree planting and bog rehabilitation to protect and restore source waters.

Uisce Éireann welcomes the upcoming process review of treatment plants for the following Group Water Schemes: Erne Valley GWS, Annagh GWS, Gowlan GWS, Doobally GWS, Dhuish GWS, Glaslough Tyholland GWS. We will work with the NFGWS to ensure that water supplied to Uisce Éireann customers from these GWSs is secure, sustainable and continues to meet the standards required under the recast Drinking Water Directive.

As explained in Section 5.5 and 10 of this report, under the draft RWRP-NW we proposed to discontinue supplies from GWSs to seven WRZs: Arvagh, Gowna, Killeshandra, Blacklion, Ballyhaise, Glaslough, and Emyvale. This was because we were unable to assess whether the existing and future GWSs abstractions will meet sustainable abstraction limits under the new licensing framework. Recognising that there will be greater clarity on the sustainability of existing and future abstractions once the new abstraction legislation and regulations are confirmed, we have selected to maintain supplies from these GWSs. If the GWSs abstractions are ultimately deemed to be unsustainable by the EPA, we will work with GWSs to consider alternative sources and reassess the feasible supply options that we identified through the NWRP option development process.

13.5 Catchment Management

13.5.1 Summary of Catchment Management Feedback

An Fóram Uisce (AFU) recommended “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.” They commented that this “could reduce dependencies on infrastructural and treatment solutions to achieve adequate water quality.” AFU recommended that Uisce Éireann (UÉ) outline the necessary engagement with leading agencies “to address these source protection measures, with more consideration of ‘front of pipe solutions.” AFU further noted that this transition would require skilled personnel and therefore recommended that UÉ increase their “staff capacity to include scientists with expertise in integrated catchment management.” AFU acknowledged 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.”

Glaslough - Tyholland GWS highlighted that they have been undertaking work in the area of Source Protection for several years. They noted that the “Group Water Scheme sector are uniquely placed to implement source protection measures as most of the stakeholders in the catchments are generally members of the GWS and it's in their interest also to protect our valuable water resource and in turn implementation of mitigation actions has proved hugely successful in the sector.”

Glaslough - Tyholland GWS outlined the following protection projects they have undertaken including;

- A preliminary source protection report completed by Dundalk IT in 2012
- Community Led Desludging Initiative on DWWTS in the Emy lake catchment in 2017
- A Project focused on implementing mitigation actions for agricultural pressures 2021 to present. This project has mainly focused on addressing MCPA issues in the Emy lake catchment area and also includes fencing water courses and communication engagement measures with others in the catchment including domestic houses and local primary schools while also having the co-benefits for biodiversity.

Glaslough - Tyholland GWS highlighted that they “hope to complete a full integrated source protection plan for the source and catchment area and are undertaking raw water monitoring to support this.” In addition, they highlighted the work they have undertaken with other projects in the Emy Lake catchment in recent years including the Catchment Care project. Glaslough - Tyholland GWS advised they would welcome collaboration with Uisce Éireann in this area and support “which would increase the benefits to our GWS and also your customers in Emyvale and Glaslough.”

Inland Fisheries Ireland (IFI) commented that the “issue of source protection should be thoroughly addressed.” They noted that “the availability of consistent reliable good water quality will depend on a myriad of factors, including land use and overall

activity within the catchment and that active participation at catchment management level through supports including financial for local projects would be beneficial.”

IFI commented that “backwash discharges to natural waters from Water Treatment Plants potentially contain polluting matter such as alum sludge (Environmental hazards of aluminium to plants, invertebrates, fish, and wildlife - PubMed (nih.gov) and biocides that can be damaging to the receiving waters (which support valuable aquatic species and habitats or ‘natural capital assets’).” IFI noted that “such discharges must be subject to a licensing / consent mechanism” and that their “status with respect to 006/11/EC of the European Parliament and of the Council and Directive 2000/60/EC of the European Parliament and of the Council is uncertain.” IFI suggested that such a consent system could mirror that already implemented at Uisce Éireann wastewater treatment plants as granted and monitored by the EPA under the Wastewater Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) as amended.

The National Federation of Group Water Schemes (NFGWS) noted that all six GWSs - Erne Valley GWS, Annagh GWS, Gowlan GWS, Doobally GWS, Dhuish GWS, Glaslough Tyholland GWS have been undertaking work in the area of source protection for several years. NFGWS noted that GWS are uniquely placed to implement source protection measures “as most of the stakeholders in catchments are generally members of the GWS and it is in their interest to protect a valuable water resource.” NFGWS commented that “the implementation of mitigation actions has proved hugely successful in the sector to date and helps deliver on biodiversity enhancement as well as on the wider objectives of the Water Framework Directive and the Habitats Directive.” They cited the following works undertaken:

- Preliminary source protection reports;
- Community-led desludging initiative on domestic wastewater treatment systems (Erne Valley & Glaslough-Tyholland GWSs);
- A project focused on implementing mitigation actions for agricultural pressures (2021 to present, Erne Valley & Glaslough-Tyholland GWSs);
- Full integrated source protection plans (ISPPs) (Erne Valley GWS), with plans for ISPPs on the other 5 schemes under the Multi-annual Rural Water Programme.

NFGWS commented they would welcome collaboration and support from Uisce Éireann in this area which would increase the benefits to the relevant GWS consumers and Uisce Éireann customers.

13.5.2 Response to Catchment Management Feedback

An Expert Group has been established by the DHLGH to make recommendations to the Minister regarding a new approach to drinking water source protection. This will be a holistic approach for risk assessment and risk management of water supplies that recognises the catchment is the first line of defence for source protection.

As part of our risk-based approach, Uisce Éireann is developing incident plans for our supplies. The purpose of the Drinking Water Safety Plans (DWSPs) and inclusion of water quality risk in our NWRP, is to take a proactive approach to reducing the incidence and risk of non-compliance in our water supplies. We will also seek to reduce risk through catchment measures and source protection. Uisce Éireann is an active participant in catchment protection and will proactively engage in this process over the coming years. Further information on our source risk assessment is included in Box 5.2 in section 5.5 and cross referenced in section 5.9 of the Framework Plan. Implementation of source protection measures will require further collaboration with several stakeholders including, riparian owners, industry groups and the agricultural, forestry and environmental sectors and Teagasc. This participation will include source risk assessments for all our supplies, progression of DWSPs and integrated catchment management measures. Once completed we will be happy to share the DWSP with our stakeholders to help prioritise drinking water catchments and areas within them requiring catchment management measures.

In 2021, Uisce Éireann published our first source protection strategy for pesticides (Available to view here: <https://www.water.ie/projects/strategic-plans/interim-pesticide-strategy/>). Conventional treatment processes are not designed to remove pesticides from raw water sources, therefore the risk from pesticide use activities needs to be understood and managed in the catchment. The aim of the strategy is to protect drinking water sources from pesticide contamination and to improve the quality of sources, in order to safeguard human health and the aquatic environment. We plan to achieve this by working collaboratively with all relevant stakeholders (including the National Pesticides and Drinking Water Action Group (NPDWAG)), who share the common goal of reducing the risk of pesticide contamination to public drinking water sources.

Uisce Éireann is also actively involved in pilot source protection projects in Ireland to trial catchment scale interventions to reduce the risk of pesticides causing exceedances in water supplies. The two key projects are the Source to Tap Project and the Pilot Drinking Water Source Protection Project. More information on these projects is provided in Box 2.4 of the RWRP-NW. Further testing has been provided in Section 5.4 to provide more information on Source Protection.

Uisce Éireann are working to implement the proposed new regulations and guidelines for drinking water source protection that includes a review of resources and expertise in this area and will be keen to collaborate with IFI in the North West region.

Uisce Éireann support the current work that NFGWS and member GWSs are undertaking in source protection. We welcome the opportunity to work with NFGWS to implement source protection measures to improve drinking water quality and reduce risks to supplies.

13.6 Desalination

13.6.1 Summary of Desalination Feedback

The Department of Agriculture Food and Marine (DAFM) commented that “hypersalinated outflows would need to be treated appropriately to avoid any adverse impact on fish stocks.” They further noted that “in the event that there were large losses of fish and fish eggs, this would be a major cause for concern” and “any other general impacts on commercial sea fisheries would need to be screened in to the environmental assessment, too”.

13.6.2 Response to Desalination Feedback

The purpose of option development is to investigate the full range of potential solutions that can address the identified need of the WRZs within the region. Given the scale of deficits and the regional climatic shortages of freshwater around Ireland, desalination cannot be ignored.

Uisce Éireann can confirm that our plan level environmental assessments undertaken as part of the SEA and NIS for the RWRP-NW, we have considered the potential impact of backwash water from the desalination process. Section 6.2.4 of the NIS describes the potential impact of the proposed desalination option in Study Area D. It is explained that “further assessments, including hydrologic modelling will be required at project level to determine the impacts of desalination on marine species and to determine the mitigation required to prevent any significant effects on these Qualifying Interest (QI) species and their marine habitat”. The mitigation and assessments needed for options to go ahead are detailed in Section 6.3.5 of the NIS.

13.7 Conclusions on Option Types Feedback

Having carefully reviewed the submissions received on the theme of Option Types, some of the points made in the submissions will be taken forward as explained in sections below. For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultation have also been considered in the development process and finalisation of the RWRP-NW.

13.7.1 Clarifications on Option Types Feedback

The following sections of the RWRP-NW has been updated to reflect feedback under the theme of Option Types:

- Section 5 – Additional text has been added to Section 5.3 to provide more detail on:
 - Uisce Éireann water conservation and efficiency programmes
 - Recommendations from the Water Forums’ research on a Framework for Improving Domestic Water Conservation in Ireland
 - The decrease of carbon output that results from reducing demand.
- Appendix 6, Table 1.1 – Lecarrow (Tobeereaoige) WTP has been corrected to Lecarrow (Toberdan)

13.7.2 Recommendations on Option Types Feedback

- Where the Preferred Approach is to connect to a GWS or utilise GWS infrastructure, Uisce Éireann will consult and engage with the NGWS as we progress the plan level Preferred Approach to project stage.
- As the abstraction legislation is implemented, Uisce Éireann will continue to work with GWSs to secure sustainable supplies for our customers into the future.

14 NIS

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “NIS.” Within the overall NIS theme, we identified two sub themes, which we set out in Figure 14.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

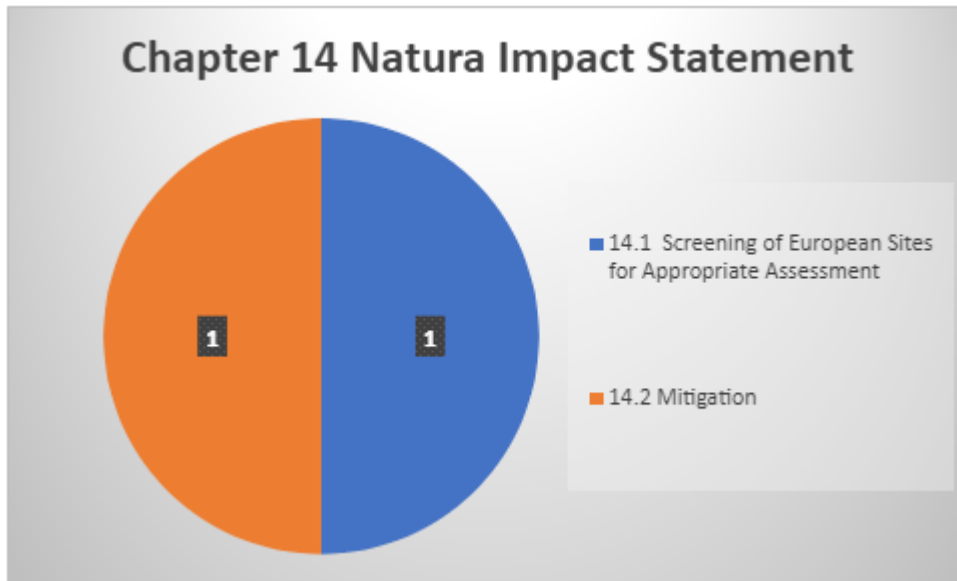


Figure 14.1 NIS Theme

14.1 Screening of European Sites for Appropriate Assessment

14.1.1 Summary of Screening of European Sites for Appropriate Assessment Feedback

The Marine Conservation Advice Team (MCA), DAERA Marine and Fisheries Division welcomed the consideration of Northern Ireland’s Special Areas of Conservation (SACs) in Section 3.1. MCA further advised that there are 18 SPAs (Special Protection Area) in Northern Ireland - East Coast Marine Special Protection Area (SPA) and Carlingford Marine SPA that should also be included. MCA further welcomed the consideration of Northern Ireland’s European Sites in Figure 3.1. and the consideration of the following plans: Draft Marine Plan for Northern Ireland 2018 in Table 7.1.

MCA welcomed the consideration of the following European Sites: Carlingford Lough SPA and River Foyle and Tributaries SAC in Table 8.1. In addition, they recommended considering the following Marine Protected Areas (MPAs):

- Lough Foyle SPA Carlingford Marine SPA which are designated under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended);
- Magilligan SAC, Skerries and Causeway SAC and Bann Estuary SAC, which are designated under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended);

- Carlingford Lough Marine Conservation Zone (MCZ), which is designated under the Marine Act (Northern Ireland) 2013;
- Carlingford Lough Areas of Special Scientific Interest (ASSI), Lough Foyle ASSI, Magilligan ASSI, Bann Estuary ASSI and Ramore Head and The Skerries ASSI, which are declared under the Environment Order (Northern Ireland) 2002, and
- Carlingford Lough Ramsar site and Lough Foyle Ramsar site, which are designated under the Ramsar Convention.

Furthermore, MCA noted that recent advice, relating to MPAs “which have marine mammals as a site selection feature, recommends the following ranges should be used when considering for either Harbour (*Phoca vitulina*) or Grey seals (*Halichoerus grypus*) and Harbour porpoise (*Phocoena phocoena*).”

- All SACs within 100km of the project should be screened for Grey seals (*Halichoerus grypus*)
- All SACs within 50km should be screened for Harbour seals (*Phoca vitulina*)
- All SACs within 100km should be screened for Harbour porpoise (*Phocoena phocoena*)

Therefore, MCA recommend that both Murlough SAC and Strangford Lough SAC should be considered for Harbour seal and the North Channel SAC should be considered for Harbour porpoise and the Maidens SAC should be considered for Grey seals. MCA referred Uisce Éireann to the DAERA Marine Map Viewer for further details.

14.1.2 Response to Screening of European Sites for Appropriate Assessment Feedback

We welcome DEARA’s Marine Conservation Advice Team’s support of the Natura Impact Statement conclusion for the draft RWRP-NW. The Appropriate Assessment (AA) process resulted in a determination at plan level that with implementation of appropriate mitigation for protecting European sites, the RWRP-NW would not give rise to adverse effects on the integrity of any European site(s). We confirm that any options that are progressed to project level will be subject to individual environmental assessments, including Environmental Impact Assessment and Appropriate Assessment (as required).

We confirm the correction of 18 SPAs in Northern Ireland rather than 16 SPAs as reported in the RWRP-NW NIS. We confirm the inclusion of the East Coast Marine SPA and the Carlingford Marine SPA in the RWRP-NW NIS and have inserted a footnote to make clear the inclusion of the Carlingford Marine SPA.

We note those SACs and SPAs not listed in Table 8.1 are not included due to there being no potential for in-combination effects with these designated sites, but they have been considered in the assessment. Any SACs or SPAs with the potential for in-combination effects have been listed e.g., River Foyle and Tributaries SAC.

The RWRP-NW NIS considers only SACs and SPAs (i.e., "European sites") in both the Republic of Ireland and Northern Ireland, therefore other designated sites such as MCZs (Marine Conservation Zone), ASSIs and Ramsar sites are not included in this assessment but have been considered in the Strategic Environmental Assessment. Magilligan SAC, Skerries and Causeway SAC, and Bann Estuary SAC have all been considered in this assessment, and were found to not have any potential for likely significant effects from the options within the RWRP-NW.

As stated in Section 6.3.3.2 of the NIS "Where preferred approach options are within or hydrologically/hydrogeologically linked to European sites, detailed surveys of habitats within the affected area will be undertaken to locate and avoid sensitive habitats to ensure there is no loss of QI Annex I habitats or Annex II species". Section 6.3.5 also states that "this list of assessments is non-exhaustive and must be reviewed at the project stage, taking into account project-specific survey information or studies."

Using the source-pathway-receptor model, the Murlough SAC, Strangford Lough SAC, North Channel SAC and the Maidens SAC have all been considered in the RWRP-NW assessment; which included the consideration of mobile marine species such as harbour porpoise, grey seal and harbour seal. As noted in the OPR Practice Note (2021) the Zone of Influence (Zoi) "should be established on a case-by-case basis using the source-pathway receptor framework and not by arbitrary distances (such as 15km)."

14.2 Mitigation

14.2.1 Summary of Mitigation and Monitoring Feedback

DEARA NIEA Natural Environment Division (NED) is "content with the mitigation which is contained within the NIS and associated documents and appendices which seeks to protect any site features both within Ireland and Northern Ireland inclusive of migratory species."

NED further advised that "should the NIS change in respect to impacts upon Northern Irish European Designated sites then NED should be re-consulted."

14.2.2 Response to Mitigation and Monitoring Feedback

As outlined in Section 6.3.3.2 of the NIS to the draft RWRP-NW, the assessment of potential effects on European sites associated with the construction stage recognises impacts can be avoided or mitigated through good siting and mitigation measures. All options will be subject to project level environmental assessments, including the potential to affect European sites during construction. These assessments will consider or identify best practice construction measures that need to be incorporated into scheme design and/or planning to avoid or mitigate potential effects.

Uisce Éireann confirms that any future amendments to the RWRP-NW will be screened for Likely Significant Effects to European sites using the same method of assessment applied in the environmental assessment of the draft RWRP-NW. For

any reason should the NIS change in respect to impacts upon designated sites including Northern Irish European Designated sites, Uisce Éireann will request feedback through public consultation with our stakeholders as per our statutory requirements.

14.3 Conclusions on NIS Feedback

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

14.3.1 Clarifications on NIS Feedback

Section 3.2 and Section 3.4 of the RWRP-NW has been amended to state there are 18 SPAs in Northern Ireland rather than 18 SPAs as per DAERA's response.

An additional footnote has been included in Section 3.4 of the RWRP-NW NIS to clarify the inclusion of the Carlingford Marine SPA wherever the Carlingford Lough SPA in Northern Ireland is mentioned in response to DAERA's submission. This note has also been included in the RWRP-NW NIS Appendices for further clarity.

The WFD statuses of the relevant waterbodies within the RWRP-NW have been updated in Section 4 of the RWRP-NW NIS to reflect the 2016-2021 assessments.

Table 7.1 in Section 7.1 of the RWRP-NW NIS has been updated to refer to the Climate Action Plan 2023 in place of the Climate Action Plan 2021.

15 Water Resource Planning

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Water Resources Planning.” Within the overall Water Resources Planning theme, we identified two sub themes, which we set out in Figure 15.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

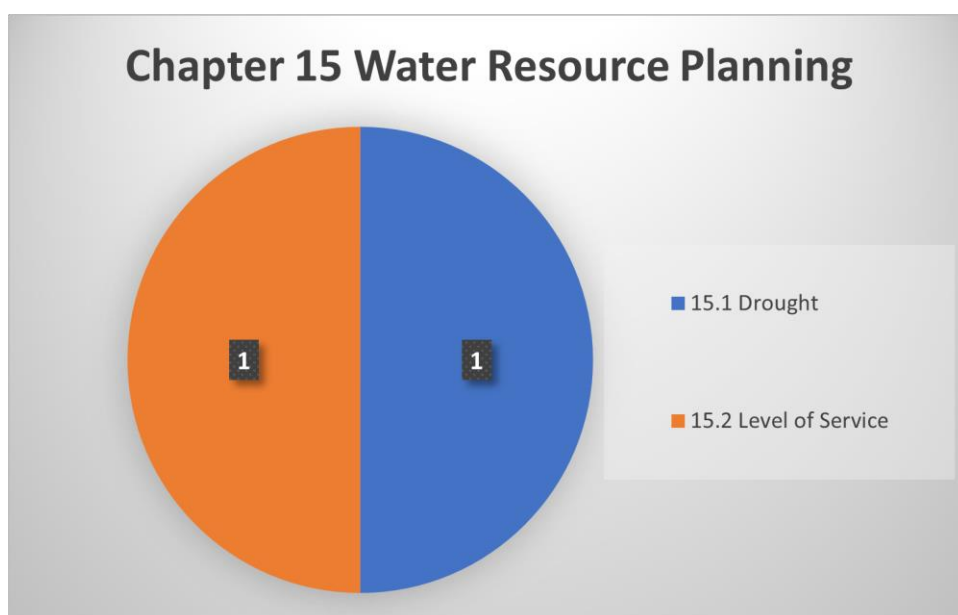


Figure 15.1 Water Resource Planning Theme

15.1 Drought

15.1.1 Summary of Drought Feedback

An Fóram Uisce (AFU) highlighted that between 2018 and 2022, there were several requirements for night time restrictions in Roundstone, Carna, Foxford and the Aran Islands in the North West region due to supply demand issues after extended dry periods.

They cited that the Department of Housing, Local Government and Heritage (DHLGH) developed a sectoral climate change adaptation plan for water (2019), which outlined the future projections of climate change in Ireland. They noted that this report projected decreases in summer precipitation, with increased periods of summer 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.”

AFU was of the view that there should be detailed Drought Management Plans specific to the North West region, included in the North West Regional Plan. The Forum recommended that UÉ add an urgent action in the RWRP-NW to develop these Regional Drought Management Plans, and that “These plans should be made publicly available and indicate how much capacity there is throughout the region

during extended drought periods.” They acknowledged that while the North West Region will likely experience less extreme drought conditions relative other parts of Ireland, 43% of Water Resource Zones (WRZ) in the region already have a supply demand balance deficit, “therefore drought management plans will still be necessary to ensure resilience in water supply throughout the year.”

AFU noted that the response by Uisce Éireann in the consultation report for the RWRP-EM, was that drought management plans will be completed for every WRZ in the next iteration of the NWRP; however, AFU was 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.”

AFU acknowledged that UÉ have outlined the learnings from the 2018 and 2020 events in the RWRP-NW (Section 2.4). However, they noted that the “learnings presented are more crises management as opposed to proactive measures to reduce the impact of the crises.” AFU was supportive of the activity outlined in Box 2.5 (Page 48) of the RWRP-NW for “Tracking drought indicators and planning responses and activities”. AFU recommended that there be early intervention in response to these indicators to try to reduce the extent of the crises, rather than planning for crises management. They recommended that 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.

15.1.2 Response to Drought Feedback

Uisce Éireann acknowledges the development of the Climate Change Sectoral Adaptation Plan for water in 2019. UÉ has also carried out significant research with the Irish Climate Analysis and Research Units (ICARUS) Department in NUI, Maynooth, under the climate sensitive catchments project. This Plan has used the latest climate change projections and a best practice risk-based approach to assess the impacts of climate change on flows in 206 catchments in Ireland. Full details of how climate change factors were considered are outlined in Appendix F of the Framework Plan.

The objective of the Preferred Approach for the RWPR-NW is to provide the 1 in 50 level of service in a dry year, which is defined by the Dry Year Critical Period (DYCP). Therefore, we are proposing to move away from vulnerable sources which we struggle to maintain supply from to more resilient sources of supplies which will be less vulnerable to dry weather events. This will reduce the impact to customers during times of drought and periods of dry weather.

Uisce Éireann acknowledges that many of the measures presented in Box 2.5 are crises management as opposed to proactive measures. Data is currently being developed with a view to have proactive measures set out in the Drought

Management Plan's (DMP) and over time the need for crises measures will be reduced and replaced by DMPs.

Drought Management Plans (DMP's) will be developed for each WRZ, and it is planned to provide this detail in the next iteration of the NWRP. These drought plans will be developed in line with the abstraction legislation and will note the measures required for different water levels at our sources. The drought plans will be unique for each supply and will address specific capacity in the case of drought.

Uisce Éireann conducted an extensive media campaign nationally in Summer 2022, to inform customers of the impact the dry weather was having on supplies and to encourage consumers to conserve water throughout the summer. This media campaign commenced in early May 2022 and continued until early September 2022. The summer conservation campaign delivered proactive conversation advice across all media and stakeholder channels.

15.2 Level of Service

15.2.1 Summary of Level of Service Feedback

An Fóram Uisce (AFU) supported the commitment from Uisce Éireann (UÉ) to invest in their human asset base to improve their Level of Service for more sufficiently trained personnel to manage infrastructure and to provide the best possible services.

15.2.2 Response to Level of Service Feedback

The target level of service is required to ensure continuity of supply to our customers in the area during drought periods. Uisce Éireann undertook a review of how we respond to incidents across our assets and how we effectively manage and communicate to limit disruptions to our customers. In response to this review, we have initiated 'Project Connect' which has established organisational structures, designed, and implemented processes and introduced regular reporting and ways of working to ensure a safe, clean and secure supply of water for our customers.

15.3 Conclusions on Water Resource Planning

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

16 Outside the Scope of the RWRP-NW

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Outside the Scope of the RWRP-NW.” Within the overall Out of Scope theme, we identified three sub themes, which we set out in Figure 16.1. We deal with each of these sub-themes in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response. The sub-themes are not dealt with in any particular order.

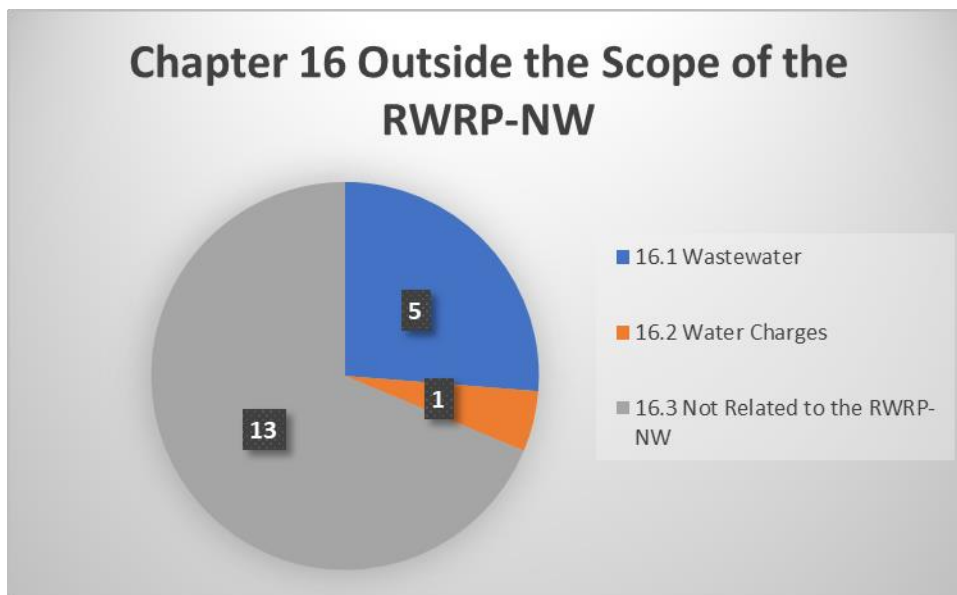


Figure 16.1 Outside the Scope of the RWRP-NW.

16.1 Wastewater

16.1.1 Summary of Wastewater Feedback

A stakeholder commented that there is absence of proper Wastewater Treatment Plants (WwTP) in the North West, and that there has been a growth in the number of summer houses constructed in the vicinity of towns, beaches and resorts in the region. The stakeholder pointed out that “there has not been a corresponding growth in the construction of wastewater treatment plants or, for that matter, of main drainage networks.”

They commented that a holistic approach to water and water treatment is needed in the North West and stated that the treatment of wastewater is an intrinsic part of water treatment and that addressing the issue would comply with the Water Framework Directive.

The stakeholder noted that if “proper wastewater treatment systems and main drainage networks are provided, it will allow for much denser, safer, better planned, better organised development.” They further commented that the economic values are considerable as land values will rise, and that local construction companies will be provided with much-needed work, building, and maintaining the development. The stakeholder highlighted that a longer tourist season would be a beneficial result.

They cited Rosstown in County Donegal as a good working example which has a modern WwTP as well as the Pilot Project undertaken by Uisce Éireann in Gaoth Dobhair. Whereby an existing WwTP was renovated, and a small diameter pipe network constructed to deliver the wastewater to the WTP.

This stakeholder suggested a five-year plan for dealing with the towns and beaches of the North West and provided a number of key points to consider in the plan;

- Carry out a survey of the existing wastewater systems in the North-West.
- Identify the problem areas where there is presently either no or inadequate wastewater treatment or main drainage systems.
- Select 'easy win' locations where modern systems can be easily developed within a reasonable timeframe, at a reasonable cost and with a positive and demonstrable cost-benefit.
- Do a preliminary costing of the emerging needs in the North West.
- Provide an annual budget to begin dealing with the issue.

Lisfannon Residents highlighted there "is raw sewerage being pumped from 44+ houses in Lisfannon heights straight into the Lough Swilly". They noted that there was a treatment plant installed in the 70's for these houses but that has not worked since the late 80's and was completely abandoned. Residents highlighted that as a result of this, Lisfannon beach lost its blue flag beach and sewage levels are increasing month on month in the Lough Swilly.

The residents acknowledged that Uisce Éireann is aware of the situation and that these 44+ houses are to be connected to the new sewer being built from Fahan to Buncrana, however they want to make the NWRP team aware of the situation and the proposed solution in the case "they weren't aware of the connection plan."

Glaslough-Tyholland Group Water Scheme (GTGWS) noted it's concerns in relation to recent planning application (P. 22 / 485) to Monaghan County Council by Silverhill Duck to discharge 480 m³ of polluted water to ground via drip irrigation system over lands North of Emyvale. The GWS commented that "it is of great concern to us as it is within 1.5km of our source and could impact negatively on all our water quality if permitted." Glaslough-Tyholland GWS pointed out that they will do everything in their power to protect the drinking water source and ensure public health is not threatened.

Clare County Council Physical Development Directorate & Ennis Municipal District had Wastewater concerns for 50 unsewered towns and villages like Broadford, Doolin, Cooraclare and Carrigaholt. The Council also noted that 10 Blue Flag beaches had deteriorating water quality including Aquapark and Marina attractions at Kilrush. They further noted concerns for the Shellfish industry which produces 25 tonnes of shellfish annually in Ireland, with an economic value of fifty-six million euro. Clare County Council further listed prioritised Water and Wastewater Infrastructure Projects in County Clare and detailed actions required. They also highlighted the

National Development Plan section on unsewered towns and villages whereby significant investment in water and waste water infrastructure needs to continue.

Irish Creamery and Milk Supplier Association (ICMSA) highlighted that relation to the proposal to reduce the number of Water Resource Zones in the Northwest Region from 119 to 78, “the upgrading of urban wastewater treatment plants is hugely important from a water quality perspective and specific timeframes need to be in place for the completion of these works.” ICMSA commented that water quality is a significant issue, other sectors including farmers have legal obligations in relation to water quality and “it is unacceptable that public authorities continue to allow direct pollution into waterways.”

ICMSA further commented that the upgrades must also allow for the tertiary treatment of wastewater and also need to allow for the further expansion of the towns and villages concerned. In the event of the upgrades impacting on individual landowners etc., the ICMSA noted it as “essential that a clear policy is in place for engaging with these landowners in line with best practice.”

16.1.2 Response to Wastewater Feedback

Although wastewater considerations are outside the scope of the NWRP, Uisce Éireann acknowledges that both water and wastewater treatment capacity are essential for growth and economic development. Uisce Éireann has a wastewater asset planning team, which develops short, medium, and long-term projects and programmes to address our wastewater asset base through the Drainage Area Plans programme. This programme targets critical wastewater networks that require a detailed performance assessment and improvement strategy as a result of a number of factors including planned development growth, reported flooding issues and poor environmental performance.

Since 2014, we have built new wastewater infrastructure for 21 towns and villages across the country, ending the discharge of raw sewage into the environment. 65% of the raw sewage in Ireland has now been eliminated. Uisce Éireann is on track to eliminate the majority of raw sewage discharges by the end of 2025 with a total investment of over €750 million. This year, we currently have 14 locations under construction across the country. There are plans for the rest, prioritising the areas where it can make the biggest impacts first. More details on completed projects and projects in the pipeline are available on our website

<https://www.water.ie/projects/national-projects/eliminating-raw-sewage/>.

The growth figures from the regional assemblies and the local authority development plans are used to inform both the NWRP and the intervention plans for our wastewater treatment plants and networks. Significant funding will continue to be required to transform our wastewater treatment facilities and networks through the regulated capital investment planning process. Every wastewater treatment project requires consent from both the planning authorities and the Environmental Protection Agency and is environmentally assessed before it can operate. The National

Wastewater Sludge Management Plan sets out a nationwide standardised approach to ensure that treated wastewater sludge across the country is effectively managed, stored, transported, and re-used or disposed of in a sustainable way, to the benefit of the public and the environment we all live in.

All comments received on wastewater treatment will be shared with the relevant Uisce Éireann team for their review.

Uisce Éireann is responsible for the management of the country's public water and wastewater infrastructure. In response to the individual stakeholder submission on the absence of proper Wastewater Treatment Plants (WwTP) in the North West, our new connections process handles the connection of developments to the public water and wastewater infrastructure; a developer, whether a single dwelling or a housing estate, follows this process if they wish to connect. Developments not connected to the public wastewater infrastructure (for example serviced by individual private septic tanks or package wastewater treatment systems), are outside the remit of Uisce Éireann. As part of the planning process the developer must satisfy the planning authority that the wastewater treatment system is suitable and will not pose a risk to the environment or human health.

Uisce Éireann has and continues to invest in the provision and upgrade of wastewater infrastructure in the North West area. There have been marked improvements in this area, reflected in the continued improvement in treated effluent discharged from wastewater treatment plants. Uisce Éireann are committed to continued investment in public wastewater infrastructure, to ensure compliance with relevant water quality legislation as well as providing for social and economic growth. Works are prioritised to address the most critical issues in line with the Government's Water Services Policy Statement and Uisce Éireann's Strategic Funding Plan

In response to Lisfannon Residents, Uisce Éireann are advancing an upgrade of the Buncrana Wastewater Treatment Plant (WwTP). Part of this Project involves the connection of the Fahan wastewater collection network to Buncrana. The existing Fahan WWTP site will be converted to a pumping station and a new rising main will be laid to connect to the Buncrana collection network. We are aware of the issue with the private treatment system serving Lisfannon Heights housing estate and have included the following in the Buncrana/Fahan Project:

1. the provision of a connection point close to Lisfannon Heights along the route of the proposed rising main from Fahan to Buncrana,
2. the provision of additional treatment capacity at the upgraded Buncrana WWTP to accommodate the load from Lisfannon Heights.

The above accommodation works will allow for the future connection of Lisfannon Heights housing estate to the public wastewater network and treatment system. This future connection will have to be funded separately via the Uisce Éireann new connections process.

In response to GTGWS, our new connections process handles the connection of developments to the public infrastructure. As the development North of Emyvale is not connected to the public wastewater infrastructure it is outside the remit of Uisce Éireann.

The Local Authority are responsible for authorising development, with the Local Authority and EPA responsible for authorisation of discharges to ground and surface water from all types of development including domestic, commercial and industrial sources.

In response to CCC, works are prioritised to address the most critical issues in line with the Government's Water Services Policy Statement and Uisce Éireann's Strategic Funding Plan. In relation to settlements regarded as unsewered (i.e., no public wastewater treatment plant or public sewers present, Uisce Éireann currently has no remit to provide new infrastructure.

In 2022 the Department of Housing, Local Government and Heritage announced the commencement of a new funding scheme targeting the waste water collection and treatment needs of villages and settlements without access to public waste water services. Applications for this funding scheme will be managed by the Rural Water Section of the Department of Housing Local Government and Heritage (DHLGH) and details of the application / bid process are set out in Circular L1/22 - Applications for funding under Measure A8 - Waste Water Collection and Treatment needs for Villages and Settlements without access to Public Waste Water Services.

Should these areas be successful in their bid to be included in this programme, or otherwise receive funding for the provision of wastewater infrastructure, Uisce Éireann will work with the DHLGH & Local Authorities to support the development and implementation of an appropriate solution.

In response to ICMSA, significant funding will continue to be required to transform our wastewater treatment facilities and networks through the regulated capital investment planning process. Every wastewater treatment project requires consent from both the planning authorities and the Environmental Protection Agency before it can operate. These consents set conditions on the wastewater discharge to ensure compliance with the relevant legislation and to protect water quality.

The growth figures from the regional assemblies and the local authority development plans are used to inform both the NWRP and the intervention plans for our wastewater treatment plants and networks. Any wastewater treatment plant being considered for upgrade takes this into account to ensure that the plant, once upgraded, can provide for the social and economic growth of the village, town or city.

16.2 Water Charges

16.2.1 Summary of Water Charges Feedback

The Irish Creamery Milk Suppliers Association (ICMSA) commented that as there is no tariff on domestic water use, it is essential that commercial users, including farmers, are not burdened with the substantial investment required in the draft RWRP-NW. The ICMSA

advised that a clear commitment is required that there will be no additional charges imposed on commercial users in order to implement the plan.

16.2.2 Response to Water Charges Feedback

Issues such as water charges are a matter of Government policy and Uisce Éireann has no remit to make commitments on charges.

16.3 Not Related to the RWRP-NW

16.3.1 Summary of Not Related to the RWRP-NW

One stakeholder in Cahertinny, Loughrea, Co. Galway, highlighted the need for an urgent solution to our ongoing water issues. They noted that they cannot depend on the water supply (Abbeyknockmoy supply) since they were connected to it in 2002/2003. The stakeholder explained when they were connected to the scheme, they were assured that their house and their next-door neighbours, would be the last two houses on this scheme, but “since then numerous houses in housing estates have been added to it.”

They commented that the “scheme is not fit for purpose and unable to cope with the demand on it, because I am at the end of the line, I always end up with no water at all.” The stakeholder pointed out that they had contacted Uisce Éireann on a number of occasions. They concluded that they hoped this project would “alleviate our ongoing water issues in an urgent manner considering water is a basic human right.”

Another stakeholder in the Cahertinny area noted that being without water on a regular basis has a huge impact on the basic day to day running of a home including heating, cooking and hygiene. They are a family of five with two family members requiring high levels of care. They commented that the constant uncertainty that these persistent disruptions have on day-to-day living is extremely frustrating and upsetting and the situation was “totally unacceptable”.

Councillor Albert Doherty required assurance from Uisce Éireann on service and supply for future developments in and around the Carndonagh area.

St. Patrick’s Purgatory/Sanctuary on Station Island (F94 K725) noted that they currently have a two Well Private Water system that pipes water from the lough shore near the Lough Derg Pilgrims Shelter Museum out to Station Island. They were interested in exploring options of connecting to the Mains System for security of supply. They would be happy to explore Cross-Border options with Uisce Éireann and are “already in discussion with Fermanagh and Omagh District Council about Tourism Potential in the Lough Erne area.”

Cllr John O’ Reilly thanked Uisce Éireann for the opportunity to make a representation for the mains water supply to be extended to the village of Kilcurry in north county Louth. Cllr O’Reilly highlighted that the mains supply is approx. 800 metres from the local school, community centre, creche, church and parochial house. Cllr O’Reilly noted he is “fully aware that due to the laws of gravity, the extension of the water supply cannot be achieved without a pumping station. As it so

happens, Louth CoCo owns a small portion of land in the Balregan area of Kilcurry which is the ideal site for a pumping station.”

Cllr O’Reilly pointed out that the issue of water mains supply is historical issue and in modern times, is becoming a more and more difficult task. He commented that in the area of Kilcurry, “I have received many requests for grants for new wells and filtering systems to eliminate E. coli in shallow wells.”

Cllr O’Reilly would appreciate if Uisce Éireann would liaise with him, the local primary school Scoil Phádraig Naofa, Scoil Beag Crèche, community centre and the parochial house. He continued that if this case were to go to an oral hearing and all these elements of the local community are present, they can make their case on an individual basis or collectively “as a community starved of a fundamental infrastructural right.” Cllr O’Reilly concluded that it “is hard to believe that a village only 3km from the largest town in Ireland has no mains water supply in 2023.”

There were several submissions in relation to Lough Bouliska. The submissions cited the catchment area is both a National Heritage Area and Special Area of Conservation and highlighted the damaging effects of flooding in on the farmland, flora and fauna as well as inaccessibility.

Another stakeholder queried the proposal to extract from Lough Bouliska. They requested clarification on the proposal and whether “works are to be carried out to the existing banks of the lake as these may become unstable and dangerous for animals. This is also a concern for the Bouliska river which forms a boundary to and drains some of my family lands. Furthermore, the existing bridge across the river is very old and not in good condition and any reduction in water levels could have an adverse effect on foundations that are laid on saturated bogland. The concerns outlined above could impede my brother and I travelling to and from my family home and also utilizing our land for grazing.” They further raised concerns “that some of our land could become dangerously inaccessible or permanently flooded due to increased levels, or just unusable because of potential problems with drainage.”

16.3.2 Response to Not Related to the RWRP-NW

In response to submissions from those in the Cahertinny area, works are ongoing on the Mid Galway scheme including network reconfiguration and strengthening, additional pumping and leak detection works, aimed at resolving the issues in this area of the Mid Galway network.

In response to Cllr. Albert Doherty’s submission on the Carndonagh area, works are underway to supplement the supply with groundwater, with trial wells due to commence in Q4 this year. The long-term solution to provide a sustainable supply in Carndonagh will be identified as part of the North-West Regional Water Resources Plan (NW RWRP). The preferred approach set out in the NW RWRP for Carndonagh was to interconnect Inishowen West/Carndonagh/ Culdaff to new sources that are to be developed near Letterkenny and upgrade Goldrum WTP.

As part of our commitment to support growth and development, we publish annual water supply and wastewater treatment capacity registers on our [website](#). The registers provide an indication of available capacity. The indication of Capacity Available has been determined based on a standardised national review of the available information and is subject to change. In all instances if you are considering progressing a development you should contact our Connections team who will provide a greater level of detail in relation to the availability of water supply capacity.

Investing in water services is key for sustainable planning and development on a national, regional and local level. In 2014, we created a robust investment planning framework that prioritises investments based on national water services policy and plans for the future. Our current investment plan was developed following significant consultation with multiple stakeholders and runs from 2020 to 2024. Our next Investment Plan which is due to run from 2025 to 2029 is currently being developed through a similar stakeholder engagement process. We invest in a range of programmes that support growth in line with statutory plans. The 3 themes that guide the development and delivery of water services are: quality, conservation and future proofing. These are detailed in the government's Water Services Policy Statement. Our investment plan submissions to the Commission for Regulation of Utilities (CRU) highlight the importance of growth in priority settlements. This supports the objectives as set out in the National Planning Framework and the Regional Spatial and Economic Strategies.

In response to the submission from St. Patrick's Purgatory/Sanctuary, Uisce Éireann has no plans to extend a public water supply to this area. Domestic and non-domestic enquiries in relation to proposed connections are managed through the Uisce Éireann Connection and Developer Services team. Further information on the enquiry/application process can be found here: <https://www.water.ie/connections/>

The proposed connection by Cllr O'Reilly to Kilcurry would require a significant amount of work and significant financial investment.

We recommend contact with the Federation of Group Water Schemes (NFGWS) to determine the potential viability of local group water scheme, as agglomerations without an existing public water services are outside the remit of Uisce Éireann. Should the community receive funding for the provision of water infrastructure, Uisce Éireann will work with the DHLGH & Local Authorities to support the development and implementation of an appropriate solution. Enquiries in relation to proposed connections of group water schemes to public water infrastructure are managed through the Uisce Éireann Connection and Developer Services team.

Uisce Éireann received several submissions during the consultation on the flooding of land and roads around Lough Bouliska which are outside of the scope of the RWRP -NW. Although not directly related to this consultation we have captured and

summarised the feedback in Section 16. UÉ replied to all stakeholders who made a submission on flooding in the area and also held a meeting to discuss these concerns with the Lough Bouliska Residents Association and local representatives. The queries and concerns were forwarded to the relevant teams within Uisce Éireann who will continue to liaise with the residents on the day-to-day operation of the level of the lough and sluice gates.

At plan level, the proposed preferred approach for the Rosmuc, Teeranea Lettermore and Carraroe supply is to connect them to the Spiddal Supply and increase our abstraction from Lough Bouliska as this has been determined as the most sustainable source of supply for the area. However, prior to any works or increase in abstraction, UÉ will have to obtain further regulatory consents, permission and an abstraction licence under the new Water Environment (Abstraction and Associated Impoundments) Act 2022.

UÉ wish to confirm that we have made no proposals to increase water levels or increase the height of the gates to facilitate an increased abstraction. A comprehensive response on the preferred approach for Lough Bouliska can be found in Section 10 Solutions Methodology.

A list of all stakeholder meetings can be found in Appendix H

16.4 Conclusions on Outside the Scope of the RWRP- NW

Having carefully reviewed the submissions received on the Out of Scope theme, Uisce Éireann considered that no updates or further recommendations to the RWRP- NW are required.

For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM and RWRP-SW consultations have also been considered in the development process and finalisation of the RWRP-NW.

17 Next Steps

Following on from the public consultation, submissions and observations received will be taken into consideration, and the RWRP-NW updated. The final RWRP-NW will then be produced, accompanied by a Strategic Environmental Assessment Statement and an Appropriate Assessment Determination.

The RWRP-SE is the fourth and final Regional Plans to be delivered over the next 12 months.

Once Phase 1 and Phase 2 of the NWRP have been finalised, comprising the Framework Plan and four (4) Regional Water Resources Plans, together they will be treated as a unified Plan and the relevant regional groupings will have no ongoing application.

water.ie/nwrp



National Water Resources Plan

Phase 2

Draft Regional Water Resources Plan

North West Region

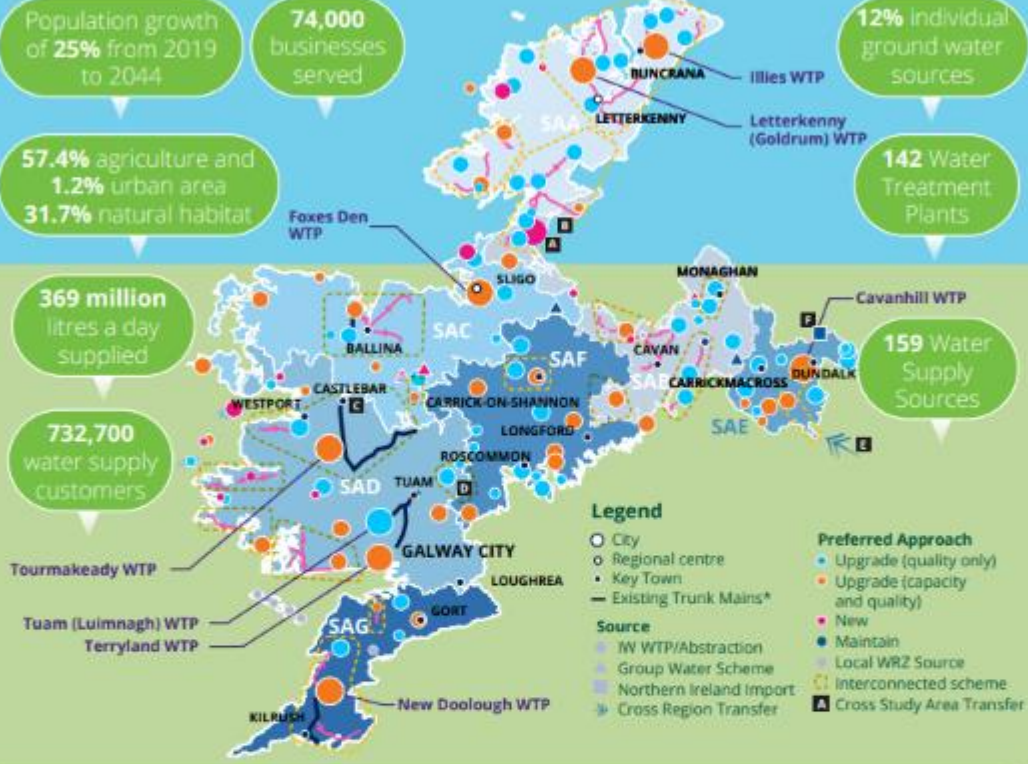
Consultation



Regional Water Resources Plan (RWRP) North West Region



The plan will set out how we can **balance the amount of drinking water we can supply with the demand for water that is needed over the short, medium and long term.**



Key Positive Outcomes of the RWRP North West

Reducing leakage to 23% of regional demand through pressure management, active leakage control, find and fix and asset replacement	We will improve the level of service provided to all customers in the Region for all-weather events significantly reducing the risk of outages and water restrictions	60% of customers in the region will obtain the water from an interconnected supply	Upgrades to 105 existing Water Treatment Plants in terms of size and barrier performance	We will provide 12 new WTPs	We will decommission 37 WTPs
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Our three pillar approach will ensure we have a safe, secure, reliable and sustainable drinking water supply for everyone.

Use Less

Reduce leakage

Use Less

Improve water efficiency

Supply Smarter

Improve infrastructure

Introduction

The National Water Resources Plan (NWRP) is Irish Water’s 25-year strategic plan for the public water supply in Ireland.

The NWRP allows us to plan for our water supplies in a consistent way and to transform the public water supply in Ireland over the next 25 years. It allows us to identify the needs within our existing supplies and to consider the challenges and opportunities that will arise. These include changing policy and legislation, climate change, environmental sustainability, growth and economic development.

Within the NWRP, we will assess all of the 539 individual supplies that form the national public water supply and develop a clear approach to address the current and future needs across these supplies.

What is the objective of the National Water Resources Plan?

The objective of the NWRP is to meet our customer and communities’ needs over the short, medium, and long term, by ensuring safe, secure, sustainable, and reliable water supplies.



National Water Resources Plan | Phase 2 Consultation | 3

What is happening now?

As this is the first NWRP, the preparation of the plan has been divided into two distinct phases, the combination of which will become the final NWRP.

In Phase 1 of the Framework Plan, we set the standards we would like our supplies to achieve and processes we will follow to address needs across our supplies. Following public consultation in early 2021, the Framework Plan is now complete and can be found at www.water.ie/nwrp

In Phase 2 of the NWRP, we summarise the needs across the 539 individual water supplies and identify the solutions to address these needs. Due to the large number of supplies in Ireland, we will deliver Phase 2 as four Regional Water Resources Plans:

- Regional Water Resources Plan: North West
- Regional Water Resources Plan: South West
- Regional Water Resources Plan: South East
- Regional Water Resources Plan: Eastern and Midlands



Figure 1. Regional Areas of the NWRP

Each of the four draft RWRPs and associated environmental reports will have their own public consultation phases, which will be carried out over the course of 2021/2023.

As part of each Regional Plan, we will:

- Apply the Framework methodology to the water supplies in the region
- Develop regional solutions for all water supplies within these areas

The first draft Regional Water Resources Plan for the Eastern and Midlands Region (draft RWRP-EM) was issued for consultation on 14th December 2021 and closed on 8th April 2022. Following a technical review of all submissions received in response to the consultation, the RWRP-EM and associated environmental reports were updated and adopted on 30 September 2022.

The second RWRP launched for public consultation was the South West Region (draft RWRP-SW). A twelve-week consultation on the draft RWRP-SW and associated SEA Environmental Report and Natura Impact Statement took place from 1 June 2022 to 24 August 2022. Following that process, all submissions will be taken into consideration and responses to the issues raised will be summarised in a Consultation Report, which will be published later in 2022.

Current progress on both the RWRP-EM and RWRP-SW is available at: <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/>

At the end of Phase 2 the outcome of the four plans will be combined and prioritised collectively.

What is the North West Region?

The North West Region includes thirteen Local Authorities: Galway City, Galway, Leitrim, Mayo, Roscommon, Sligo, Cavan, Donegal, Monaghan, Longford, Louth, Meath and Clare. The area also includes eight islands off the coast Ireland, namely Inishmore, Inishmean, Inishere, Inisboffin, Inishturk, Clare Island, Achill Island and Arranmore Island.

Eighteen percent (18%) of the national population is located within the region. Twenty six percent (26%) of the regional population and 3% of Ireland's total population is located within Galway City. The North West Region includes seven Key Towns: Ballina, Castlebar, Cavan, Ballinasloe, Carrick-on-Shannon, Monaghan, Roscommon and Tuam. Castlebar is the largest of the Key Towns with a population of almost 12,100. Fifty-four percent (54%) of the region's population live in settlements of less than 5,000 with much of the region being sparsely populated.

Irish Water supplies around 369 million litres of water per day to a population of 732,700 people and 74,000 businesses in water supplies, around the North West Region. This represents more than 21% of our total supply nationally.



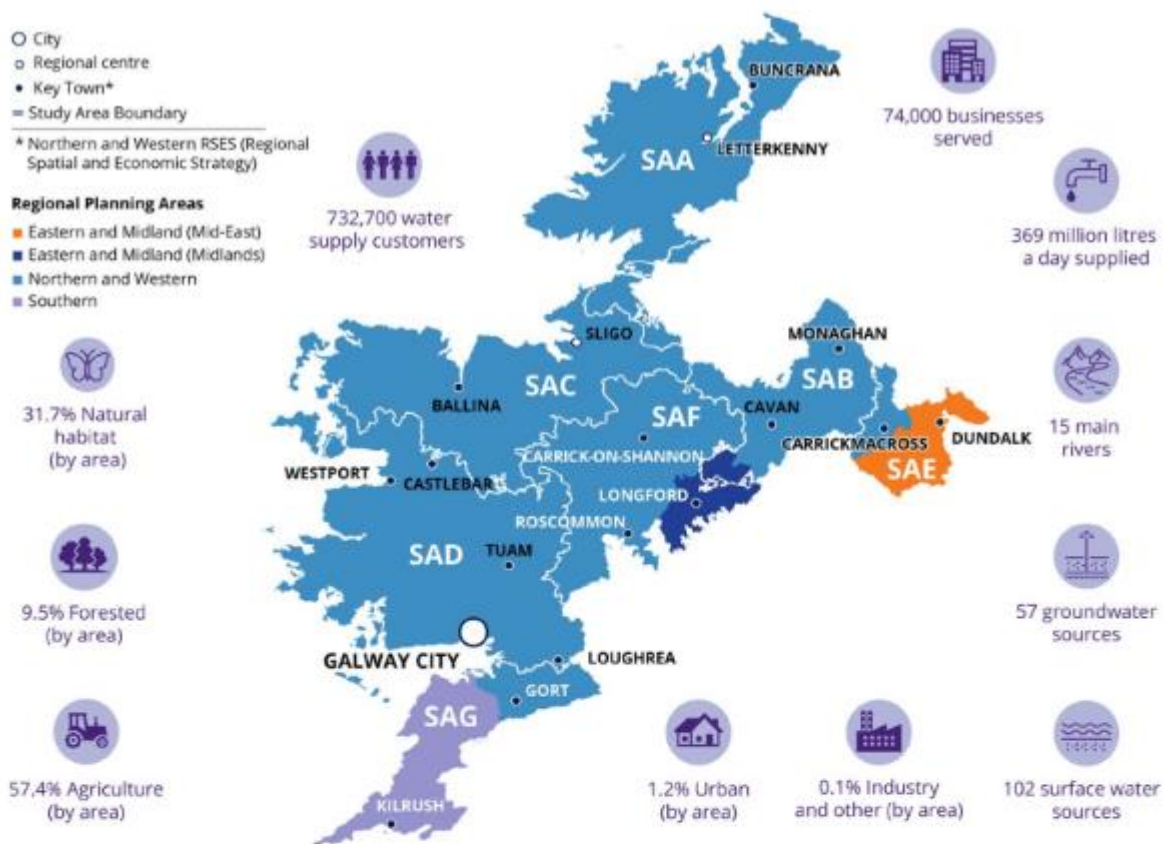


Figure 3. Key characteristics of the North West Region

What are the issues in the Region?

In the North West Region, there are 142 Water Treatment Plants that feed water into 119 stand-alone water supplies known as water resources zones (WRZs). These WRZs provide water to all the cities, towns, villages, and rural properties in the region that are connected to the public water supply.

When we viewed these supplies using the Irish Water risk factors we set out in the Framework plan, we identified the following needs, which must be addressed as part of the draft RWRP-NW:

- 58% of the WRZs are in supply Deficit, which means they do not have the capacity to meet current or future needs
- 97 of the 142 Water Treatment Plants need some form of investment to reduce risk to water quality
- Levels of service across the North West Region are below the standard we are aiming to achieve. Until we reach our target level of service, there is a higher risk of interruptions to supply
- Some of our water abstractions may be unsustainable

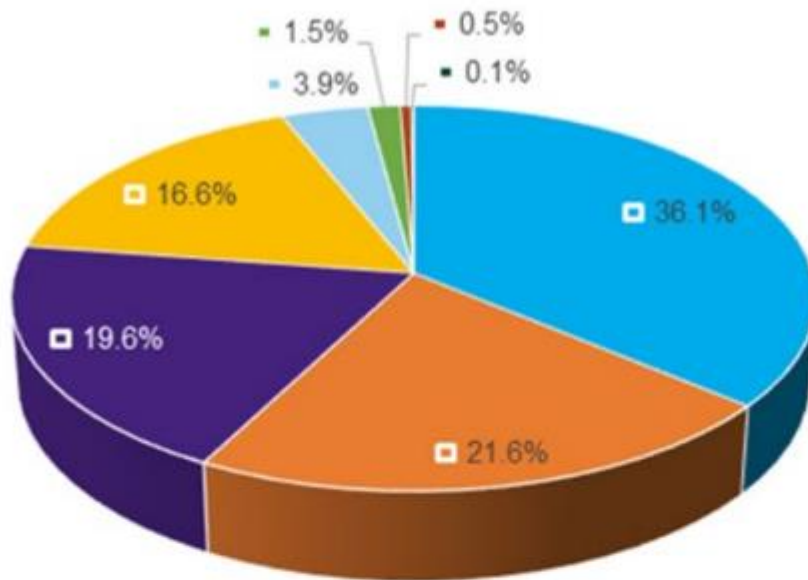
How do we review this in our draft regional plan?



Within the Plan we identify solutions to address these needs under three pillars, Use Less (water conservation), Lose Less (leakage reduction) and Supply Smarter (sustainable water supplies).

As part of the draft RWRP-NW, we reviewed 1,355 unconstrained options and developed 811 feasible options to address the needs we identified in the Region.

These feasible options included an extensive list of option types, including, groundwater and surface water sources, reservoirs and water transfers.



- Surface Water (293)
- Rationalisation (175)
- Groundwater (159)
- Transfer (135)
- Upgrade WTP (WQ only) (32)
- Desalination (12)
- Cross Study Area Supply (4)
- Network improvements (1)

We then assessed these to develop a preferred approach for each of the water supplies.

What is the outcome of our plan?

The development of the draft RWRP-NW has for the first time allowed Irish Water to collectively assess needs across all of the 119 water supplies in the region, in terms of quality, quantity, reliability and sustainability. The regional plan allows us to consider local options to resolve identified needs within individual supplies and also larger regional options that can address needs across multiple supplies.

The preferred approach for the region, once delivered, involves:

- Merging supply systems within the region to form 17 larger interconnected Water Resource Zones, reducing the number of Water Resource Zones in the North West Region from 119 to 78.
- Upgrading 105 existing Water Treatment Plants to reduce water quality risks across all WRZs.
- Increasing the capacity of 45 (of the remaining 105) Water Treatment Plants to address the current supply deficit and to meet forecast growth.
- Interconnecting supplies via 733 kilometres of trunk mains.
- Development of 12 new Water Treatment Plants.
- Eventual decommissioning of 37 Water Treatment Plants.
- Reducing leakage to 23% of regional demand through pressure management.

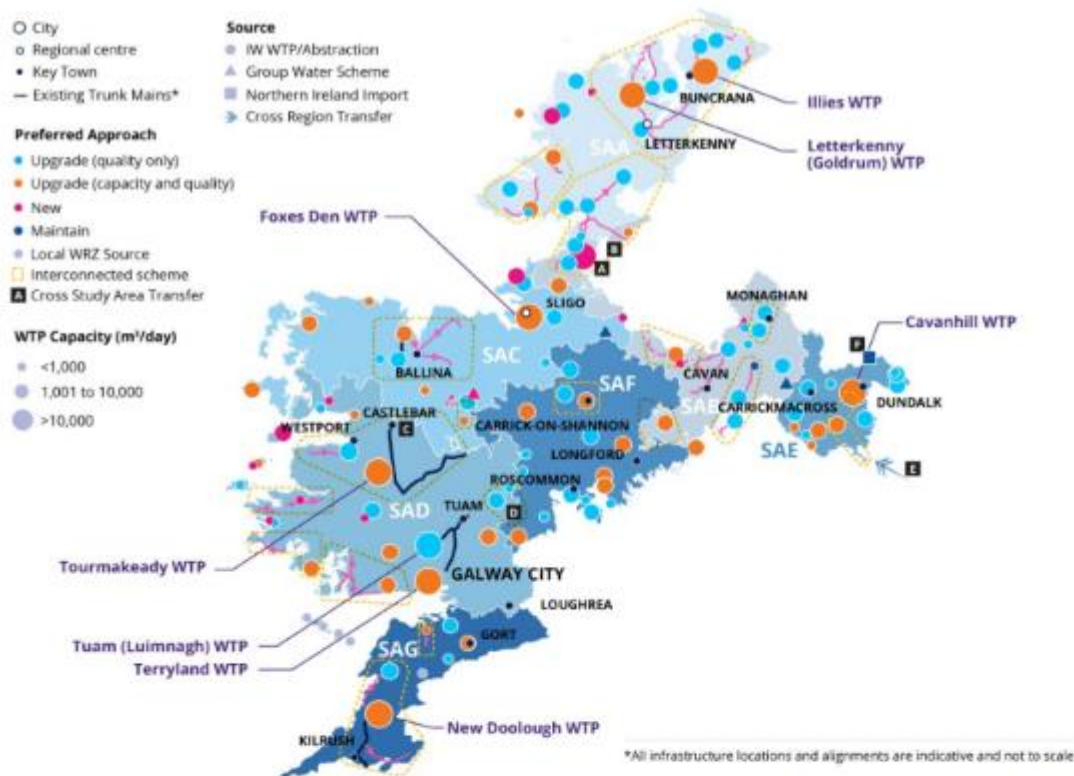


Figure 4. Regional Preferred Approach

What does this mean for consumers in the region?

The preferred approach will provide the best overall outcome for the region, particularly in relation to environmental, ecology and resilience outcomes. This will result in:

- Improved performance across all of the water supplies in terms of quality and quantity. Strategic transformation from the existing fragmented supply to a more resilient and sustainable interconnected supply. All 105 of the remaining/new water resources zones in the North West Region will be able to provide improved reliability and meet a minimum 1 in 50 Level of Service during normal, dry, drought and winter conditions.

- All Water Resource Zones will be resilient with improved environmental sustainability.
- Customer benefits in terms of increased reliability and reduced occurrence of outages across our supplies.
- Customer benefits in terms of reduced water quality risk and the instances of boil water notices.
- Improved resilience, with 60% of the population supplied via sources with impounding storage or aquifer storage that will allow us to better manage seasonal variation in water availability and drought events.
- Sources that are more environmentally sustainable and allow us to adapt to climate change and align with the requirements of the Water Framework Directive and Habitats Directive.
- Improved operational control across our water supplies, and ability to react to adverse events.
- Improved efficiency of our distribution networks in terms of leakage, pressure and strategic storage.
- Ability to facilitate growth and economic development.



How can I get involved?

Irish Water is now seeking feedback on the public consultation for the draft RWRP- North West and associated SEA Environmental Report and Natura Impact Statement.

A thirteen-week consultation will run from the 22 November 2022 to 21 February 2023, during which time the draft RWRP North West and associated environmental reports can be viewed and downloaded at <https://www.water.ie/rwrp/north-west> or at your local authority's planning office or County Library (depending on the local authority) during their normal opening hours.

This is your opportunity to feed into the process of how we identify the issues and determine what the opportunities are for water supply in your area. We are also seeking your feedback on how we will develop options to address any problems identified, before applying them to specific areas and options.

All submissions will be taken into consideration and responses to the issues raised will be summarised in a Consultation Report, which will be published on <https://www.water.ie/rwrp/north-west>

Individual submissions will be reported anonymously and feedback from organisations will be attributed to them.

Feedback received outside the scope of the draft RWRP-NW and the associated environmental reports will not be considered as part of this public consultation process and will not be reported on. Any feedback in relation to in-flight Irish Water projects, or in reference to any other area of the Irish Water business should be sent directly to those project teams,

unless applicable to how they are included in the RWRP-NW. Information on Irish Water projects and contact details can be found on www.water.ie

In line with the General Data Protection Regulations (GDPR) effective from 25 May 2018, Irish Water's updated Privacy Notice, is available to view online at www.water.ie/privacy-notice

Have your say

Any member of the public wishing to make a submission can do so by email or post by **21 February 2023** as follows:

Email: **nwrp@water.ie**
Post: **National Water Resources Plan,
Irish Water, P.O. Box 13216,
Glenageary, Co. Dublin**
Freephone: **1800 46 36 76**

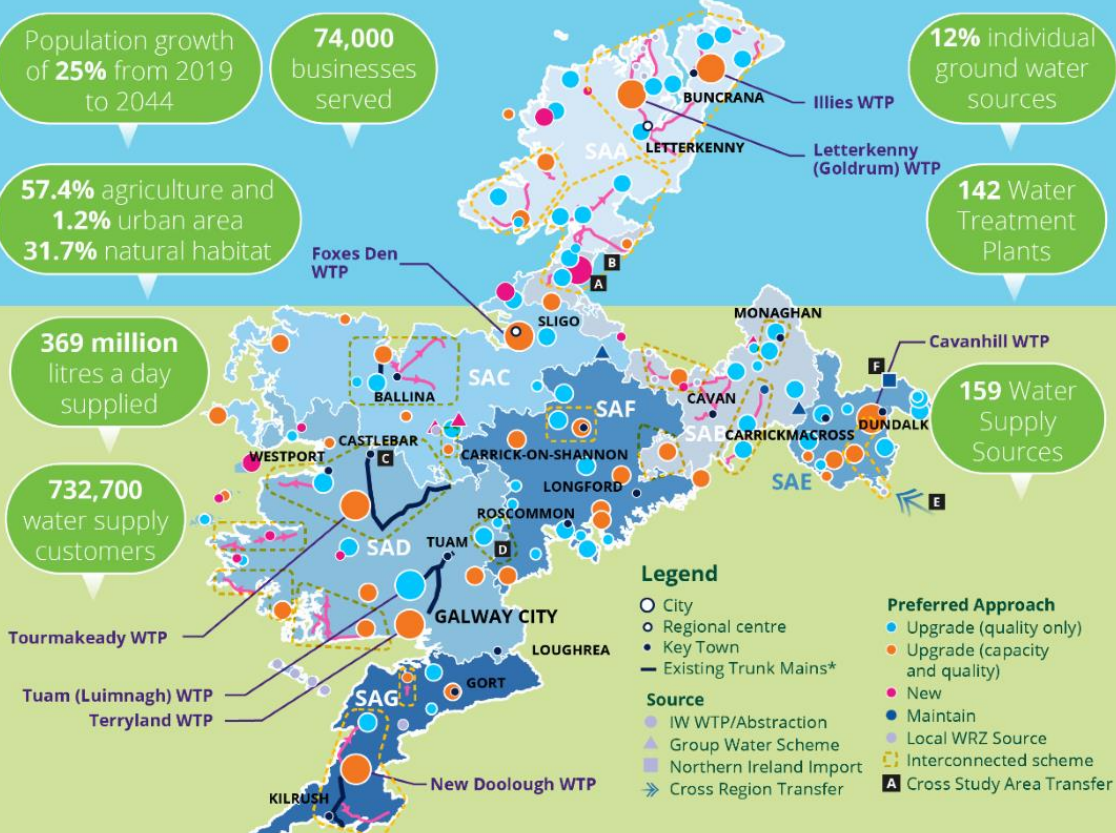
A dedicated helpline is available for anyone who would like to discuss any aspect of the consultation prior to making a submission. Freephone: 1800 46 36 76

Appendix B RWRP-NW Infographic

Regional Water Resources Plan (RWRP) North West Region



The plan will set out how we can **balance the amount of drinking water we can supply with the demand for water that is needed over the short, medium and long term.**



Key Positive Outcomes of the RWRP North West					
Reducing leakage to 23% of regional demand through pressure management, active leakage control, find and fix and asset replacement	We will improve the level of service provided to all customers in the Region for all-weather events significantly reducing the risk of outages and water restrictions	60% of customers in the region will obtain the water from an interconnected supply	Upgrades to 105 existing Water Treatment Plants in terms of size and barrier performance	We will provide 12 new WTPs	We will decommission 37 WTPs

Our three pillar approach will ensure we have a safe, secure, reliable and sustainable drinking water supply for everyone

Lose Less

Reduce leakage

Use Less

Improve water efficiency

Supply Smarter

Improve infrastructure

Appendix C Press Release

Irish Water launches public consultation on its plans to provide more secure and sustainable water supply to homes and businesses across the North West region over the next 25 years

Public Consultation runs from 22 November 2022 to 21 February 2023

We want to hear from you!

Meet our team at a public webinar and have your say on our plans to supply water in your area.

Tuesday November 22, 2022 - Irish Water today begins a three-month public consultation on the draft Regional Water Resource Plan – North West (RWRP-NW). The plan sets out options for providing a more secure, reliable and sustainable water supply for 732,700 customers in the North West region over the next 25 years. The plan includes counties Cavan, Donegal, Galway, Leitrim, Mayo, Monaghan, Sligo and parts of Clare, Longford, Louth, Meath and Roscommon. Eight islands off the coast of Ireland are also included in the region.

Irish Water's National Water Resources Plan will be the first resources plan for the entire public water supply in Ireland. The National Plan will identify the needs across our existing supplies and the challenges and opportunities that we face over the coming years including legislation, climate change, the environment, growth and economic development. The National Plan will allow us to understand the actions and activities required to transform our water supplies and provide a safe, secure, reliable, and sustainable water supply for our current and future customers. The National Plan will also provide a transparent roadmap on how Irish Water will plan for its water assets to align with national policy.

Given the scale of the area to be covered, the National Plan is being rolled out in two phases. The National Plan was first adopted in the summer of 2021 and Irish Water has since moved into Phase 2 and is preparing four Regional Water Resources Plans.

The four regions are:

Regional Water Resources Plan: North West

Regional Water Resources Plan: South West

Regional Water Resources Plan: South East

Regional Water Resources Plan: Eastern and Midlands

Each Regional Plan is subject to its own consultation and, once adopted, all of the Regional Plans and the Framework Plan will be treated as a unified National Plan.

Public consultation on the draft Regional Water Resources Plan North West launches today and will continue until 21 February 2023.

The draft RWRP-NW describes the North West Region and the current challenges faced now and into the future in terms of delivering a safe, secure and resilient water supply. It identifies progress made to date, for instance through leakage reductions, capital investment works, and works in progress. It applies the methodology as adopted in the Framework Plan to (i) identify the Need across the 119 Water Resource Zones, in terms of quality, quantity, reliability and sustainability of supply, and (ii) identify Plan level solutions to meet this Need across the region.

There are 142 Water Treatment Plants (WTPs) in the North West Region, which collectively serve 732,700 people or 18% of the population of Ireland, via approximately 17,732 kilometres of distribution network and 119 Water Resource Zones. These treatment plants also serve 74,000 businesses. The region itself covers approximately 26,912 square kilometres, encompassing counties Cavan, Donegal, Galway, Leitrim, Mayo, Monaghan, Sligo and parts of Clare, Longford, Louth, Meath and Roscommon. Eight islands off the coast of Ireland are also included in the region.

Speaking at the launch of the public consultation, Mairéad Conlon, Regional Water Resources Strategy Lead for Irish Water said, “The development of a draft plan on how Irish Water will supply water across the North West region is an important step. It will allow Irish Water to review water supply needs across the region and consider local options to resolve these needs.

“The draft Regional Plan will offer key benefits in terms of transformation of our supplies, including the ability to cater for growth and economic development in a sustainable way, through improved interconnectivity between our supplies to ensure balanced regional development and new sustainable water sources that are adaptable to climate change.

“The draft plan sets out how we envisage water will be supplied to homes and businesses across counties Cavan, Donegal, Galway, Leitrim, Mayo, Monaghan, Sligo and parts of Clare, Longford, Louth, Meath and Roscommon over the next 25 years. Eight islands off the coast of Ireland are also included in the region. Our team hopes to meet as many people as possible and hear from them about their local areas, to ensure that our plan is the best fit for the North West region,” explained Mairéad.

Irish Water is now seeking feedback on the public consultation for the draft RWRP-NW and associated SEA Environmental Report and Natura Impact Statement (NIS). The documents are available to view on our website at www.water.ie/rwrp/north-west.

A 13-week statutory public consultation will run from 22 November 2022 to 21 February 2023.

Submissions can be made by post or email by 21 February 2023 to:

Email: nwrp@water.ie

Post: National Water Resources Plan, Irish Water, PO Box 13216, Glenageary, Co. Dublin

This public consultation is everyone's opportunity to feed into the process of how Irish Water identifies the water supply issues in the region and determines what the options are to provide a more resilient water supply to customers within the region.

Public webinars will be facilitated in January and February 2023. These webinars will provide information on the draft Regional Water Resources Plan - North West and allow opportunities to pose questions to our team. If you would like to be part of an online public webinar on the draft Regional Water Resources Plan - North West and associated environmental reports, you can register your interest on our website at www.water.ie/rwrp/north-west.

Irish Water is also seeking feedback on how it will develop options to address any problems identified.

All submissions will be taken into consideration and responses to the issues raised will be summarised in a Consultation Report, which will be published on www.water.ie/nwrp.

ENDS

Appendix D Sample Newspaper Advertisements

Foilsíonn Uisce Éireann an Dréachtphlean Réigiúnach um Acmhainní Uisce do Réigiún an Iarthuaiscirt le haghaidh Comhairliúcháin Poiblí

D'fhoilsigh Uisce Éireann an Dréachtphlean Réigiúnach um Acmhainní Uisce do Réigiún an Iarthuaiscirt (PRAU-IT). Is é an PRAU-IT an tríú plean Réigiúnach um Acmhainní Uisce as ceithre cinn a foilsíodh le haghaidh comhairliúcháin poiblí agus leagfaidh sé amach straitéis Uisce Éireann chun an córas poiblí um sholáthar uisce a aistriú agus a fheabhsú sa réigiún.

Cuimsítear i réigiún an Iarthuaiscirt Cathair na Gaillimhe, Gaillimh, Liatroim, Maigh Eo, Ros Comáin, Sligeach, Cabhán, Dún na nGall, Muineachán, an Longfort, Lú, an Mhí agus an Clár.

Is é is cuspóir foriomlán leis an PRAU-IT riachtanais an chustaiméara agus riachtanais an phobail a bhainistiú, rud a chinnteoidh go mbeidh an soláthar uisce don réigiún inbhuanaithe, sábháilte agus iontaoifa sa todhchaí.

Bainfidh na nithe seo a leanas le toradh an dréachtphlean PRAU-IT:

- Feidhmíocht fheabhsaithe ar fud na soláthairtí uisce uile ó thaobh Cáilíochta agus Cainníochta de.
- Aistriú straitéiseach ón soláthar ilroinnte atá ann cheana chuig soláthar idirnasctha atá níos athléimní agus níos inbhuanaithe; agus
- An cumas tacú le fás agus forbairt eacnamaíoch ar fud Réigiún an Iarthuaiscirt.

Tá comhairliúcháin poiblí ar siúl faoi láthair ar feadh 13 seachtaine chun eolas a dhéanamh d'fhorbairt an PRAU-IT. Mairfidh an comhairliúcháin ón 22 Samhain 2022 go dtí an 21 Feabhra 2023. Tá liosta iomlán de na bailte fearainn, bailte, lonnaithe agus contaetha sa PRAU-IT ar fáil ag <https://www.water.ie/rwrp/north-west>

Cuireann Uisce Éireann fáilte roimh aiseolas ar an dréachtphlean PRAU-IT agus an Measúnacht Straitéiseach Timpeallachta (MST) agus an Ráiteas Tionchair Natura (RTN) a bhaineann leis, atá ar fáil ag <https://www.water.ie/rwrp/north-west>

Is féidir nótaí tráchtá agus aiseolas a chur chuig Uisce Éireann faoin Máirt, an 21 Feabhra 2023 trí:

Riomhphost: nwrp@water.ie
Post: Plean Náisiúnta um Acmhainní Uisce, Uisce Éireann, Bosca Oifig Poist 13216, Gleann na gCaorach, Co. Bhaile Átha Cliath.

Déanfar gach aighneacht a bhreithniú agus glacfar aiseolas ábhartha isteach sa PRAU-IT deiridh do réigiún an Iarthuaiscirt, a fhoilseofar in 2023, in éineacht leis an Ráiteas MST agus an Cinneadh MC. Foilseofar Tuarascáil Chomhairliúcháin freisin, i ndiaidh athbhreithniú a dhéanamh ar an aiseolas ar fad a gheofar le linn na céime comhairliúcháin poiblí seo.

Óstálfadh Uisce Éireann sraith de sheimineáir ghréasáin don phobal i mí Eanáir 2023 agus i mí Feabhra 2023 chun an dréachtphlean PRAU-IT agus na tuarascálacha timpeallachta gaolmhara a chur i láthair. Chun clárú tabhair cuairt ar <https://www.water.ie/rwrp/north-west>

Ag cosaint ár n-uisce don saol atá romhainn



Irish Water publishes the draft Regional Water Resources Plan North West for Public Consultation

Irish Water has published the draft Regional Water Resources Plan - North West (RWRP-NW). The RWRP-NW is the third of four Regional Water Resources Plans launched for public consultation and it will set out Irish Water's strategy to transform and improve the public water supply system in the region.

The North West region includes Galway City, Galway, Leitrim, Mayo, Roscommon, Sligo, Cavan, Donegal, Monaghan, Longford, Louth, Meath and Clare.

The objective of the RWRP-NW is to manage customer and community needs ensuring that the drinking water supply for the region is sustainable, secure, and reliable in the future.

The outcome of the draft RWRP-NW will involve:

- Improved performance across all of the water supplies in terms of Quality and Quantity;
- Strategic transformation from the existing fragmented supply to a more resilient and sustainable interconnected supply; and
- Ability to support growth and economic development across the North West Region.

A 13-week public consultation is now underway to inform the development of the RWRP-NW. The consultation will run from 22 November 2022 to 21 February 2023. A full list of townlands, towns, settlements and counties included in the RWRP-NW can be found at <https://www.water.ie/rwrp/north-west>

Irish Water is inviting feedback on the draft RWRP-NW and associated Strategic Environmental Assessment (SEA) Environmental Report and Natura Impact Statement (NIS), which are available at <https://www.water.ie/rwrp/north-west>

Comments and feedback can be sent to Irish Water by Tuesday 21 February 2023 via:

Email: nwrp@water.ie
Post: National Water Resources Plan, Irish Water, P.O. Box 13216, Glenageary, Co. Dublin.

All submissions received will be reviewed and relevant feedback will be incorporated into the final RWRP-NW, which will be published in 2023, alongside the SEA Statement and AA Determination. A Consultation Report will also be published, following a review of all feedback received during this public consultation stage.

Irish Water will host a series of webinars for members of the public in January and February 2023 to present the draft RWRP-NW plan and associated environmental reports. To register visit <https://www.water.ie/rwrp/north-west>

Safeguarding our water for our future



Appendix E Planning Counters and Libraries

Local authority	Location	Address
Carlow County Council	Planning Department	Carlow County Council, Athy Road, Carlow R93 E7R7
Cavan County Council	Planning Department	Cavan County Council, Cavan Courthouse, Farnham Street, Cavan H12 R6V2
Clare County Council	Planning Department	Clare County Council, Áras Contae an Chláir, New Road, Ennis, Co. Clare V95 DXP2
Cork City Council	Planning Department	Cork City Council, City Hall, Anglesea Street, Cork T12 T997
Cork County Council	Planning Department	Cork County Council, County Hall, Carrigrohane Road, Cork T12 R2NC
Donegal County Council	Central Library	Donegal Central Library, St Oliver Plunkett Rd, Letterkenny, Co. Donegal F92 R273
Dublin City Council	Planning Department	Dublin City Council, Civic Offices, Wood Quay, Dublin 8 D08 RF3F
Dun Laoghaire-Rathdown County Council	Planning Department	Dun Laoghaire Rathdown County Council, Civic Hub, Dundrum Office Park, Main Street, Dundrum, Dublin 14 D14 YY00
Fingal County Council	Planning Department	Fingal County Council, County Hall, Main Street, Swords, Co. Dublin K67 X8Y2
Galway City Council	Planning Department	Galway City Council, City Hall, College Road, Galway H91 X4K8

Galway County Council	Planning Department	Galway County Council, Áras an Chontae, Prospect Hill, Galway H91 H6KX
Kerry County Council	Planning Department	Kerry County Council, Co Buildings, Rathass, Tralee, Co. Kerry V92 H7VT
Kildare County Council	Planning Department	Kildare County Council, Áras Chill Dara, Devoy Park, Naas, Co. Kildare W91 X77F
Kilkenny County Council	Planning Department	Kilkenny County Council, County Hall, John Street, Kilkenny R95 A39T
Laois County Council	Planning Department	Laois County Council, Áras an Chontae, JFL Ave., Portlaoise, Co. Laois R32 EHP9
Leitrim County Council	Planning Department	Leitrim County Council, Áras An Chontae, St. Georges Terrace, Carrick on Shannon, Co. Leitrim N41 PF67
Limerick City & County Council	Planning Department	Limerick City & County Council, Dooradoyle Road, Dooradoyle, Limerick V94 WW78
Longford County Council	Planning Department	Longford County Council, Áras An Chontae, Great Water Street, Longford N39 NH56
Louth County Council	Planning Department	Louth County Council, Town Hall, Crowe Street, Dundalk, Co. Louth A91 W20C
Mayo County Council	Planning Department	Mayo County Council, Áras an Chontae,

		The Mall, Castlebar, Co. Mayo F23 WF90
Meath County Council	Planning Department	Meath County Council, Buvinda House, Dublin Road, Navan, Co. Meath C15 Y291
Monaghan County Council	Planning Department	Monaghan County Council, 1 Dublin Street, Monaghan H18 X982
Tipperary County Council	Planning Department	Tipperary County Council, Civic Offices, Nenagh, Co. Tipperary E45A099
Offaly County Council	Planning Department	Offaly County Council, Áras an Chontae, Charleville Road, Tullamore, Co. Offaly R35 F893
Roscommon County Council	Planning Department	Roscommon County Council, Áras an Chontae, Roscommon Town, Co. Roscommon F42 VR98
Sligo County Council	Planning Department	Sligo County Council, Sligo City Hall, Quay St, Abbeyquarter North, Sligo F91 PP44
South Dublin County Council	Planning Department	South Dublin County Council, County Hall, Tallaght, Dublin 24 D24 A3XC
Waterford City & County Council	Carrickphierish Library	Carrickphierish Library, Gracedieu Rd, Carrickphierish, Co. Waterford X91 NN9F
Westmeath County Council	Planning Department	Westmeath County Council, Áras an Chontae, Mount Street, Mullingar, Co. Westmeath N91 FH4N

Wexford County Council	Planning Department	Wexford County Council, Customer Service Unit Block B, County Hall, Carricklawn, Wexford Y35 WY93
Wicklow County Council	Planning Department	Wicklow County Council, County Buildings, Whitegates, Wicklow Town, Co. Wicklow A67 FW96

Appendix F Sample Stakeholder Emails

Draft RWRP North West Consultation

Dear Stakeholder,

Thank you for your engagement to date on the development of the National Water Resources Plan (NWRP).

Phase 1 of the NWRP Framework Plan was adopted in May 2021 following a 13.5-week statutory consultation. The NWRP Framework Plan and all associated reports can be viewed and downloaded at <https://www.water.ie/nwrp>

Irish Water are now seeking feedback on the draft RWRP North West (draft RWRP-NW) and associated SEA Environmental Report and Natura Impact Statement. A 13-week consultation will run from 22 November 2022 to 21 February 2023 during which time the documents will be available to view on our website at www.water.ie/rwrp/north-west and at your local authority's planning office during their normal opening hours.

Submissions, or observations can be made up to the closing date of the consultation period, by email or post to:

Email: nwrp@water.ie

Post: National Water Resources Plan, Irish Water, PO Box 13216, Glenageary, Co. Dublin.

The following consultation questions have been prepared in order to guide you in making a submission. However, this is just an aide and all submissions received in response to the consultation will be considered.

2. In section 2 of the draft RWRP-NW 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?
3. Within the North West region, we consider 119 water supplies (Water Resource Zones) represented across 7 Study Areas. Do you have any comments on the Study Areas?
3. Section 3 of the draft RWRP-NW and each of the technical appendices 1-7 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?
4. Section 4, 7 and 8 of the draft RWRP-NW, and the technical appendices 1-7, 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?
5. Section 6 and the technical appendices 1-7 of the draft RWRP-NW summarise our process for developing options to address the needs in the NW Region. Do you have any comments on this process?

6. Section 7 sets out how we identify our Preferred Approach to addressing the need at WRZ and Study Area level. Each of the technical appendices for Study Areas 1-7 (A-G) and the Environmental Review for Study Areas 1-7 (A-G) set out how the Preferred Approach has been identified in more detail. Have you any feedback on this?
7. The draft RWRP-NW looks at a range of solutions to meet the need in a WRZ or Study Area. These solutions are not limited by distance, therefore, some solutions for the WRZ or Study Area will involve interconnections across multiple supply systems. Have you any comments on the Regional Preferred Approach?
8. Do you have any comments on the Strategic Environmental Assessment (SEA) Environmental Report and Natura Impact Statement (NIS) which accompany the draft RWRP-NW?
9. We have produced an RWRP Consultation Roadmap. Do you have any comments on this?
10. How would you like Irish Water to communicate with you as the RWRPs progress?

All submissions made on the draft RWRP-NW and associated environmental reports will be reviewed and relevant feedback incorporated into the final RWRP-NW and associated SEA Statement. Submissions from individuals will be reported anonymously and feedback from organisations will be attributed to them. Submissions will not be individually responded to but will be summarised in a Consultation Report which will be published in 2023.

View our updated Privacy Notice at www.water.ie/privacy-notice which is in line with the General Data Protection Regulation (GDPR) effective from 25 May 2018.

The remaining regional plan RWRP South East will be consulted on in the same way, comprising consultation on the SEA Scoping Report followed by public consultation on the draft RWRP-SE over the next 12 months.

Irish Water will be in contact regarding a briefing over the coming weeks to discuss the draft RWRP–NW plan and associated environmental reports, and to answer any questions you may have that will assist you in making your submission.

Yours sincerely,

NWRP Team

Irish Water

T: 1800 46 36 76

E: nwrp@water.ie

Colvill House, 24-26 Talbot Street, Dublin Ireland

Appendix G Public Webinars Q&A Document

Regional Water Resources Plan – North West

Questions and Answers from Public Webinars

1. Why can't the existing Catchment Areas, as per the EPA, be used for the purpose of this consultation process?

The formation of the study areas and regional groups was determined based on factors, including Irish Water's Operational Regions, our local supply boundaries, Local Authority boundaries and catchment areas.

It is not always possible to categorise by catchment area. For example, a water treatment plant may be obtaining supply from one catchment and supplying customers based in another catchment.

There are 539 supplies nationally and, by using study areas, it made the information more manageable and simpler to review and discuss in more detail. Through the National Water Resources Plan (NWRP), we have developed preferred approaches for the 539 supplies nationally.

2. How do you assess High Risk Catchments?

Risk assessments are undertaken for each catchment area. We base our risk management on the World Health Organisation's Drinking Water Safety Plan (DWSP) approach.

The DWSP approach involves assessing a comprehensive range of hazardous events that could potentially occur in every single drinking water supply from its source.

Further to our risk assessment of the source, we ensure that all barriers, or mitigation measures, are in place at the Water Treatment Plant (WTP) to ensure that water entering the distribution system complies with regulatory standards. This process is overseen by the Environmental Protection Agency (EPA).

Therefore, if we are abstracting water from a high-risk catchment, for example a catchment in which there are industry, quarry/mining operations, forestry, or agricultural activities, then the treatment process at the WTP will be more complex than a WTP located in a low-risk catchment.

Source protection measures will reduce the risk in the catchment and will require collaboration with stakeholders including riparian owners, industry groups, the agricultural, forestry and environmental sector, LAWPRO and Teagasc. In recognition of the importance of multi-stakeholder engagement and collaboration in managing shared natural resources, Uisce Éireann is part of an expert group chaired by the Department of Housing Local Government and Heritage (DHLGH), who make recommendations to the Minister regarding

a new approach to drinking water source protection, as part of the transposition of the recast Drinking Water Directive. The national transposing regulations (yet to be published) and guidelines will set out the responsible bodies for implementation of source protection.

3. How will the proposal to take water from the River Shannon to supply Dublin impact on water availability in North West Region?

The preferred approach for 37 supplies in the Eastern and Midlands region, including the Greater Dublin Area (GDA), is to provide supply from a proposed new abstraction from Ardnacrusha at Parteen basin. Through the NWRP process, we looked at all existing sources and any potential increases in abstraction and assess these cumulatively to determine how any proposed changes would impact other existing and planned abstractions.

In the North West, we have plans involving the interconnection of both Boyle and Carrick-on-Shannon. While this will also be supplied from the River Shannon, the abstraction is upstream of the Parteen Basin and we have confirmed through our assessments that there is no cumulative impact of this abstraction or any other proposed abstraction on water availability in the Shannon catchment. Through our work on the NWRP process, we have looked at capacity and options for long term supply to each area and determined preferred approaches. We looked at a number of options for all supplies and, in these cases, supply from the River Shannon was determined to be the best long-term supply and most resilient solution for the Carrick-on-Shannon and Boyle supplies.

4. Where can we identify our actual supply?

All supplies can be identified in the North West Study Area Map – Study Area Report, which can be found [here](#).

5. What way does Uisce Éireann liaise with LAWPRO to ensure everyone is working collectively towards improving water quality? I believe there is urgent work needed across the country.

As mentioned in the response to Question 2 above, source protection measures will reduce the risk in the catchment and will require collaboration with stakeholders.

Uisce Éireann is actively involved in implementing innovative source protection measures, along with other stakeholders mentioned already, and through this work, is involved in pilot source protection projects in Ireland to trial catchment scale interventions and monitor whether they can reduce the risk of pesticides causing exceedances in water supplies. For example, Uisce Éireann was a project partner on the [Source to Tap](#) Project, a cross-border partnership project that focused on the River Erne and the River Derg catchments, which cross the border between Ireland and Northern Ireland. More information can be found at <https://www.sourcetotap.eu/>.

A pilot source protection project is now also underway in the Erne Larah catchment area in County Cavan and more information can be found [here](#).

The recast Drinking Water Directive provides specific obligations for Member States to undertake risk assessment of the catchment areas by 2027. This will further help identify the risks to the drinking water supply. The national transposing regulations and guidelines (expected soon) will identify how this will be done and by whom. Uisce Éireann will play a big part in this and will engage and collaborate with key stakeholders.

6. Can you explain the barrier; what is it?

As part of the NWRP draft Framework Plan we have assessed the capability of our current water supply assets (water treatments plants and water supply network), to deal with existing and future potential risks. This is called a Barrier Assessment.

A Barrier Assessment allows us to understand the likely quality and reliability need and assess the additional improvements and infrastructure required that will allow us to meet the standards that we have set for ourselves. It should be noted that a “quality need” identified through the Barrier Assessment is not an indicator that Irish Water has failed or is failing to comply with the Drinking Water Regulations. Rather, it is an assessment of the need to invest in areas of our asset base (human and structural), to ensure that we can address potential risks or emerging risks to our water supplies.

Barriers are further explained in more details in the Framework Plan – Appendix J, which is available [here](#).

7. Where can we see the assessment that took place on Lough Gil abstraction and the assessment of Foxes Den Water Treatment Plant?

Please refer to Appendix 3 of the Study Area C Technical Report [here](#).

8. How does the issue of Sewerage, or Wastewater, Treatment Plants being located upstream from an abstraction point impact on your position?

All aspects in a catchment, including upstream discharges from industry, wastewater treatment plants, private dwellings, forestry and agriculture, affect how a WTP will be designed and what barriers will be put in place. We also look at risks within the catchment, see responses to question 2 and 9 of this document.

9. How do you manage pollution in the catchment area from farming and industry?

When we are designing new water treatment plants (WTPs), we look at the entire catchment and carry out water quality sampling, before we design the plant. With existing

plants, when we are looking at upgrades, we also look at the water quality in the catchment. We look at risks in the catchment where there may not be poor water quality, but there may be a potential risk, for example, heavy agriculture, forestry or industry located in the catchment area. Sources in karst regions are typically more vulnerable to contamination as water can move very quickly from the surface into the aquifer. Where there is a thick layer of slow draining soils above an aquifer, water quality is typically much higher owing to the filtration capacity of the soils.

We would use the quality samples and the risk assessment of the catchment to determine the level of treatment required. The new drinking water regulations will set out further requirements as to how catchment management measures will be implemented and by whom. This cannot be done by Uisce Éireann alone and a collaborative approach is needed with stakeholders, such as the local authorities, EPA and LAWPRO who work in the community, as it does not have the power to influence third party activities. A joint approach is required.

Overall improvements in water quality reduce the amount of treatment processes required in the plant and frequency of shutdowns and interruptions to supply. It could take water bodies 10 to 20 years to recover from historical pollution.

In the case of a pollution event, there are a number of measures we can take, so that, if we are aware of risks in a catchment, we have alarms and triggers available to protect the public water supply against those risks. In some cases, we can include raw water storage that is designed to allow a pollution event to pass the plant and maintain water supply to customers while it does. We can then temporarily shut down our abstraction until the pollution event passes.

UÉ is actively involved in pilot source protection projects in Ireland to trial catchment-scale interventions and reduce the risk of pesticides causing exceedances in water supplies. For example, we were a project partner on the [Source to Tap](#) Project, a cross-border partnership project that focused on the River Erne and the River Derg catchments, which cross the border between Ireland and Northern Ireland.

10. Glaslough / Tyholland Group Water Scheme (GTGWS) has no knowledge of any contact from UÉ?

UÉ met with the National Federation of Group Water Schemes (NFGWS) early in January 2023 as part of this consultation and discussed proposals identified under the Regional Water Resources Plan in the North West that impact on group schemes in the region.

11. Are there plans to connect and supply water to any GWS, Eg. Glaslough Tyholland GWS?

The Glaslough Tyholland Group Water Scheme (GWS) currently obtains its supply from the Emy Lough source. It is a good source, and it has enough water for its current supply. UÉ

currently obtains supply from this GWS for two of our supplies, Glaslough and Emyvale. It is not envisaged that the Glaslough Tyholland GWS would ever need to connect to the public supply. If it, or any other GWS, needed to connect into one of our schemes, that is something we would consider through our taking in charge process.

Through our work on the National Water Resources Plan, we look at demand, specific to the area and factor in any uncertainties. This will allow for additional supply, which would potentially be needed if a GWS was required to connect to the public water supply network. A lot of the GWSs in the area are serviced by good sources and are operating at a high standard and UÉ is obtaining supply from them. If there is a requirement in the future for the GWSs to join nearby public water supply networks, by the provision of the allowance for uncertainty, we should have enough capacity to allow for the supplies once the preferred approach is in place.

There is a taking in charge process, whereby UÉ can take group schemes in their charge, once certain conditions have been met. More information on GWS is available on our website [here](#).

12. Is it proposed to take a new pipe from Monaghan town through the existing GTGWS?

The exact location of any proposed new pipelines would be developed at site assessment stage, which would be part of the individual project designs identified. We might have an indicative route at present, but not the exact one until we commence the detailed design phase of the project.

13. Can you provide more specific details on proposals to rationalise Glaslough & Emyvale?

They are two public supplies in Monaghan that currently obtain water from a GWS import. We are working on proposals with the GWSs to see if it is required to move away from the group water scheme supplies. If there is potential to maintain them, we will be proposing to do so. In the NWRP, we have to consider potential growth and whether we can provide supply for that growth in the future. We need to get confirmation from the GWSs involved, to confirm that they will be able to sustain growth in the future. We have had meetings with the GWSs & NFGWS to discuss these two supplies and will continue to engage with them going forward.

14. Is water that is provided to the agriculture sector treated water - this seems to be a waste and should be rainwater instead of expensive treated water.

All water in the distribution network is treated water. We would need a separate network if we were to provide untreated water to our customers for agricultural or other non-

domestic use. Agricultural users are treated like all non-domestic users and encouraged to reduce demand. Many agricultural users would have systems in place to reduce water use such as tanks for grey water harvesting. UÉ would welcome these systems being utilised more often.

15. Is there a plan to move private wells to Uisce Éireann?

No, there are currently no plans to switch over all private wells to the public supply.

16. Thank you for a very good and informative presentation, it defines a large programme of work for the North West Region. Would you have a timeline for the proposed upgrade of Carrick On Shannon WTP whereby it will supply the Boyle area?

A significant volume of work and investment is required to implement the NWRP. Critical projects and areas of need will be prioritised in the Capital Investments Programme. Each project will have to go through statutory approvals and land acquisition, as such, there is no exact timeline for all of the projects identified under the plan at present.

Appendix H Stakeholders Briefings

Stakeholder	Date
An Fóram Uisce (AFU)	8 November 2022
Cavan County Council	28 November 2022
Clare County Council	8 February 2023
Commission for the Regulation of Utilities (CRU)	20 October 2022
Department of the Environment, Climate and Communications	21 October 2022
Donegal County Council	26 January 2023
Environmental Protection Agency (EPA including SEA Team)	17 October 2022
Galway City Council	5 December 2022
Galway County Council	5 December 2022
Geological Survey Ireland (GSI)	25 January 2023
IBEC	17 January 2023
Inland Fisheries Ireland (IFI)	15 November 2022
Inishowen Rivers Trust	27 January 2023
Leitrim County Council	22 November 2022
Lisa Chambers T.D	12 February 2023
Local Authority Waters Programme (LAWPRO)	21 November 2022
Lough Bouliska Residents	05 July 2023
Longford County Council	31 January 2023
Loughs Agency	1 February 2023
Louth County Council	1 February 2023
Mayo County Council	9 February 2023
Meath County Council	7 February 2023
Meath County Council	7 February 2023
Monaghan County Council	28 November 2023
Monaghan County Council	28 November 2023
National Federation of Group Water Schemes (NFGWS)	24 November 2022

National Federation of Group Water Schemes (NFGWS)	12 January 2023
Northern Ireland Environment Agency (NIEA)	9 November 2022
NPWS and National Monuments Service	19 January 2023
Oireachtas Webinar 1	18 January 2023
Oireachtas Webinar 2	9 February 2023
Public Webinar 1	16 January 2023
Public Webinar 2	18 January 2023
Public Webinar 3	31 January 2023
Public Webinar 4	2 February 2023
Roscommon County Council	14 February 2023
Sligo County Council	9 February 2023
Sligo Rivers Trust	25 January 2023
Waterways Ireland (WI)	15 November 2022