

# Regional Water Resources Plan South East

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.

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This report has been prepared on behalf of, and for the exclusive use of Jacobs' Client (Uisce Éireann), and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party.

## Table of contents

Glossary	1
1 Introduction	5
1.1 Benefits of the NWRP	6
1.2 Why do we need a NWRP?	7
1.3 Consultation One	7
1.4 Pre-Consultation Engagement	9
3. Consultation Two	10
3.1 Introduction	10
3.2 Phase 2 – RWRP South East	12
4. Consultation Two Promotion	14
4.1 NWRP Webpage	14
4.2 Consultation Two Information Brochure	14
4.3 RWRP-SE Infographic	15
4.4 Press Release	15
4.5 Media Interview and Press	15
4.6 Newspaper Adverts	15
4.7 Social Media	16
4.8 Public Display of Documents	16
4.9 RWRP Freephone Phonenumber	17
4.10 Direct Engagement	17
4.11 Outcomes of the Consultation	19
5 Analysis of the Feedback	20
5.1 Methodology	20
5.2 Out of Scope	20
5.3 Submission Overview	21
5.4 Submission Process	23
5.5 Review of Preferred Approaches Arising from Consultation	23
5.6 Legislation and Data Updates	24
5.7 Report Corrections	25
6. Policy	27
6.1 National Policy	27
6.2 Regional Policy	29
6.3 Conclusions on Policy	29
7. RWRP-SE Regional Plan	30
7.1 Study Areas	30

7.2 Population and Growth	31
7.3 Regional Boundary	43
7.4 General Feedback	43
7.5 Conclusions on Outside the Scope of the RWRP-SE	46
8. Environment	47
8.1 Water Quality	47
8.2 Biodiversity Flora and Fauna	49
8.3 Mitigation and Monitoring	52
8.4 Strategic Environmental Assessment	56
8.5 Conclusions on Environment	61
9. Need	63
9.1 Supply	63
9.2 Demand	67
9.3 Supply Demand Balance	71
9.4 Water Quality and Reliability	72
9.5 Deficits	74
9.6 Conclusions on Need	74
10 Solutions Methodology	76
10.1 Preferred Approach	76
10.2 Interim Solutions	81
10.3 Data Challenges	83
10.4 Conclusions on Solutions Methodology	84
11 Regional Plan Consultation Process	85
11.1 Regional Plan Consultation Process	85
11.2 Conclusions on Regional Plan Consultation Process	87
12 Plan Implementation	88
12.1 Phasing	88
12.2 Conclusions on Plan Implementation	93
13 Option Types	94
13.1 Groundwater and Surface Water	94
13.2 Reservoirs	96
13.3 Water Treatment Plants	96
13.4 Network Improvements	98
13.5 Catchment Management	99
13.6 Use Less	100
13.7 Lose Less	105
13.8 Conclusions on Option Types	106

14 NIS	108
14.1 Screening of European Sites for Appropriate Assessment	108
14.2 Potential Impacts and Effects	109
14.3 Mitigation and Monitoring	112
14.4 Conclusions on NIS	113
15 Water Resource Planning	114
15.1 Level of Service	114
15.2 Water Resource Planning	118
15.3 Drought	119
15.4 Conclusions on Water Resource Planning	122
16 Outside the Scope of the RWRP-SE	123
16.1 Wastewater	123
16.2 Not Related to the RWRP-SE	125
16.3 Conclusions on Outside the scope of the RWRP-SE	129
17 Next Steps	130
Appendix A RWRP-SE Brochure	131
Appendix B RWRP-SE Infographic	145
Appendix C Press Release	146
Appendix D Sample Newspaper Advertisements	148
Appendix E Planning Counters, Public Service Buildings and Libraries	149
Appendix F Sample Stakeholder Emails	152
Appendix G Stakeholder Briefings	154

## 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
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
GWS	Group Water Schemes
HED	Historic Environment Division
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 Eireann
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
NBS	Nature-Based Solutions
NDD	Non-Domestic Demand
NDP	National Development Plan
NED	Natural Environment Division

NFGWS	National Federation of Group Water Schemes
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
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
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
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
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
Zol	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 Regional Water Resources Plan Eastern and Midlands (RWRP-EM), the Regional Water Resources Plan for the South West (RWRP-SW) and the Regional Water Resources Plan for the North West (RWRP-NW) have all been

adopted. The consultation reports, along with the updated documents including the and associated environmental reports, are available to view at <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/>

The Regional Water Resources Plan for the South East (RWRP-SE) is the fourth and final Regional Plan to be delivered. Uisce Éireann undertook public consultation on Phase 2 of the draft RWRP-SE between 11 July 2023 to 3 October 2023. This consultation report is a response to the submissions made as part of that public consultation process.

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.

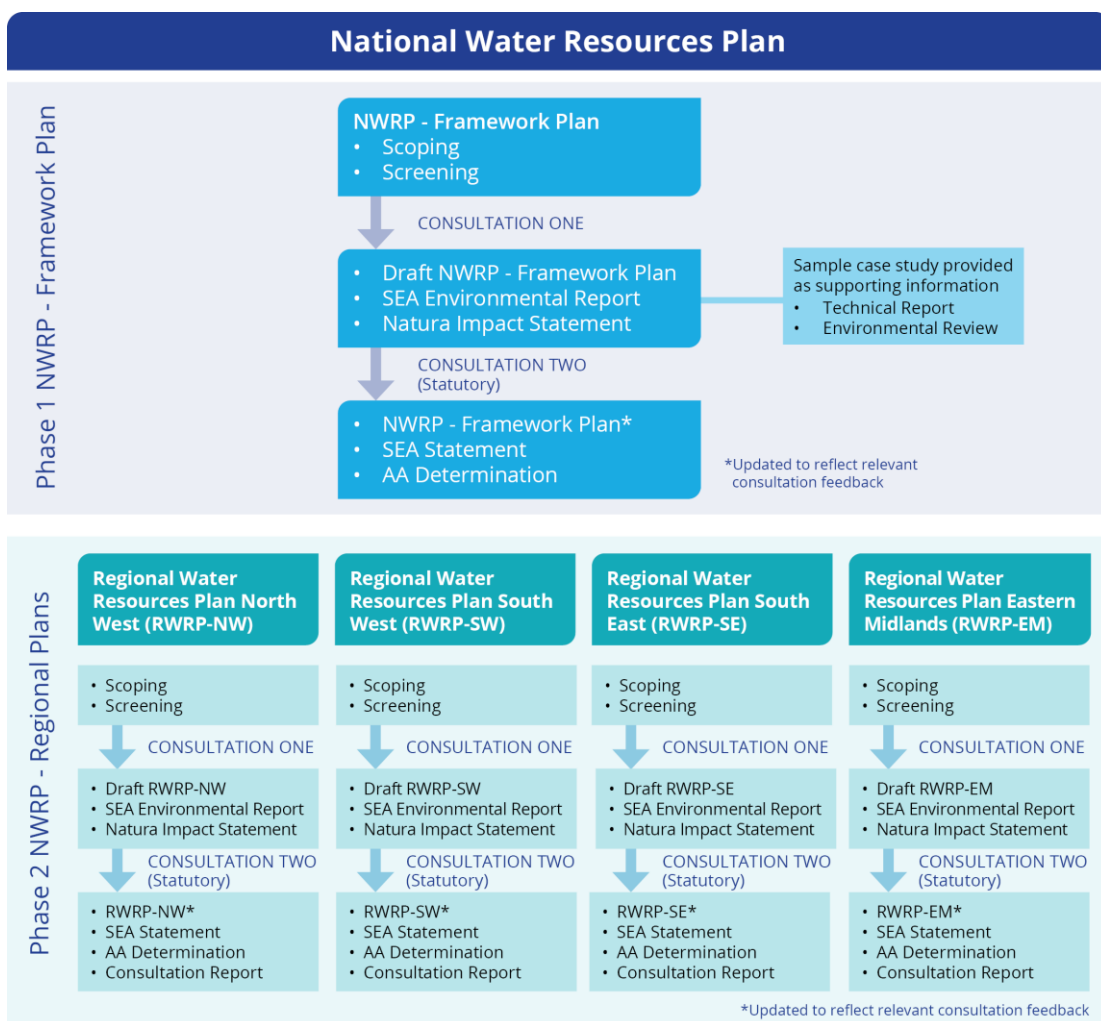


Figure 1.1 Components of the National Water Resources Plan

## 1.1 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.

## 1.2 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.

## 1.3 Consultation One

In Phase 2 the draft RWRP-SE underwent SEA and AA and were subject to public consultation. Consultation one on the SEA Scoping Report for the RWRP-SE was held for four weeks between 22 November 2022 to 20 December 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 South East region. The feedback obtained was considered and reflected in the draft RWRP-SE, the associated SEA Environmental Report and the Natura Impact Statement (NIS) for consultation two.

Throughout 2023, 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-SE as part of the SEA and AA process through public consultation at key stages, as outlined in the RWRP-SE Consultation Roadmap in Figure 1.2.

## RWRP South East Public Consultation Roadmap

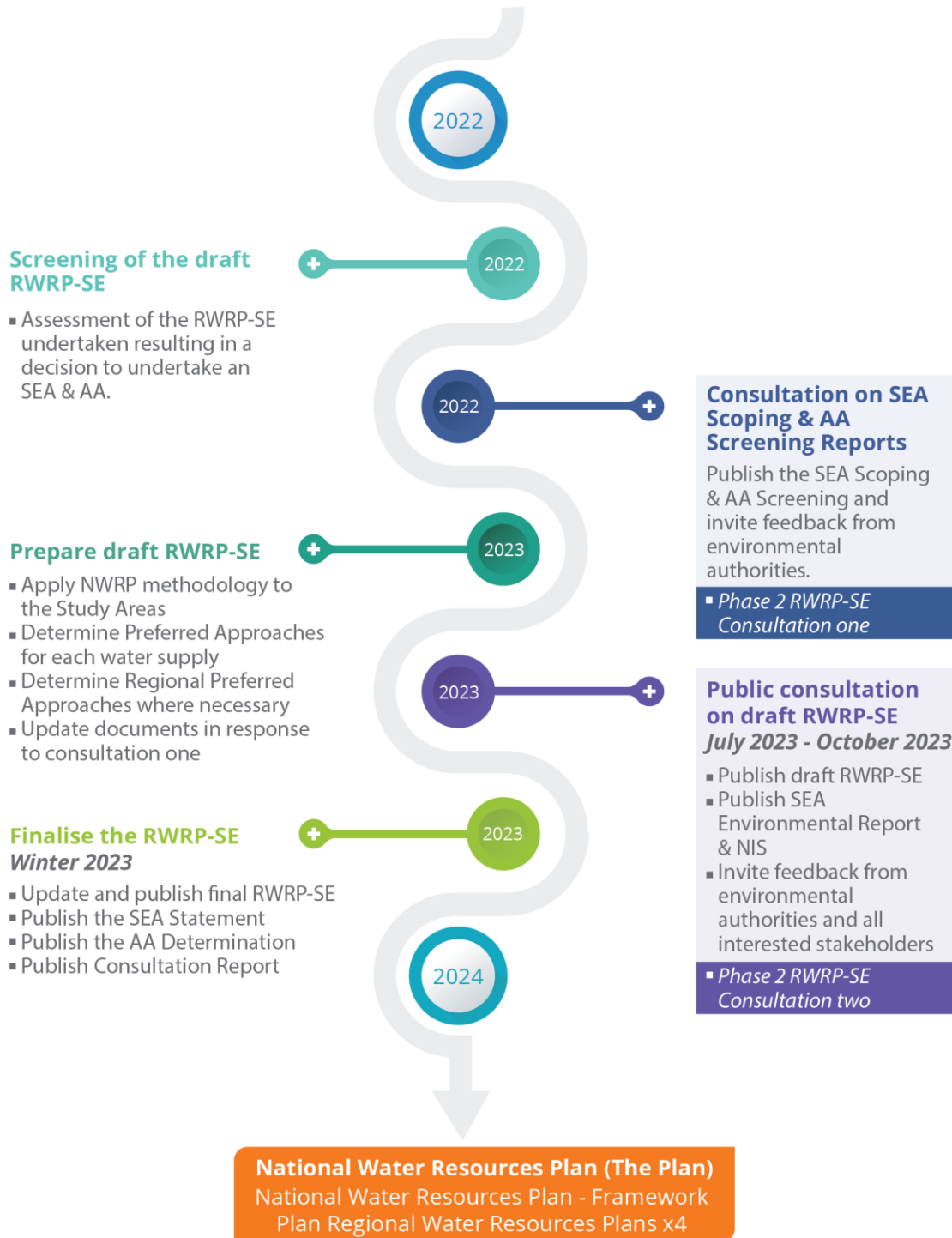


Figure 1.2 RWRP South East Public Consultation Roadmap.

## 1.4 Pre-Consultation Engagement

As part of the development of the Phase 2 RWRP-SE, 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 the 20 April 2023. A reminder was also issued on the 27 April 2023. A series of online briefings were facilitated by Uisce Éireann on the draft RWRP-SE and associated environmental reports. The purpose of the briefings in 2023 was to update stakeholders on our progress and discuss any new information available. Table 2.1 lists the dates for all four pre-consultation briefings completed during May and September 2023.

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

Stakeholder	Date
Commission for Regulation of Utilities (CRU)	11 May 2023
Department of the Environment, Climate and Communications (DECC)	17 May 2023
An Fóram Uisce (AFU)	29 May 2023

## 3. Consultation Two

### 3.1 Introduction

Uisce Éireann undertook public consultation on Phase 2 of the draft RWRP-SE in accordance with the consultation requirements of the SEA Regulations and the Habitat Regulations. We have termed the Phase 2 draft RWRP-SE 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-SE.

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-SE, 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 South East

The draft RWRP-SE was issued for consultation on 11 July 2023, with consultation closing on 3 October 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-SE 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 South East region we consider 111 water supplies (Water Resource Zones) represented across 3 Study Areas. Do you have any comments on the Study Areas?
3. Section 3 of the draft RWRP-SE and each of the technical appendices 1-3 outline the Need in terms of water quality, quantity, sustainability, and resilience across the region and in each of the Study Areas. Do you have any comment on the Need?
4. Section 4, 7 and 8 of the draft RWRP-SE, and the technical appendices 1-3, set out solutions we can undertake to address some of these needs in the interim, while we develop the preferred approaches. Do you have any comments on this?
5. Section 6 and the technical appendices 1-3 of the draft RWRP-SE summarise our process for developing options to address the needs in the South East 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 1-3 (K-M) and the Environmental Review for Study Areas 1-3 (K-M) set out how the Preferred Approach has been identified in more detail. Have you any feedback on this?
7. The draft RWRP-SE 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-SE?
9. We have produced an RWRP-SE 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-SE webpage on the Uisce Éireann website;
- Information brochure on the consultation available in English and Irish;
- RWRP-SE infographic;
- RWRP-SE consultation roadmap;
- Non-technical summary (NTS) of the draft RWRP-SE;
- Press releases to national and regional media;
- Media interviews;
- Newspaper adverts;
- Online briefings;
- Online public webinars;
- Social media;
- Animations, explaining the RWRP-SE;
- Public display of hardcopy documents in Local Authority offices; 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](http://www.water.ie/nwrp). A separate dedicated webpage was created with details of the Phase 2 RWRP-SE consultation. 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-SE consultation. The animation aids communication, through an alternative format to text, assisting our efforts to effectively inform as broad demographic as possible. An English and Irish version were created and available on the website.

The draft RWRP-SE, the SEA Environmental Report and the NIS were made available to view or download from the RWRP-SE dedicated webpage on 11 July 2023, along with all other relevant information, including the RWRP-SE consultation roadmap, the consultation information brochure, the NTS and an RWRP-SE infographic.

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

**By email:** [nwrp@water.ie](mailto:nwrp@water.ie)

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

Table 4.1 Consultation document opens

Document	No. of openings
RWRP-SE draft Plan	306
RWRP-SE draft Plan Non-Technical Summary	40
RWRP-SE SEA Report	45
RWRP-SE Information Brochure	28

### 4.2 Consultation Two Information Brochure

A consultation information brochure outlining the draft RWRP-SE, details of the consultation questions and information on how stakeholders could provide feedback on the draft RWRP-SE and associated environmental reports was published on the RWRP-SE webpage on 11 July 2023.

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 <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/>. A copy of the English version can be found in Appendix A.

### **4.3 RWRP-SE Infographic**

An RWRP-SE 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-SE, was issued under embargo to national, regional, and local media on 10 July 2023 for release on 11 July 2023. 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-SE 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 20 September 2023, to regional media in Carlow, Limerick, Kilkenny, Tipperary, Waterford, Wexford, and Wicklow, as well as all elected reps in those counties, Uisce Éireann's social media channels and website. This delivered a total media reach of 778,296.

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

National and regional coverage was generated across all media channels throughout the consultation period. 20 print and 12 online articles and 2 broadcast items were published about the Phase 2 draft RWRP-SE 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 Examiner and The Irish Times on 11 July 2023, and the Irish Farmers Journal on 13 July 2023. 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 nine newspapers on 11 July 2023 advertising the online public webinars for the draft RWRP-SE. The regional publications were:

- Carlow Nationalist
- Clonmel Nationalist
- Kilkenny People
- Limerick Leader
- Nenagh Guardian
- Seachtain
- Waterford News & Star
- Wexford People
- Wicklow People

Copies of the newspaper adverts are included in Appendix D.

## 4.7 Social Media

The launch of the draft RWRP-SE 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, 12 Facebook posts, 18 Twitter posts and 10 LinkedIn posts were shared, 10 of which were promoted to achieve optimum stakeholder reach. In total, 5.7m impressions were made.

Table 4.2 Social Media

Platform	No. of posts	Impressions
Facebook	12	3.9 million
Twitter	20	23,955
LinkedIn	10	23,453

## 4.8 Public Display of Documents

In order to ensure the draft RWRP-SE and associated environmental reports were readily accessible, hard copies of the draft RWRP-SE, including

appendices, the SEA Environmental Report, the NTS and the NIS were provided for public display in 30 local authority offices, one county library and one public service building 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 library and public service building was promoted through the project website, social media, and newspaper advertisements. An audit of all 32 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, public service buildings 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-SE 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 and regulatory stakeholders on numerous occasions throughout the development of the draft RWRP-SE 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-SE, 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-SE and associated environmental reports, an email announcement was issued to all statutory stakeholders, including the environmental authorities as required by the SEA Regulations, on 11 July 2023.

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 G.

#### **4.10.2 Elected Representatives**

Emails were issued to all elected representatives on the 11 July 2023 via the NWRP project email, including to Ministers, TDs, Senators, MEPs, and Councillors. The NWRP team offered briefings to Kilkenny and Carlow Councillors at their pre-arranged quarterly councillor clinics with Uisce Éireann. Alternatively, where councillor clinic dates did not align with the RWRP-SE public consultation period, separate emails were issued to the council liaison officers in Wicklow, Waterford, Wexford, Limerick, and Tipperary County Councils with offers of a separate online briefing with the NWRP team.

#### **4.10.3 Local Authorities**

To increase awareness and encourage participation in the draft RWRP-SE consultation, Chief Executives and Directors of Services for Water / Environmental Services of all seven local authority areas were notified of the consultation by email on 11 July 2023. Correspondence included details of the draft RWRP-SE, an outline of the consultation and the consultation questions, and all necessary information on how to participate.

As noted in section 4.8 a hard copy of the consultation documents was provided to 30 local authorities planning counters, one county library and one public service building.

#### **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 11 July 2023 to those identified, informing them of the details of the consultation and inviting them to give their feedback on the draft RWRP-SE 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 19 September 2023, Uisce Éireann briefed the National Stakeholder Forum and gave an update of the public consultation on the draft RWRP-SE.



#### 4.10.6 Public Webinars

A total of four public webinars were held over the months of July and September 2023 and 35 interested members of the public registered their attendance.

The public webinars were promoted through press releases that were issued to all regional media in the seven counties of the South East plan area (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-SE 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.

Table 4.3 Stakeholder Briefings RWRP-SE

Stakeholder Group	No of briefings
Local Authority Councillors	5
Interested Bodies	2
Key Stakeholders & Environmental Authorities	2
Elected Representatives	1
Public Webinars	4

#### 4.11 Outcomes of the Consultation

All feedback received during this public consultation process on Phase 2 of the RWRP-SE was reviewed by the NWRP team and all relevant feedback has been incorporated into the RWRP-SE. A summary of the feedback received, our response to this feedback and any consequential changes made to the RWRP-SE 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-SE and how consultation influenced the development of the RWRP-SE.



## 5 Analysis of the Feedback

This section of the report outlines the approach taken to analyse the 30 submissions received during this period of consultation, Consultation Two, on Phase 2 of the draft RWRP South East 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. 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- SE 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-SE

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-SE. 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-SE was shared with the corresponding project teams, details of which can be found on [www.water.ie](http://www.water.ie)

### 5.3 Submission Overview

The following figures present the results of the overall analysis of the 30 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.

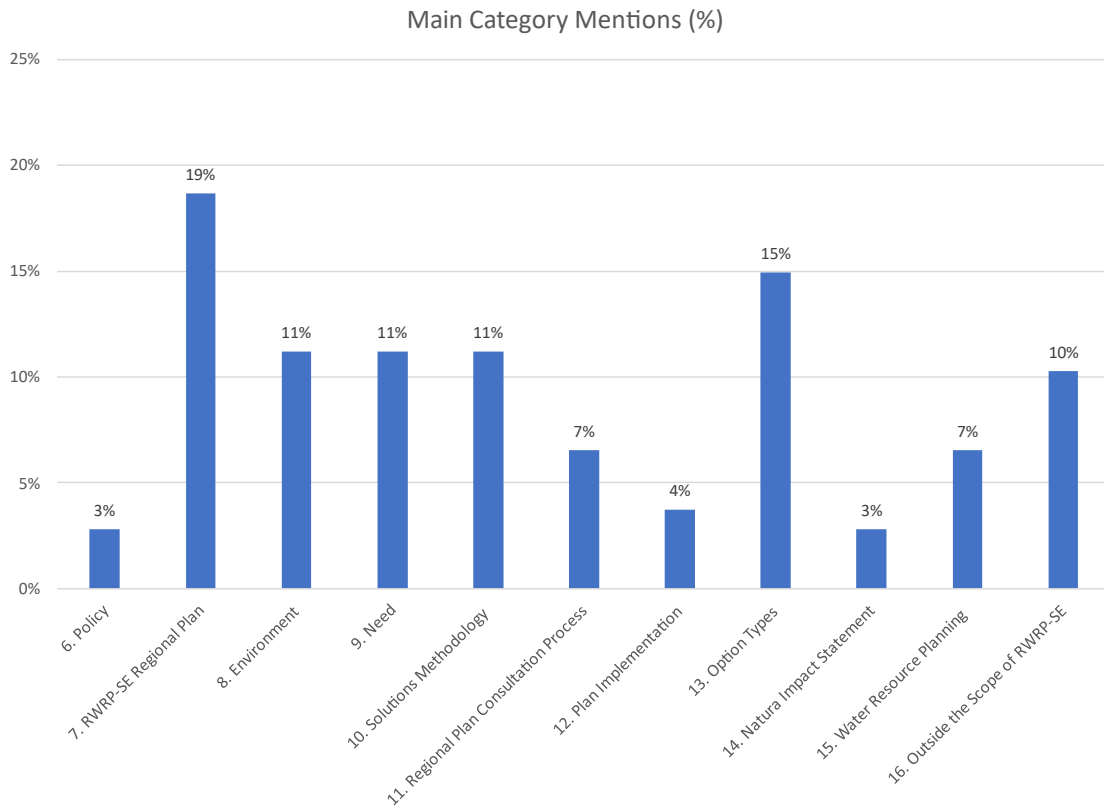
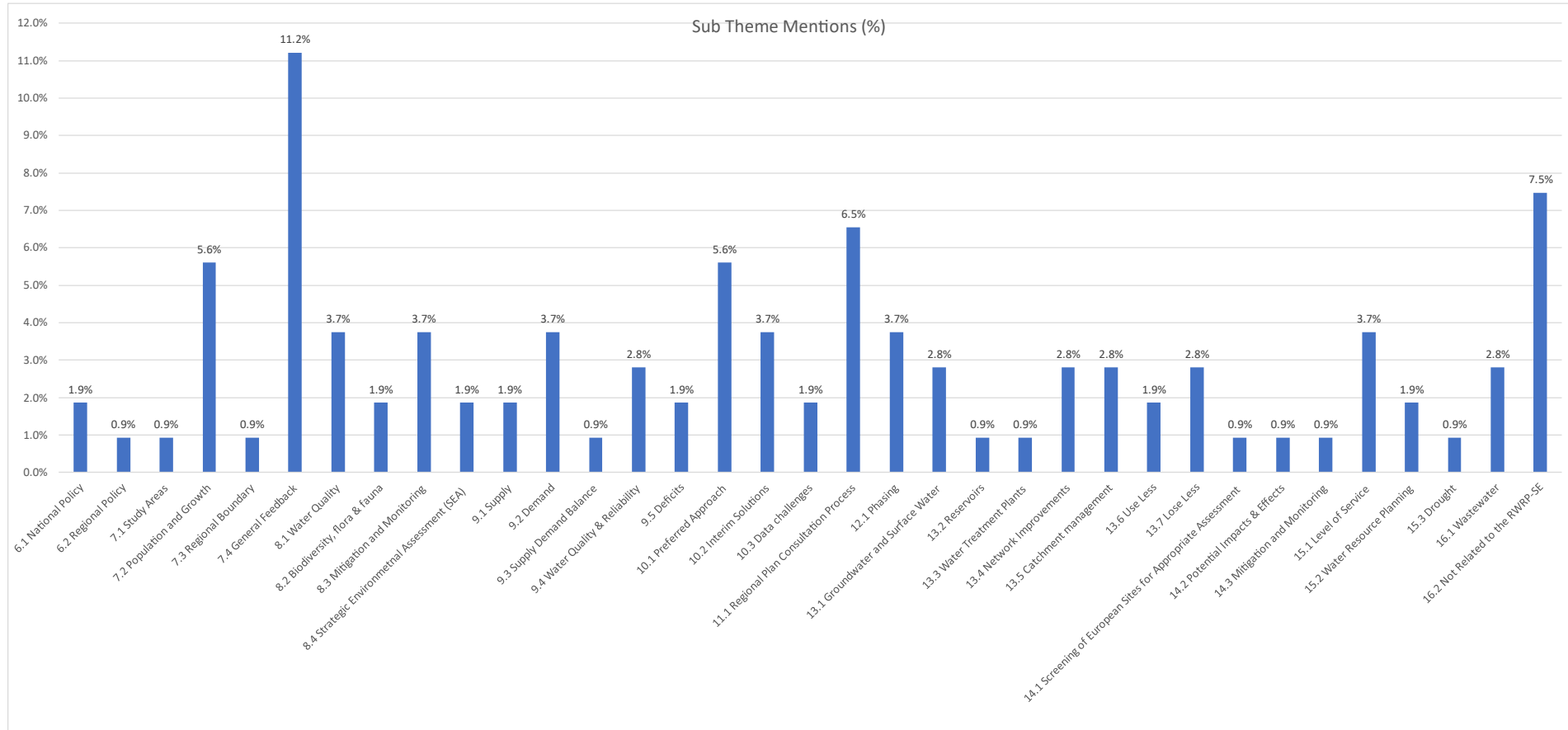


Figure 5.3 Sub Theme Mentions



## 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 30 submissions.

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

References to any consequential changes made to the draft RWRP-SE 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.

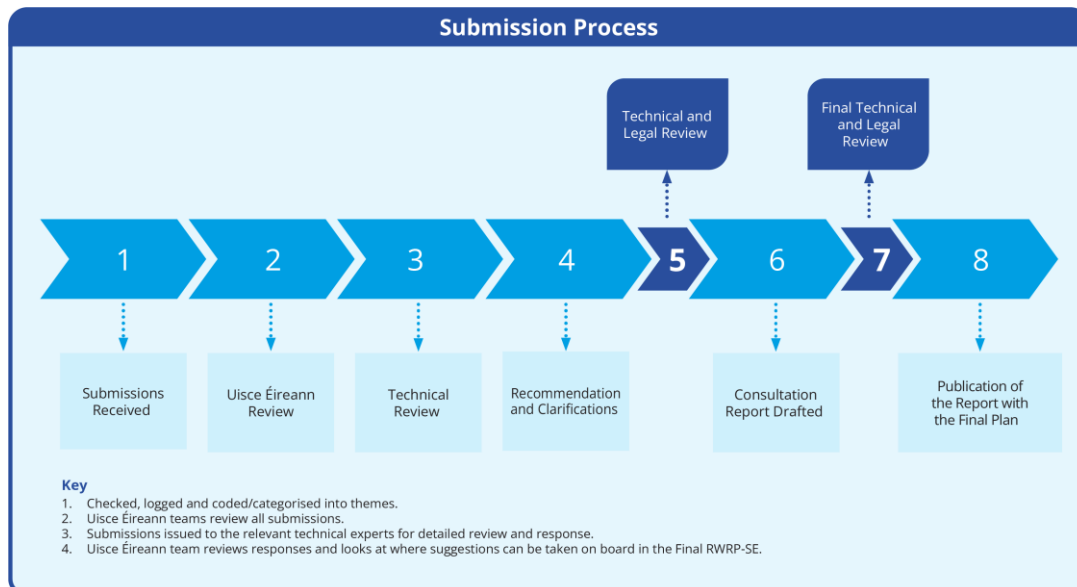


Figure 5.4 Submission Process

## 5.5 Review of Preferred Approaches Arising from Consultation

As set out in Section 9 of the RWRP-SE, the NWRP 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. No additional data was received throughout the consultation period for the RWRP-SE. 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.

## 5.6 Legislation and Data Updates

We have updated references to key legislation and published data in our final report. These updates are listed in Table 5.1.

Table 5.1 Updated legislation and data

Draft Report data / legislation reference	Final Report data / legislation reference
WFD Status (All Assessment Techniques) Tables (Excel) 2016 -2021 – April 2023	WFD Status Tables (Excel) (All Waterbodies) 2016-2021 – Oct 2023
Progress on critical infrastructure projects	RWRP-SE, Section 4.3.2 – examples of in-progress critical infrastructure projects have been added.  RWRP-SE, Appendix 1 Study Area K – Table 2.4 updated with further examples of critical infrastructure projects in progress.
Water Environment (Abstractions and Associated Impoundments) Bill, 2022 (as initiated)	Water Environment (Abstractions and Associated Impoundments) Act, 2022 (the Abstractions Act)
European Union (Drinking Water) Regulations 2014 S.I. No. 122/2014 (as amended 2017 S.I. No. 464/2017)	European Union (Drinking Water) Regulations 2014 S.I. No. 122/2014 (as amended 2017 S.I. No. 464/2017) The European Union Drinking Water Regulations 2023 (S.I 99/2023)
Drinking Water Directive (98/83/EC), Provisional Agreement of Recast Directive 18th December 2019	EU Drinking Water Directive (Directive 2020/2184 of the European Parliament and of the Council on the quality of water intended for human consumption (recast)
Status update of WTPs on the Environment Protection Agency Remedial Action List (RAL).	See Table 2.2 in each Study Area Technical Appendices for the final RAL status.

## 5.7 Report Corrections

We have identified and corrected some typographical and other errors in our final report. Please refer to the table below for a summary of the main corrections made.

Table 5.2 Corrections to the draft RWRP-SE

Reference	Error	Correction
Maps across Sections 2, 3 and 7	Key Towns incorrectly identified in the noted figures.	Corrected the legend symbols for Key Towns in the noted figures.
Section 2.3.5	The number of high-status WFD river water bodies was incorrectly reported as the number of river water bodies with 'high status potential.'	Corrected the number of high ecological status river water bodies (RWBs) from 39 to 20.  The percentage of RWBs in the region classified as 'High' or 'Good' status was changed from 43% to 42%; and the number of RWBs classified from moderate condition changed from 39% to 40%.
Section 3.2.6.3	Incorrect reference to non-domestic growth in Galway City rather than Waterford City in the following sentence, "For this reason, an estimated 10% growth in non-domestic demand is assumed for Galway City over the 25-year planning period."	Changed Galway City to Waterford City.
Section 7, 8 and 10	The number of new WTPs in SAM was incorrectly reported as 5 rather than 4 and the total number of new WTPs reported as 14 rather than 13.	Reference to the number of New WTPs corrected in Table 7.12, Table 7.17, Figure 7.10, Figure 7.13 & 7.14, Section 7.5.3, Figure 8.2 & 8.3, Section 10.4.
Table 8.6	One maintained surface water abstraction was incorrectly counted as a groundwater abstraction.	Changed the number of maintained surface water abstractions from 30 to 31 and the number of maintained

Reference	Error	Correction
		groundwater abstractions from 46 to 45.
Technical Appendix 1 Study Area K, Table 7.1	Estimated increase in leakage savings beyond SELL incorrectly reported as 9,156 m <sup>3</sup> /day rather than 36,233 m <sup>3</sup> /day.	Reported leakage savings in Table 7.1 changed from 9,156 m <sup>3</sup> /day to 36,233 m <sup>3</sup> /day.

## 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

In their submission, Waterford City and County Council (WCCC) stated the principles underpinning the sustainable development of Waterford City as the south-east regional city of scale are set out in the National Planning Framework (NPF). They noted opportunities exist to build on the City's existing employment base which includes pharmaceuticals, medical-technology, and engineering and advanced manufacturing sectors, as well as emerging indigenous enterprises, tourist, and educational facilities.

They requested a commitment from state agencies to support and de-risk private investment. In line with the NPF, they also stated that the draft RWRP-SE must ensure that water supply and wastewater needs are met.

WCCC set out the following strategic policy objectives which inform the council's development plan core strategy to ensure that all new development is both plan-led and infrastructure-led;

- **Concentric City:**  
Identify investment opportunities and priorities to deliver the concentric city model and the core strategy and settlement strategy founded on the principle of infrastructure-led development.
- **Infrastructure Led Development:**



Liaise with relevant service providers to ensure Development Plan implementation is consistent with the Core Strategy.

The above, they noted, is particularly relevant to both Waterford City as a designated regional city and Dungarvan and Ballinroad as a designated key town in the Regional Spatial and Economic Strategy (RSES).

WCCC were concerned there was no investment priority or an implementation program for the projects set out under the draft RWRP-SE. They commented it could “undermine confidence in the private sector and its investment choices and ultimately runs the risk of jeopardising achievement of infrastructure-led development, the NPF, the RSES and the role and function of Waterford City as an economic driver of the region in particular.” They further stated that failure to include details of the implantation program of the final Plan at this stage was a “missed opportunity to consult with key stakeholders.”

The Environmental Protection Agency (EPA) advised Uisce Éireann to ensure consistency and alignment between this Plan and other key relevant regional and national plans. They further advised that the Plan should consider the relevant objectives and policy commitments of the NPF, the RSES, relevant flood risk management plans and the River Basin Management Plan as appropriate.

### **6.1.2 Response to National Policy Feedback**

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.

A key objective of the RWRP-SE 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.

## **6.2 Regional Policy**

### **6.2.1 Summary of Regional Policy Feedback**

The Construction Industry Federation (CIF) highlighted a key objective of the NPF is balanced regional development with an increased focus on the regions and cited “investment in water services infrastructure is critical to the implementation of the National Development Plan.” As a result, the CIF welcomed the development of the National Water Resources Plan that ensures water infrastructure can support the proposed growth policies of the NPF and RSES and County Development Plans.

### **6.2.2 Response to Regional Policy Feedback**

Uisce Éireann welcomes the Construction Industry Federations support on the development of the NWRP.

## **6.3 Conclusions on Policy**

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

## 7. RWRP-SE 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 four 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.

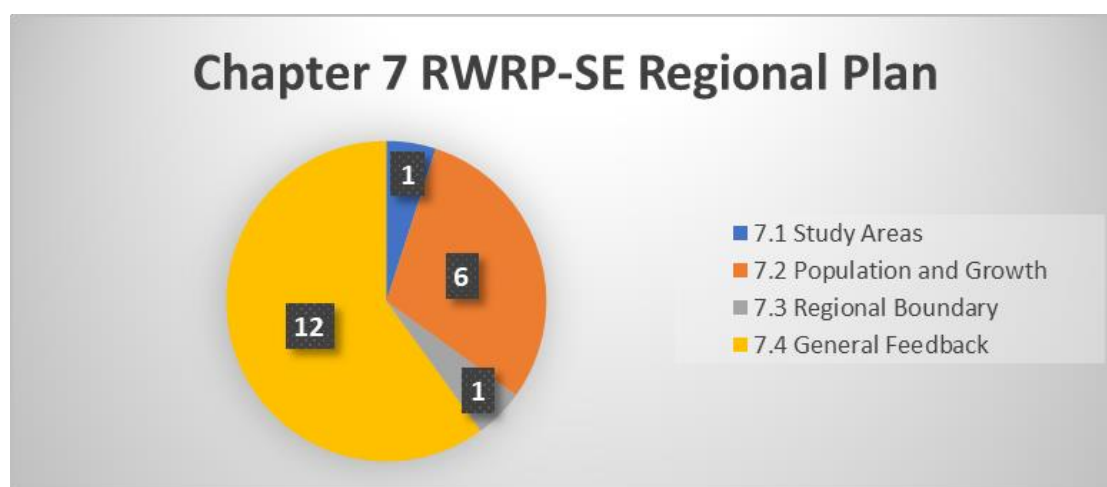


Figure 7.1 Regional Plan Theme.

### 7.1 Study Areas

#### 7.1.1 Summary of Study Areas Feedback

Tipperary Social Democrats noted that Study Area K (SAK) is much larger than Study Area L (SAL) and Study Area M (SAM) and that SAKs population is heavily weighted to the eastern side of the Study Area around Waterford City, Clonmel and Tramore. They were concerned that priorities would be focused more on the eastern side than on either the western or northern side. They proposed that SAK should be split in two to help retain focus on the less populated areas of SAK and bring it in line with the area dimensions of the other Study Areas in the South East.

#### 7.1.2 Response to Study Areas 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-SE, 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) commended the inclusion of the information provided in the Water Treatment Plant Overview document that accompanied the Draft RWRP-SE consultation documents.

AFU commended the provision of a water supply register available on Uisce Éireann's website, which gives an indication of the available capacity for water supply in each Local Authority area. AFU sought clarity on whether this information is used by Local Authorities to review planning applications, or if the responsibility lies with Uisce Éireann to assess whether new applications should be granted planning.

AFU recommended that Uisce Éireann provide further detail about its role in relation to regulatory control of growth, development, and expansion of activities 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 AFU is of the view that there should be more transparency regarding where trade-offs are required between the two.

Waterford City and County Council (WCCC) stated that their submission is framed in the national and regional context where "Waterford City is recognised as a key asset for Ireland in terms of its location, ability to compete nationally and internationally and capacity to grow and to relieve pressure on Dublin and surrounding counties." They noted the National Planning Framework (NPF) recognises Waterford's role and potential as a national centre of scale to complement Dublin based on population and job creation supported by the South East Technological University. They emphasized the targeted growth of Waterford, providing an additional 12,000 jobs to support and an additional 27,000 - 32,000 population by 2040, as vital to the national and regional long-term growth strategy expressed in the NPF.

WCCC highlighted Section 2.2 of the draft RWRP-SE identifies Dungarvan as having a population of 5k - 10k which "is not reflective of the Regional Spatial and Economic Strategy (RSES) and city and county development plan which both identify Dungarvan, along with its satellite of Ballinroad, as having population in excess of 10K and as such class the settlement as a Key Town. Dungarvan/Ballinroad had a population of 10,388 persons in 2016 Census." WCCC advised that Table 2.1 should include reference to Ballinroad when describing SAK and the remainder of the narrative and tables in section 2 should be reviewed to ensure consistency in how Dungarvan and Ballinroad is defined.

WCCC further noted the population growth for Waterford City and suburbs as set out in Table 3.8 is conservative in its assessment while the extent of the relevant geographic area is uncertain. WCCC noted the defined area of the city and suburbs includes Tramore and that Tramore is also included as a town with a population above 10,000. They also noted that the percentage growth rate of 52% for the city

and suburbs is below the 60% envisaged in the RSES where the definition of the city and suburbs differs significantly from that used by Uisce Éireann. WCC cited that “excluding the rural population outside the built-up areas of the city and suburbs, the 2016 Census has identified a population baseline of c. 73,500 and not 55,200 as defined in Table 3.8.”

WCC further noted that no account was made for the existing dispersed rural population or the likely increase in this figure. They advised that despite policy to promote regeneration and development of urban centres while continuing to ensure rural areas maintain a healthy population, it is considered that the rural population will continue to grow. This they stated is evident “through population increases across the region and in Waterford in particular where all rural areas are classed as being under urban influence from either Waterford City, Cork City, Dungarvan or Clonmel.”

WCCC commented there are significant constraints within the draft RWRP-SE that require reconsideration in the final Plan. WCCC recommended baseline population statistics should be clarified using new 2021 Census figures, with reference to population and associated employment growth for the Metropolitan Area Strategic Plan (MASP) area and the key town of Dungarvan and Ballinroad. WCCC also noted a consistent approach in presenting the data used in the RWRP-SE would be welcomed.

The Construction Industry Federation (CIF) noted a critical part of the formulation of the Plan is the Supply Demand Balance (SDB) and projected population growth, which in turn impact on investment decisions. The CIF were concerned that growth projections used in the draft RWRP-SE were based on best available data from the NPF and RSESs at the time of compiling the draft Plan and that the 2016 population was projected forward to 2019 to establish base year populations. The CIF highlighted the 2022 census shows the Economic and Social Research Institute (ESRI) population predictions that were used in the NPF and RSES underestimated the actual growth in population that was experienced. “For instance, ESRI 2021 predictions for Waterford were a population of 120,400. Census 2022 showed a population of 127,085 (Difference of 6,685) while Wexford's population was underestimated by 7,127.”

The CIF were also concerned data relating to population forecasts and economic trends were based on information gathered before the Covid 19 pandemic and the war in Ukraine. They highlighted that “Covid has seen a lot more people moving to the regions availing of the opportunity to work from home, whilst the war in Ukraine has further increased the population and need for housing and the associated water infrastructure requirements.” However, the CIF welcomed that Uisce Éireann will incorporate the increasingly refined growth rates into demand forecasts as the plans are finalised and that the NWRP will be formally updated every five years with baseline forecasts and data feeding into the NWRP being reviewed annually. The CIF also recommended an ongoing review of population projections to ensure the

data predictions used in reference to population changes is current and accurate. They noted the Plan can then reflect these changes to ensure infrastructure delivery needed to future proof the Uisce Éireann network and meet population needs.

The CIF stated it is paramount that Uisce Éireann reference long-term and reliable population projection figures and implement a targeted strategy to deliver water and wastewater infrastructure provision. They suggested this should be carried out in line with a plan-led, focused approach to providing infrastructure for housing supply, to ensure that the needs of the future population can be met.

The CIF recommended that future growth and development opportunities are identified in a targeted manner on a location basis, with relevant stakeholders being part of this review process to enable a targeted infrastructure planning approach to be taken and unlock housing delivery. They noted establishing this early in the investment plan will again enable a well-planned approach to water and wastewater infrastructure delivery, which is a key part of housing supply. The CIF stated that establishing these locations and priorities should be completed with relevant stakeholder engagement and include the CIF.

CIF highlighted that a lack of water infrastructure is currently one of the biggest barriers to housing delivery in the South East region. The CIF noted the South East Region has a huge capacity to grow and act as a counterbalance to Dublin and therefore, they recommended investment in water and wastewater infrastructure in the Region is key.

Finally, the CIF welcomed the plan to address almost 90% of the capacity constraints in Wexford.

Wicklow County Council (WCC) stated the housing growth targets are highly restricted for areas served by the four water supplies in the 2022-2028 Wicklow County Development Plan (CDP). WCC noted they have a Settlement Strategy within the CDP that operates at ten levels depending on existing settlement patterns. WCC explained “Level 1 is the most urbanised areas like Bray while Level 10 is the least urbanised as it is open countryside. Residential development is more restricted within the lower levels. All four WRZs covered in the study area for SAM fall within the range of Level 7 to level 10.”

WCC noted there is a very low level of residential development envisaged in settlements under the current CDP. They further noted the other three remaining public supplies are level 10 settlements within WCC's Settlement Strategy that are in the rural area which has a highly restricted settlement strategy.

The Office of the Planning Regulator (OPR) stated that when planning for both the quantity and location of supply the RWRP-SE is based on the population growth targets set out in the NPF and RSES for the Southern Regional Assembly (SRA). The OPR noted the SRA encompasses the MASP for Limerick, designated under the NPF, in addition to the key towns of Kilkenny, Wexford, Clonmel, Thurles, Dungarvan and Gorey, designated under the RSES.



The OPR highlighted the draft RWRP-SE indicates it has taken account of growth targets for the key towns in the RSES, and the targets for Waterford City in the NPF but the OPR is unclear why growth projections for other areas in the draft RWRP-SE are based on the draft NPF. They advised Uisce Éireann should ensure that this approach does not materially affect the assumptions underpinning the draft RWRP-SE.

In this regard, the OPR noted that the Economic and Social Research Institute has produced detailed population growth projections for the Department of Housing, Local Government and Heritage, 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 recommended Uisce Éireann should consider whether these detailed projections would be of assistance to finalising its regional and national plans.

The OPR welcomed proposals to refine growth rates as development plans and the Waterford MASP are finalised. The OPR noted the Waterford MASP was adopted as part of the RSES for the SRA in 2020 and the CDPs for the South East has been drafted. They advised Uisce Éireann that some updates may be required in terms of text and population forecasts before the final RWRP-SE is published.

The OPR welcomed the commitment in the draft RWRP-SE to support the objectives of the RSES for the SRA. They also welcomed the commitment to and coordination with local authorities' statutory plans to invest in water infrastructure to service the core strategies of city and CDPs. The OPR further welcomed the clear identification of the settlement hierarchy in national planning policy, including City, Metropolitan Area, and Key Towns.

The OPR considered the approach to non-domestic growth to be reasonable, however, they urged Uisce Éireann to consider whether it is necessary to take account of projected job growth included in the Waterford MASP to 2031.

The OPR noted the RSES sets out specific population targets for Waterford City and metropolitan area in line with the NPF with detailed projections set out in the Waterford MASP. They noted, "employment is projected to grow by almost 14,000 by 2031, based on a 1.6:1 population-growth: employment-growth ratio." They highlighted that the Waterford MASP identifies locations for strategic employment and residential development areas that are critical to the achievement of the population targets. The OPR commented "the intent is for the MASP to act as strategic planning and investment frameworks for the city metropolitan area, addressing high-level and long-term strategic development issues such as capacity issues for water and wastewater infrastructure." The OPR were unsure if these growth factors had been considered in respect of the relevant RWRP-SE Study Areas and recommended that this be provided given the key role of the areas in delivering the RSES. They cited "population growth projected for Waterford City and suburbs in Table 3.8 is 28,555, to reach 83,764 in 2044" which falls significantly

below the RSES target for 2040 and advised Uisce Éireann to review the figures to ensure the RWRP-SE takes due account of targeted growth.

The OPR were concerned Table 3.8 contained generalised assumptions and growth rates for the other settlements, based on the size of a settlement rather than its designation, which they stated was not consistent with the RSES and risks assuming a ‘business as usual’ growth pattern. The OPR recommended Uisce Éireann ensure that the correct growth targets are considered in support of national and regional policy. In this regard, under the NPF and the RSES, they noted “local authorities are supported in targeting growth of more than 30% for designated Key Towns to 2040 over their 2016 population, subject to capacity analysis and sustainability criteria. The level of growth specific to each Key Town is set out in the core strategy of each county development plan.”

The OPR highlighted the CDPs for each of the counties concerned have set out the short-term population targets for their respective Key Towns in line with RSES, which ultimately will aim to meet the NPF target by 2040. They advised the RWRP-SE should provide for in excess of 30% growth by 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. They further advised the RWRP-SE should take account of the more detailed population and housing targets in those core strategies in the plan period and up to 2031 to ensure the appropriate alignment of water resource infrastructure over the medium and longer term.

The OPR welcomed the preparation of the draft RWRP-SE as investment in water services infrastructure is critical to the implementation of the NPF and the RSES.

The Southern Regional Assembly (SRA) noted the strategic population and economic growth at the regional level for the Local Authority areas within the South East area is covered by the Region’s RSES and the Waterford MASP. They also noted the City and CDP Core Strategies, provide a further clarification of the distribution of Local Authority growth rates within the settlement hierarchy of each City and County Council. The SRA highlighted that alignment to the relevant objectives of the RSES and growth targets within the Southern Region RSES and subsequent City and County Development Plan Core Strategies is a key consideration for the relevant Study Areas within the South East.

The SRA reiterated the delivery of water infrastructure, protecting and improving water quality and ensuring sustainable sources of supply are fundamental to service infrastructure led population and economic growth and would achieve the strategic outcomes of the RSES and City and CDP Core Strategies for the South East.

The SRA listed several Regional Policy Objectives (RPOs) of direct relevance to the implementation of the NWRP including “RPO 4 Infrastructure Investment, RPO 7-10 Investment and Delivering Infrastructure for Metropolitan Areas, RPO 11 Key Towns, RPO 26 Towns and Villages, RPO 68 Regional Investment for Enterprise Growth , RPO 110 Ecosystem Services, RPOs 111, 112, 121 for Water Quality and



implementation of the Water Framework Directive and River Basin Management Plans, RPO 122 Sustainable Drainage Systems, RPO 124 Green Infrastructure and RPOs 208-210 for Water Supply and Water Protection. “

The SRA welcomed the commitment in the RWRP-SE to align and deliver on the objectives of each RSES and coordinate with Local Authorities to invest in water infrastructure to service the Core Strategies of City and County Developments. The SRA acknowledged that their previous recommendations were being addressed but recommended some further strengthening in the approach to ensure alignment to the RSES and their past comments.

The SRA noted the population projections for the South East to 2031 in Appendix 1 of the RSES are directly relevant for the RWRP-SE and the SRA welcomed a clarification that the growth projections have been taken into consideration in the study area population growth projections for the period 2019 – 2044 in Table 2.3 of the draft RWRP-SE.

The SRA further noted the population growth to 2044 in Table 2.3 is for a population of 473,480 (increase of 104,240) for the South-East Resource Plan area to 2044 whereas the RSES projection is for an uplift of up to 89,000 to a population in a range between 581,500 to 598,500 for the South East by 2031. They stated further headroom should be allocated for growth for parts of the RWRP-SE area that include parts of the Mid-West and South West Strategic Planning. The SRA advised consultation with Local Authorities and the relevant CDP Core Strategies will inform the growth projected for locations at sub-county level.

In addition, the SRA noted the population projection to 2044 for water services in the RWRP-SE is lower than the RSES population projection to 2031 for the South East. The SRA stated the publication of the full results from Census 2022 will provide further clarity on growth rates over the last six years but noted that “the level of change required to deliver growth projections under the NPF and RSES for Project Ireland 2040 will take several Development Plan cycles to change patterns of development and allow the lead-in time for infrastructure delivery to service the level of change required for greater balanced regional development.”

The SRA recommended additional growth capacity for all Study Areas and sufficient headroom to service the higher range of RSES growth targets should be provided to ensure ample capacity for infrastructure led growth. The SRA noted in Table 3.8 the RWRP-SE assigned a 52% growth rate to Waterford city and suburbs plus surrounding towns of well as Kilmeaden, Tramore, Cheekpoint, Passage East and Dunmore East to 2044. The SRA is concerned that although the inclusion of these settlements creates a distinctly different area to Waterford City and Suburbs or the Waterford Metropolitan Area it would provide a lower rate of average annual growth than the +60% growth rate set by the statutory RSES and Waterford MASP for City and Suburbs.

The SRA recommended a higher range of growth is adopted for the Waterford city and Metropolitan Area to the 2044 horizon and cited “NPF targets up to 60% by 2040 for Waterford City and Suburbs.” They highlighted the 2022 Census results indicate an accelerating rate of population increase of 12.7% in City and Suburbs 2016 – 2022, which reflects key enablers and regeneration projects which will drive the growth of the Waterford city Metropolitan Area.

The SRA also pinpointed the importance of retrofitting services within the city and suburbs and metropolitan area to alleviate existing capacity constraints, enable compact growth, brownfield regeneration and service strategic residential growth locations. This includes the Urban Regeneration and Development Fund, regeneration projects (city centre and north quays regeneration), consolidation of the city suburbs, and strategic employment locations. They stressed that it is critical for RSES implementation and the RWRPs need to give recognition to the Waterford city and Metropolitan Area as a primary engine of population and employment growth in the Irish State and South East region.

The SRA welcomed recognition of the role of the Key Towns in the RWRP-SE but stated it could be strengthened further in reference to the population growth, regional and sub-regional economic growth functions Key Towns serve. They advised consultation with Local Authorities should continue to ensure the actual growth rates targeted at local level for Key Towns. The SRA advised that servicing infrastructure led growth of the Key Towns needs to be underpinned by water services.

The SRA welcomed Uisce Éireann's commitment for on-going assessment and revision to align with City and County Development Plan targets in co-ordination with Local Authorities.

The SRA advised the RWRP-SE to directly support the growth of the Waterford Metropolitan Area and refer to the Waterford Metropolitan Area, specifically in the plan. They further advised that future demand for population and employment growth within the metropolitan area as set out in Table 1 of the Waterford MASP should be addressed in growth assumptions to ensure there is adequate capacity and headroom to service Waterford City and Metropolitan Area.

### **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-SE. 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-SE 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-SE 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-SE.

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-SE.

The OPR, SRA and Waterford City & Council noted that the growth projections in the draft RWRP-SE for some settlements differ compared with projections in RSES's, NPF and County Development Plans. Uisce Éireann 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-SE and represent the expected growth rates in the planning settlements. We will continue to liaise with key stakeholders 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.

Uisce Éireann also confirms 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.

A number of submissions referred to Municipal Area Spatial Plans, and Strategic Development Zone, noting that water services infrastructure would be required to facilitate development in these areas.

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 is working closely with CSO on the update of 2022 Census population data as per Uisce Éireann's District Meter Areas (DMAs) boundaries. The Supply Demand Balance will be updated with the 2022 Census population data once the population update of Uisce Éireann's District Meter Areas (DMAs) boundaries is completed. 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.

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.

In response to Waterford City and County Council's, ORA's and SRA's submissions on growth rates for Waterford City, the population growth at a WRZ level is presented in Figure 2.5 of the draft RWRP-SE. The figure shows the higher growth rate projections of Waterford City and surrounds and the Key Towns. It should be noted that settlements and associated growth rates 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, in order to ensure that the overall growth is aligned with the NPF (and draft NPF where applicable). For example, a growth rate of 52% is applied in Waterford City, whereas a growth rate of 15% is assumed for settlements with a 2016 population less than 1,500. Therefore, the overall population growth rate for Study Area K is 30% as shown in Table 2.3. A summary of the population growth rates that we have assumed for the settlements in the draft RWRP-SE is presented in Section 3, which explains the demand forecast projections across the region.

We have updated section 2.1.2, table 2.1 and table 3.8 of the draft RWRP-SE to include Dungarvan and Ballinroad as a Key Town and 'Town with population over 10,000 in 2016' as per WCCC suggestion.

Uisce Éireann notes the information provided by WCCC regarding development and growth projects for Waterford City and suburbs. We confirm that we will liaise with WCCC Forward Planning Department to ensure proposed infrastructure development adequately supports development in these areas. 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.

Uisce Éireann also recognises the need for balanced development and the need to support rural communities. Uisce Éireann is committed to facilitating rural growth through the "Small Towns and Villages Programme." Details on the programme can be found on our website: <https://www.water.ie/news/green-light-for-21-additi/>. However, it should also be noted that all supplies from the largest to the smallest are considered within the NWRP, with needs assessments and Preferred Approach developments conducted for every one of the 539 supplies nationally.

Uisce Éireann confirms that growth projections used within our draft RWRP-SE 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-SE. 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.

In response to The Construction Industry Federation's and SRA's submission on their query on uncertainty in our estimation of future growth, we 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 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.

Uisce Éireann acknowledges the CIF's suggestion on plan-led focused approach to provide infrastructure for housing supply and to ensure that the needs of the future population can be met. The Governments 'Housing for All - A New Housing Plan for Ireland' projects housing output to 2030 and will receive capital investment from the NDP which is the investment plan for the National Planning Framework which along with the RSES and MAPS inform our growth projections. Our preferred approaches incorporate growth projections to accommodate demand need for the 2044 period and will be updated and define our growth forecasts as per the monitoring and feedback process set out in section 8.3.8 of the Framework Plan. To ensure we can support growth while transforming our supplies, we also include interim measures within our NWRP. These measures are intended to address critical need, as set out in Section 8.3.7.6 of the Framework Plan.

Uisce Éireann acknowledges WCC's notes on population located within RWRP-SE. We will continue and work closely with WCC on any population changes. It is Uisce Éireann's objective 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 notes the OPR's comment on MASP. We have updated section 2.1.2, table 2.1 and table 3.8 of the draft RWRP-SE to include Dungarvan and Ballinroad as a Key Town and 'Town with population over 10,000 in 2016' as per WCCC suggestion.

The OPR noted that the growth projections in the draft RWRP-SE for some settlements differ compared with projections in RSES's and CDPs. Uisce Éireann 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 NPF.

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, 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.

Uisce Éireann considers job growth within our calculations for domestic demand as our population is increasing and non-domestic demand. We are engaging with potential new industrial and commercial customers and key stakeholders such as the IDA and Enterprise Ireland to anticipate and deliver water services infrastructure to support industrial development and job creation. We will engage directly with all inquiries for possible development and will seek to provide accurate and timely information on the capacity and likely cost of meeting requirements for water services. We recognise the need to build confidence in our ability to cater for such development, responding efficiently to opportunity, as it arises. More information on our Support on Social and Economic Growth is available on the Uisce Éireann website: <https://www.water.ie/docs/WSSP-Growth.pdf>

In response to the SRA, 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 RWRP-SE determines a preferred approach to resolve the need at Water Resource Zone (WRZ) Level. Metropolitan Areas and Strategic Development Zones form part of the WRZ. Uisce Éireann can confirm that growth projections for these areas are included in the WRZ growth projections. Details of local infrastructure required to service these areas will be considered in more detail at project level. To provide clarity on this point, in the final plan, we have provided reference to Metropolitan Areas and Strategic Development Zones in Section 2 and provided additional text in Section 6.4 in regard to project level assessments.

In response to the SRA submission on Key Towns and Growth rates. The population growth at a WRZ level is presented in Figure 2.5 of the draft RWRP-SE. The figure shows the higher growth rate projections of Waterford City and surrounds and the Key Towns. It should be noted that settlements and associated growth rates 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, in order to ensure that the overall growth is aligned with the NPF (and draft NPF where applicable). A summary of the population growth rates that we have assumed for the settlements in the draft RWRP-SE is presented in Section 3, which explains the demand forecast projections across the region.

## 7.3 Regional Boundary

### 7.3.1 Summary of Regional Boundary Feedback

The Southern Regional Assembly (SRA) noted that the RWRP-SE boundary is mainly within the Southern Region except for part of county Wicklow which is included in the RWRP-EM. They also noted that the RWRP definition of the South East is a different configuration to the defined Nomenclature of Territorial Units for Statistics (NUTS) III regional boundary for the South East. The SRA acknowledged that the boundary for the RWRP-SE is determined by the boundaries of the Uisce Éireann Operational Regions, Water Resource Zone boundaries, water supply delivery areas, water body catchments and sub catchments. The SRA welcomed the clarification that once the NWRP has been finalised the Framework Plan and four RWRPs, together will be treated as a unified plan and the relevant regional groupings will have no ongoing application.

### 7.3.2 Response to Regional Boundary Feedback

Uisce Éireann notes the feedback from the Southern Regional Assembly (SRA) on the regional groupings. As noted by the SRA, the regional boundaries will have no impact on the roll out of the Preferred Approaches and do not impact Uisce Éireann operations.

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 General Feedback

### 7.4.1 Summary of General Feedback

Waterford City and County Council (WCCC) welcomed the opportunity to make an observation on the draft RWRP-SE. WCCC commended the preparation and assembly of the suite of documentation which comprise the draft RWRP-SE and the level of detail set out therein as to how essential infrastructure will be reconfigured over the period of the plan, including the extension, and merging of supply zones, upgrading water treatment plants and storage capacity, leakage reduction measures and decommissioning of redundant treatment plants.

Meath County Council welcomed the opportunity to engage in the consultation process on the draft RWRP-SE but made no further comments.



The Department of Agriculture, Environment and Rural Affairs (DAERA) and supported by a service level agreement with the Department for Communities – Historic Environment Division (HED) considered the draft RWRP-SE and were thankful for the opportunity to make a submission. DAERA noted HED had no comment to make in relation to the draft RWRP-SE. DAERA commented that the layout and content of the Environmental Report is well laid out and easy to follow. DAERA SEA Team is content that the environmental report and the process of consultation follow the SEA Directive.

The Construction Industry Federation (CIF) - Southern Region were pleased to make a submission and noted their submission was based on consultation with regional branch CIF members and is reflective of their experience, collective knowledge, and expertise at the forefront of construction in the South East of Ireland. The CIF welcomed the development of the NWRP.

The National Federation of Group Water Schemes (NFGWS) welcomed the opportunity to make a submission on the draft RWRP-SE. The NFGWS recognised the significant body of work undertaken by Uisce Éireann to develop the draft Plan. They acknowledged that this exercise will clearly allow Uisce Éireann to review its water supply needs collectively including risks from quality, quantity, reliability, and sustainability while considering options to resolve these needs at a local or regional level.

The Industrial Development Authority (IDA) recognised the significant body of work undertaken by Uisce Éireann in the preparation of the NWRP Framework Plan and the subsequent production of four RWRPs. The IDA noted the availability of clean water in adequate volumetric supplies is fundamental to IDA's objectives to sustain and grow Foreign Direct Investment in Ireland. In this regard, the IDA was pleased to provide a submission in response to the draft RWRP-SE and noted that the content of their submission, while made in the context of the South East, is equally relevant to the other regional plans and key aspects of the Framework Plan.

The Office of the Planning Regulator (OPR) commended Uisce Éireann for preparing the draft RWRP-SE and were thankful for the opportunity to make a submission. The OPR further commended Uisce Éireann for preparing an appropriately detailed and informative non-technical summary of the draft RWRP-SE and an information leaflet, in addition to the helpful explanatory videos on the website. They noted this approach would facilitate greater public participation and input into the development of the draft RWRP-SE. The OPR stated the draft RWRP-SE sets out a clear approach for providing a sustainable, secure, and reliable water supply to meet the current and future needs for the South East. The OPR acknowledged once again the positive working relationship between the OPR and Uisce Éireann and the thorough assessments Uisce Éireann carries out of local authority statutory plans in its day-to-day work. The OPR encouraged continued consultation with them on the NWRP.

The Environmental Protection Agency (EPA) welcomed the opportunity to provide comments at this stage and acknowledged the importance of the Plan regarding

water resource planning for the South East region. The EPA also welcomed that the comments they provided in previous consultations on the NWRP, at SEA Scoping Stage, have been considered, in preparing the draft RWRP-SE and associated SEA.

Geological Survey Ireland (GSI) welcomed the publication of Uisce Éireann's RWRP-SE and the associated SEA and NIS. GSI noted a collaborative multiagency approach, where agencies with expertise in each specific area within the water cycle work together, is essential for the management of Ireland's water resources. With this in mind, GSI offered continued hydrogeological support in terms of data, expertise, and advice to Uisce Éireann. GSI also urged Uisce Éireann to seriously consider and address their concerns specifically on groundwater before proceeding further to ensure that groundwater resources and quality in the South East region of Ireland are managed and protected appropriately.

The Southern Regional Assembly (SRA) welcomed the publication of the draft RWRP-SE as part of the NWRP process and further welcomed the opportunity to make a submission on this important framework to provide a safe, secure, reliable, and sustainable water supply in our Region. On the basis of the NWRP being a unified plan integrating the RWRPs, the SRA noted the purpose of their submission was to confirm that their previous recommendations to the NWRP are integrated into the series of RWRPs and requested these recommendations are addressed. The SRA commended the depth of evidence base analysis and scenario testing undertaken and documented in the RWRP-SE including the identification of needs, status of infrastructure and supply, modelling for climate change, option developments across separate Water Resource Zones and the development of Regional Options, including technical reports for each study area in the appendices.

The Inland Waterways Association of Ireland (IWAI) welcomed the opportunity to provide feedback on the draft RWRP-SE, SEA Environmental Report and NIS. In preparation, IWAI examined the NWRP Consultation Report and acknowledged Uisce Éireann's inclusion of IWAI's feedback from this process.

#### **7.4.2 Response to General Feedback**

Most respondents welcomed the opportunity to engage on the draft RWRP-SE 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 welcome feedback from Waterford City and County Council, Meath County Council, The Department of Agriculture, Environment and Rural Affairs (DAERA), The Construction Industry Federation (CIF) - Southern Region, NFGWS, The Industrial Development Authority (IDA), The Office of the Planning Regulator (OPR), Environmental Protection Agency, Southern Regional Assembly, and IWAI 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.

Uisce Éireann values GSI's hydrogeological support in terms of data, expertise, and advice that GSI provides to Uisce Éireann. We will continue to engage with GSI on the development of further studies on existing and potential future groundwater supplies in terms of water quantity and quality across Ireland to manage and protect our groundwater sources.

Uisce Éireann notes feedback from the Southern Regional Assembly (SRA) on integrating SRA's previous submissions made on the RWRP-SW and RWRP-EM. We confirm that any relevant clarifications and recommendations from the RWRP-EM, the RWRP-SW and the RWRP-NW consultations have also been considered in the development process and finalisation of the RWRP-SE. 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.

## **7.5 Conclusions on Outside the Scope of the RWRP-SE**

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

### **7.5.1 Clarifications on RWRP-SE Feedback**

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

- Section 2 – Dungarvan and Ballinroad were included in Section 2.1.2 as key towns.
- Section 2 - Dungarvan and Ballinroad was included in table 2.1 as a settlement with population over 10,000.
- Section 3 - Dungarvan and Ballinroad was included in table 3.8 as a settlement with a population over 10,000.

## 8. Environment

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Environment.” Within the overall Environment theme, we identified four sub themes, which we set out in Figure 8.1. 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.

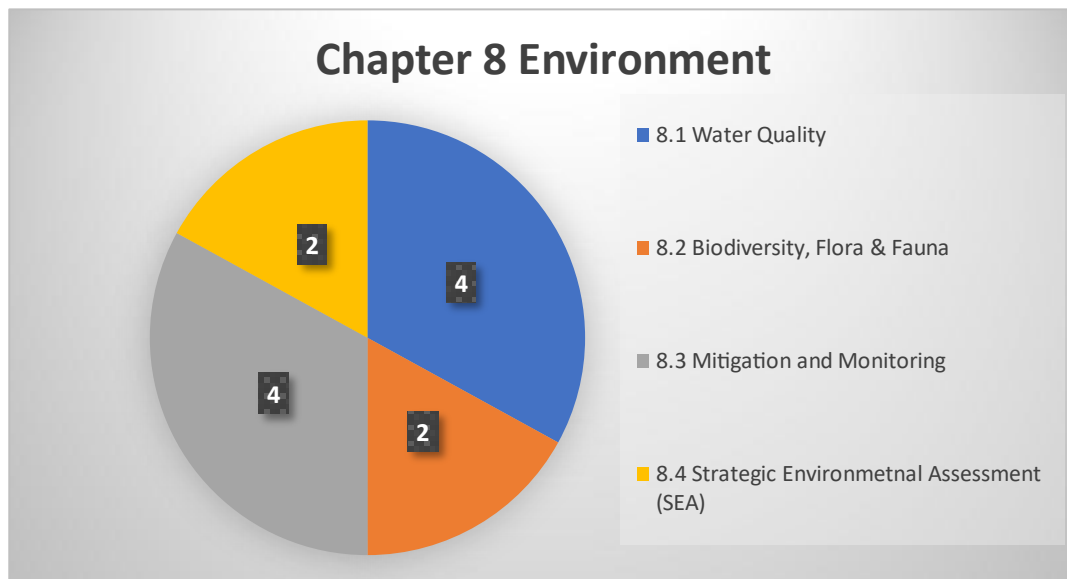


Figure 8.1 Environment Theme.

### 8.1 Water Quality

#### 8.1.1 Summary of Water Quality Feedback

Councillor Rory O’Connell recommended the inclusion of the measurement of microplastics in public reports on water quality as a proactive step to further help environmental protection. Cllr O’Connell suggested that implementing yearly aims and increasing testing, similar to what is done for lead and iron would be valuable, such as setting a level of micro plastics allowed in water and aiming to reduce it to zero. Cllr O’Connell further commented that reducing microplastics can contribute to safeguarding water system and ecosystems over the next 25 years and highlighted that this topic will become more popular coupled with more research on the impact of micro plastics.

Cllr O’Connell suggested that the measurements of more chemicals such as disinfection by-products be incorporated into the plan. He noted that “this is far worse than forever chemicals which Uisce Éireann currently measure...I would also like better plans for tackling forever chemicals in south east.”

Tipperary Social Democrats noted that water quality and consistency of delivery is a huge issue in Tipperary, and it is “great to see a draft action plan to help address these issues.” Tipperary Social Democrats commented that the plan does not address the issue of hard water and limescale and that there should be a greater

focus on softening water in the plan. They noted that though “this can be done at the point of use, it is likely the households with a lower income would not be able to afford to do this and so they would be hit the hardest. Limescale is causing massive issues for some parts of Tipperary.”

Geological Survey Ireland (GSI) welcomed Uisce Éireann's recognition of the importance of source protection in ensuring the security and sustainability of water supplies and that Uisce Éireann will continue to work with key stakeholders to promote this. GSI noted they look forward to working with Uisce Éireann in the expert groups chaired by the Department of Housing, Local Government and Heritage as Drinking water source protection is a significant objective of this expert group.

Tipperary County Council noted that the draft RWRP-SE highlights the climate change challenges facing UÉ in protecting and improving water quality and improving water services infrastructure.

### 8.1.2 Response to Water Quality Feedback

Microplastics will be considered as part of Uisce Eireann regulatory monitoring programmes under the new drinking water regulations (the European Union (Drinking Water) Regulations 2023 S.I. No. 99/2023) if they are included in the watch list of substances/compounds which are required to be monitored. The addition of parameters to the watch list is under active consideration by a DHLGH subcommittee of which Uisce Eireann, the NFGWS, the EPA and the HSE are members.

The new drinking water regulations include additional disinfection by-products such as chlorate, chlorite, and halo acetic acids. This monitoring will commence as per the regulations no later than March 2026. Implementation of the regulations is subject to approval of the DHLGH chaired drinking water implementation group. Should any additional disinfection by-products be identified that are of concern in terms of public health, then subject to consultation with the HSE and EPA they can be added to the watch list.

Uisce Éireann takes a risk-based approach to our water supplies using the World Health Organizations’ 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.

Uisce Éireann is committed to enabling communities to thrive by continuously upgrading and developing critical infrastructure to support sustainable growth and development, providing safe drinking water, and enhancing the environment.

We have plans to undertake significant upgrades in County Tipperary which will improve water quality across the County. The plans include the following:

- Significant upgrades to Glenary WTP (Clonmel), Linguan WTP (Carrick-on-Suir), and Stooke WTP (Dundrum Regional) to improve water quality and resilience.
- Rationalisation of Horse and Jockey, Littleton, Two Mile Borris, Glengar and Upperchurch have been approved and construction works are scheduled to commence soon.
- Interconnection of the Dundrum Regional Scheme to the Thurles Regional Scheme has been approved to proceed to design and construction stage. When completed, these works will increase resilience for the Dundrum Regional Scheme.
- There are 23 sites in County Tipperary that have received the disinfection and pH adjustment upgrade to date, and 6 sites to be completed in 2023.
- The Supply Demand Balance Programme has identified several potential sites to develop new groundwater assets to address supply deficits for Tipperary Town, Galtee Regional, and Templemore.

Hardness is a natural characteristic of much of Ireland's drinking water supply. Hard water contains high levels of natural minerals absorbed from rock and soil and is not harmful to health. In fact, the higher mineral content may offer health benefits above that of soft water. Uisce Éireann does not chemically soften hard water for the following reasons:

- There are no health risks involved in drinking and using hard water;
- Softening water removes beneficial minerals from hard water;
- There is no legislative requirement to remove hardness from drinking water;
- Depending on the technology used, artificially softened water may not be suitable for everyone to drink. For example, increased sodium levels caused by salt softening may not be suitable for infants or 'at risk' groups; and
- Hard water can create an internal protective film on lead pipes or fittings. This can prevent metals such as lead leaching into drinking water supplies.

Uisce Éireann has published suggestions for managing hardwater in domestic appliances, which can be found at <https://www.water.ie/help/water-quality/hard-water/>.

Uisce Éireann appreciates Geological Survey Ireland (GSI) recognition of the importance of source protection in ensuring the security and sustainability of water supplies.

Uisce Éireann notes comments from Tipperary County Council (TCC) on the climate challenges facing UÉ in protecting and improving water quality and improving water services infrastructure.

## 8.2 Biodiversity Flora and Fauna

### 8.2.1 Summary of Biodiversity Flora and Fauna Feedback



The Southern Regional Assembly (SRA) noted the recommendations they made during the NWRP submission for the integration of Green and Blue Infrastructure (GBI) and Nature Based Solutions (NBS) and Ecosystem Service Approaches as part of the Developing Solutions and Supply Smarter infrastructure measures and methodologies of the NWRP. They highlighted that strengthened integration of these principles and projects will accord with the three outcomes of the NWRP to Lose Less, Use Less and Supply Smarter and furthermore “Nature Based SuDS and an Ecosystem Service approach are strongly advocated and should be elaborated upon.”

The SRA noted the positive integration of these principles in the RWRP-SE and welcome the commitment for:

- Ensuring that UÉ build and manage infrastructure responsibly so that ecosystems are protected, and where possible enhanced.
- The implementation of UÉ Biodiversity Policy which seeks that in association with the provision of water and wastewater services, biodiversity and the natural environment are conserved, protected and where practical enhanced through our responsible stewardship, sustainable water services and strong partnerships.
- Implementation of the UÉ Biodiversity Action Plan (BAP) in 2021.
- One of the key objectives of the BAP is the promotion of NBS for water protection and wastewater treatment, which have considerable potential to deliver biodiversity. NBS are multi-functional measures that aim to protect water resources and address water-related challenges by restoring or maintaining ecosystems, as well as natural features and characteristics of waterbodies using natural means and processes.
- Support for UÉ projects that integrate NBS that include reduction in energy usage, carbon sequestration, and amenity use for local communities. UÉ supports a broad range of measures such as: wetlands, basins, and ponds, reedbeds, buffer strips and hedges and forest riparian buffers.
- Identifying opportunities for the incorporation of NBS, and catchment management activities within UÉ abstraction catchments will continue to be encouraged and promoted through the NWRP.

The SRA reiterated that in the unified NWRP positive commitment to adopt GBI, NBS, Ecosystem Services and protect and enhance Biodiversity through the UÉ BAP is commended and continues to be a priority action for the unified NWRP.

The SRA commented that UÉ are an important stakeholder for the SRA in a collaborative project under the Interreg Europe “Blue Green Cities” project. The SRA highlighted that they have recently in collaboration with ARUP completed and published their GBI and NBS Framework for the Southern Region, Our Green Region, which is available to assist UÉ projects as a toolkit and it can be accessed at: <https://www.southernassembly.ie/eu-projects/blue-green-city/blue-green-city-other-publications>.

The Department of Housing Local Government and Heritage (DHLGH) noted that the RWRP-SE will result in the decommissioning of existing abstractions at Ballyragget Water Treatment Plant (WTP) and Radestown WTP which currently extract from the River Barrow and River Nore Special Area of Conservation (SAC). DHLGH suggested that there may be scope to decommission weirs which are forming a barrier for fish migration. They noted that “improvement of passage of migratory fish species is an action under the National Biodiversity Action Plan, the EU Biodiversity Strategy for 2030 and would also support SAC Site Specific Conservation Objectives for Qualifying Interest fish species.” DHLGH advised UÉ to include removal of barriers to fish migration due to weirs, where applicable.

### 8.2.2 Response to Biodiversity Flora and Fauna Feedback

We welcome the Southern Regional Assembly’s support for Uisce Éireann’s Biodiversity Action Plan and projects that integrate Nature-Based Solutions (NBS) and Ecosystem Service Approaches.

Uisce Éireann is committed to implementing NBS and will continue to work in partnership with catchment stakeholders and local authorities to develop these collaborative projects that deliver benefits for both our customers and the environment. Insufficient information on option sites and pipeline routes is available to apply a natural capital assessment approach fully at this stage. However, developing and using tools such as natural capital/ecosystems services are included as part of the SEA Environmental Action Plan and will be taken forward into project development (see section 10.2 of the SEA Environmental Report).

Uisce Éireann is currently a stakeholder on the ‘Blue Green Cities’ project that is seeking to improve policy making and implementation of projects that integrate NBS and Blue-Green Infrastructure. For example, the establishment of 5.27 hectares of riparian woodland at our Lough Guitane WTP site. More information on this NBS and additional NBSs in the South East region is provided in Section 2.3.9 of the RWRP-SE.

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 Biodiversity Action Plan. Section 6.4 of the RWRP-SE outlines how the Biodiversity Action Plan will be considered at project level. More details on the plan can be found at <https://www.water.ie/projects/national-projects/biodiversity/>

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 Plan.



Uisce Éireann acknowledges the need to engage and consult with IFI when undertaking emergency works in low flow situations and confirms that appropriate methodologies will be agreed in advance of completing such works. 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 develop fish passage at weirs associated with our abstractions to address fish movement throughout the year.

## 8.3 Mitigation and Monitoring

### 8.3.1 Summary of Mitigation and Monitoring Feedback

The Marine Plan Team (MPT) DAERA – Marine & Fisheries Division noted and endorsed the concerns raised by other consultees such as DfI Rivers and NIEA regarding flood risk, stormwater discharge, and appropriate sewage treatment and disposal. They referred UÉ to their website: <https://www.daera-ni.gov.uk/publications/standing-advice-development-may-have-effect-water-environment-including-groundwater-and-fisheries>

The Department of Housing Local Government and Heritage (DHLGH) noted that statutory Exemption for Restoration Projects (SERP) implementation is an action of the National Biodiversity Action Plan 2017 – 2021 (Action 4.2.2 – Uisce Éireann to implement its Water Services Strategic Plan (2015-2040), in particular its objective to protect and enhance the environment). DHLGH advised that the performance indicator ‘environmental monitoring of the implementation of the plan’ “must be provided for in the plan which must monitor the effects of the plan implementation the environment.”

The Environmental Protection Agency (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 NWRP. “It should consider and deal with the possibility of cumulative effects...monitoring of both positive and negative effects should be considered.” The monitoring programme should also set out the various data sources, monitoring frequencies, responsibilities, and reporting. They further commented that “if the monitoring identifies adverse impacts during the implementation of the Plan, Uisce Eireann should ensure that suitable and effective remedial action is taken.”

The EPA observed that the implementation of the Plan should include provisions for annual or bi-annual reporting on implementation of the Plan commitments. Further to the Plan implementation, monitoring and reporting should be aligned with the environmental monitoring and reporting required under the Strategic Environmental Assessment (SEA) legislation. This, they noted, will assist in evaluating the

environmental performance of the Plan. They advised that guidance on SEA-related monitoring is available on the EPA website at <https://www.epa.ie/publications/research/environmental-technologies/research-306-guidance.php>

Tipperary County Council (TCC) commented that the key climate change risk areas for County Tipperary are flooding, extreme cold and heavy snowfall, ice, and drought. It also commended the UÉ adaptation and future monitoring measures to support environmental resilience to climate change, which will benefit supply resilience.

TCC noted that Uisce Éireann gathered data relating to population forecasts, economic trends, and tourism before the onset of the COVID-19 pandemic. Therefore, they advised that trends and patterns may need to be revised by Uisce Éireann as enough data and information are available to understand the long-term impact of the pandemic. TCC also noted that Census 2022 will provide updated data, which will need to be accounted for in data modelling. They noted that Uisce Éireann's key considerations will be potential changes to demographics in relation to commercial and office settings, changes in hospitality and in tourism impacts.

The EPA suggested that interim monitoring reports (annual or bi-annual) be provided over the lifetime of the Plan. "Such reporting would allow for remedial action to be taken where significant adverse effects are identified...and also enable Uisce Eireann to adapt the monitoring programme as necessary."

The EPA noted Uisce Eireann's commitment to providing 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 dependent ecosystems, including groundwater." They further suggested having a plan in place to react to the monitoring results as necessary.

The EPA suggested that the Monitoring Programme should be flexible enough to take account of specific environmental issues and unforeseen adverse impacts should they arise during implementation and deal with the possibility of cumulative effects. Furthermore, they suggested that monitoring of both positive and negative effects should be taken into account and the Monitoring Programme should set out the various data sources, monitoring frequencies, responsibilities and reporting. The EPA advised that Guidance on SEA-related monitoring is available on the EPA website at <https://www.epa.ie/publications/research/environmental-technologies/research-306.php>

The EPA further suggested that acknowledging that the National Planning Framework (NPF) would be beneficial and the Regional Spatial and Economic Strategies (RSES), which will be undergoing review "Uisce Eireann should consider any relevant recommendations arising out of adoption of the updated NPF and RSES in implementing the plan."

The EPA noted that any 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.

### **8.3.2 Response to Mitigation and Monitoring Feedback**

The information from the DAERA Marine Conservation Advice team is noted. 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. Flood risk is considered as part of the options appraisal, however, the assessments at plan level are based on desktop information as many options are at a conceptual stage and there is insufficient information to differentiate between options on the basis of flood risk when design details, siting and routing are still to be determined. All assessments are carried out in a uniform and consistent manner and the purpose of the assessments is 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 and both surface water and ground water flood risk will also need to be considered further as part of the development of option design and for assessment 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 Flood Risk Management Plans.

Environmental monitoring of the implementation of the plan is provided for through the SEA Monitoring Plan and Environmental Action Plan (EAP) to monitor the effects of the plan implementation on the environment.

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-SE.

The Environmental Action Plan 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. The EAP also recognises the need to take remedial action where significant effects are identified.

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-SE. 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.

Uisce Éireann has considered the impact of climate change on our sources and on our water demands in the following ways:

- Climate change factors were applied to the estimated yield from our sources into the future. These climate change factors were determined further to our extensive research with the Irish Climate Analysis and Research Units Department in National University of Ireland, Maynooth, under the climate sensitive catchments project. This project 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 impact of climate change on water usage has also been considered by applying peaking factors to represent demands in a dry year critical period. This accounts for the increased demand during dry weather, such as droughts. The demand estimates also consider increased usage during peak tourist seasons.

We have also applied a headroom allowance in our demand estimates to account for uncertainty in our understanding of the impact of climate change. The allowance provides a buffer in the supply demand balance and ensures that the Preferred Approach is sized appropriately to meet future estimated supply deficits.

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.

Further to this, the Preferred Approach was assessed against adaptability under the following headings - Sustainability, Climate Change, Demand Growth and Leakage Targets. The details of this sensitivity analysis are included in the Technical Appendices to the RWRP-SE and the Strategic Environmental Assessment Environmental Report. Further assessment of the impacts of climate change will be carried out at project level through hydrological and hydrogeological modelling work.

The Environmental Action Plan 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.

The Monitoring Plan and Environmental Action Plan has been designed to provide a basis for the identification and continuous review of the positive, negative, and cumulative impacts of the RWRP-SE. 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. The final Environmental Action Plan and Monitoring Plan are also provided in section 5 of the SEA Statement.

The 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. Part 1 provides 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.

Uisce Éireann acknowledges that reviews of the NPF and RSES documents are ongoing and any updates to these will need to be taken into account in the next iteration of the Plan. The process for review of amendments to the RWRP-SE is outlined as part of the feedback and monitoring process in Plan section 9.

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.

## **8.4 Strategic Environmental Assessment**

### **8.4.1 Summary of Strategic Environmental Assessment Feedback**

The National Monument Service (NMS) in the Department of Housing Local Government and Heritage (DHLGH) commented that the SEA “makes no reference to the Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland 1999).” The Framework outlines the national policy on the protection of the archaeological heritage in the course of development and in

accordance with the National Monuments Acts 1930 to 2014 with the aims and requirements of the 'Valletta Convention' (1992 Council of Europe European Convention on the Protection of the Archaeological Heritage) to which Ireland is a party.

The NMS noted that while this section of the SEA outlines a number of key information sources, notable the Record of Monuments and Places, Sites and Monuments Record and National Inventory of Architectural Heritage, "there are significant omissions." The NMS requested the following data sources about the archaeological and cultural heritage environment relevant to the plan and its associated environmental assessments be considered.

The NMS's website ([www.archaeology.ie](http://www.archaeology.ie)) is highlighted as a key source of data, information, and publications, including GIS datasets, in addition to the datasets already referenced in the SEA:

- Wreck Viewer - records of over 18,000 known and potential wreck sites in Irish waters.
- List of National Monuments in Ownership or Guardianship of the Minister.
- List of Preservation Orders currently in force.
- Excavations Bulletin

They advised the database of Irish excavation reports (<https://excavations.ie/>) contains summaries of archaeological excavations carried out on the island of Ireland since 1969.

NMS noted that this section of the draft SEA does include United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Sites. "However, the provided information is inaccurate and out of date." The NMS noted that currently there only two World Heritage properties within the state—Brú na Bóinne in County Meath and Skellig Michael in County Kerry. The Tentative List was updated in 2022 and now includes the following sites:

- The Passage Tomb Landscape of County Sligo
- Royal Sites of Ireland: Ancient Irish Sites of Royal Inauguration
- Transatlantic Cable Ensemble

Further information on UNESCO World Heritage properties within Ireland and those on the current tentative list can be found here: <https://worldheritageireland.ie/>.

NMS noted that in addition to the Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland 1999) the SEA should take account of the following policies, plans and programme relevant to Cultural Heritage:

- Climate Change Sectoral Adaptation Plan—Built and Archaeological Heritage (2019): <https://www.gov.ie/pdf/?file=https://assets.gov.ie/246863/2660361a-6b77-4b58-b040-aea8fd960606.pdf#page=null>
- Heritage 2030—National Heritage Plan (2022): <https://www.gov.ie/en/publication/778b8-heritage-ireland-2030/>



- National Policy on Town Defences (2008):  
<https://www.archaeology.ie/sites/default/files/media/publications/national-policy-on-town-defences.pdf>

The NMS explained that The Underwater Archaeology Unit (UAU) is tasked with the protection and preservation of Ireland’s underwater cultural heritage and to make recommendations to the relevant planning authorities and other regulatory bodies on the interactions between underwater cultural heritage and development. In regard to the Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland 1999) the NMS stated that, although Ireland is not yet state party to the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage, Ireland supported its adoption and has supported its aims and objectives. They further commented that ratification by Ireland of the Convention will take place after enactment of additional domestic legislation and therefore it is essential “that full account is taken of the need to provide appropriate protection for the underwater cultural heritage” ...and that “the omission of consideration of underwater cultural heritage is notable.”

The NMS went into detail regarding the National Monuments (Amendment) Act 1987 and the protection of wrecks in inland waterways. They stated that Section 3 of the Act is the primary piece of legislation for the protection of wrecks over 100 years old and archaeological objects underwater, irrespective of age. They further highlighted that, as well as wrecks over 100 years old, wrecks and archaeological objects that are less than 100 years old or the potential location of such a wreck or archaeological object can also be protected under Section 3 of the Act. The NMS outlined that Underwater cultural heritage also encompasses submerged landscapes, weirs, historic bridges, fording points, revetment walls, historic flood defences and other riverine structures and features. The Wreck Inventory of Ireland Database is the official register of historic shipwrecks protected under the Act with over 18,000 wrecks have been recorded to date. NMS highlighted that previously unrecorded wreck sites may yet be discovered in the rivers and coastal waters of the south east under consideration in the Plan.

The Environmental Protection Agency (EPA) commented that a commitment should be included to take any relevant aspects of the Draft Water and Planning Guidelines, currently being prepared by the Department of Housing, Local Government and Heritage (DHLGH) into account when implementing the Plan once these Guidelines are adopted. Additionally, they noted the European Union (Water Policy) (Abstractions Registration) Regulations 2018 should also be referenced in the Plan.

The EPA also suggested that reference is made to the Draft Sustainable and Compact Settlement Guidelines which is currently being prepared by DHLGH. They commented that “ensuring critical infrastructure is adequate and appropriate to support proposals to develop and grow out settlements will be a key consideration.”

In regards Environmental Baseline the EPA welcomed that their State of the Environment Report (SOER) Report Ireland’s Environment – An Integrated

Assessment (2020) has been taken into account and acknowledged that Section 5.2 of the SEA ER identified the key aspects of the SOER, of relevance to the Plan. They also suggested that the EPA's most recent reports on water quality, climate change, air quality, drinking water and urban water, available on the EPA website are also referred to and incorporated where appropriate.

The EPA acknowledged that the Plan identifies the water-service related issues and challenges (including supply of water services and water quality aspects). They 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.

The EPA commented that the abstraction of waters for drinking water purposes need to continue to be carefully considered, effectively implemented, and monitored in accordance with any abstraction licensing legislation, which is currently in draft form with the Department of Housing, Local Government and Heritage (DHLGH). "In particular, this is important where those waters support protected species and designated habitats within the Plan area."

The EPA commented that Uisce Éireann should be mindful of the Water Framework Directive-related environmental objectives for surface waters and groundwaters, with regards to 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, as provided in Chapter 9, which examines regional cumulative effects, both within the Plan and between the Plan and other plans and programmes. They also welcomed the EPA guidance 'Good Practice Guidance Note on Cumulative Effects in Strategic Environmental Assessment' (EPA, 2020) has been taken into account.

The EPA suggested that once the Plan is adopted, Uisce Éireann should prepare an SEA Statement that summarises:

- 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.

Issue a copy of the SEA Statement with the above information to any environmental authority consulted during the SEA process.

#### **8.4.2 Response to Strategic Environmental Assessment Feedback**

The Framework and Principles for the Protection of the Archaeological Heritage suggested for consideration by the National Monument's Service (NMS) have been



taken into account and added to the policy plans and programmes (PPP review in the SEA Environmental Report (Appendix F)).

Uisce Éireann is satisfied that the data sources used for the plan level assessment are adequate but acknowledges the recommendation from NMS to use additional datasets that would support environmental assessment. These require more detailed site location information than currently available at the plan level but have been included as part of the recommendations for project level assessment and identified in the Monitoring Plan so that these are taken forward for consideration in more detailed studies as specific schemes are developed as relevant.

Uisce Éireann note that there are no UNESCO World Heritage Sites and only one site on the tentative list within the baseline study area for RWRP-SE. Uisce Éireann have refined the text within section 5.10 to ensure the baseline area for this plan and assessment and the relevant data sources used are clear.

The policy and plans suggested by the NMS have been considered and added to the PPP review in the SEA Environmental Report (Appendix F).

Uisce Éireann recognise the concerns raised by the Underwater Archaeology Unit and have amended the baseline section 5.10 the Monitoring Plan and within the SEA Environmental Report to specifically address underwater archaeology rather than cover as archaeology more generally and provide due consideration of underwater cultural heritage, including use of recommended datasets and consideration of section 3 of the National Monuments (Amendment) Act 1987 and the 2001 UNESCO Convention of the Protection of the Underwater Cultural Heritage. The closest wreck site to the Preferred Approach options in the South East region is over a kilometre away and therefore based on the plan level information on the Preferred Approaches impacts on wreck sites during construction or operation are considered unlikely. The potential for impacts on wreck sites as well as other cultural heritage and archaeological interests will be considered further in the more detailed assessments undertaken at Project level. Relevant figures within the SEA documentation have also been updated to include sites from the Wreck Inventory Database where appropriate.

Uisce Éireann acknowledges the recommendation from the Environmental Protection Agency (EPA) to consider relevant emerging guidelines, such as the Draft Water and Planning Guidelines, and Draft Sustainable and Compact Settlement Guidelines, and recently published reports from the EPA website. Uisce Éireann have adapted the text in section 10.3 to make clear that any relevant new and emerging guidelines will be taken into account in future iterations of the Plan. Uisce Éireann have also considered the reports published to the EPA's website and added reference to these where relevant.

Uisce Éireann notes that the European Union (Water Policy) (Abstractions Registration) Regulations 2018 is referenced in Appendix F of the SEA Environmental Report.

We welcome the EPA's feedback and the acknowledgment that Uisce Éireann has considered the existing national programmes in place to protect and provide clean and wholesome drinking water.

Uisce Éireann recognises the importance of minimising the potential for environmental impacts of all proposed developments, including the proposals for additional reservoirs and impoundments in the RWRP-SE. We will ensure the ecology of the area is protected by implementing appropriate mitigation measures to manage environmental risks at project level. Uisce Éireann has 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.

Uisce Éireann will be required to apply for licenses for abstractions through the proposed abstraction license legislation. The EPA as the licencing regulator will review our existing and proposed abstractions and determine if they are feasible considering all other abstractions in the catchment and the impact of the abstractions on the ecology and water framework status of the waterbody.

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-SE. The SEA Statement outlines how environmental considerations have been integrated into the RWRP-SE and how consultation influenced the development of the RWRP-SE. 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 and the RWRP-SE commits to implementing the recommendations from the SEA and AA.

The SEA Statement has been prepared to cover the points identified in the EPA comments.

## **8.5 Conclusions on Environment**

Having carefully reviewed the submissions received on the theme of the Environment, Uisce Éireann considered that more clarity on certain points should be provided in the RWRP-SE and the Strategic Environmental Assessment (SEA) Environmental Report. These changes are reflected in amendments made to the updated SEA Environmental report and are also addressed in the SEA Statement and explained in the section 8 response table above and summarised in section 8.5.1 "Clarifications" below. In addition, some of the points made in the submissions will be taken forward in other ways, as explained in section 8.5.2 "Recommendations" below.

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

### 8.5.1 Clarifications on Environmental Feedback

The RWRP-SE has not required any updates as a result of the feedback under the theme of Environment. However, the Strategic Environmental Assessment (SEA) Environmental report has been updated to reflect feedback under the theme of Environment as indicated in the response tables in section 8 and summarised below:

- The SEA Environmental Report policy, plan and programme review (Appendix F) has been updated to include the Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan, National Policy on Town Defences, UNESCO Convention on the Protection of the Underwater Cultural Heritage, and Framework and principles for the protection of the archaeological heritage and where needed, updates to plans and legislation references have been made to reflect their current status.
- The text in sections 5.2, 5.4.1 and 10.3 has been updated to reference relevant EPA reports and that any emerging guidelines will be taken into account in future iterations of the Plan.
- The text within section 5.10 has been updated to ensure the baseline area for the plan, assessment and data sources used are clear.
- Relevant figures within the SEA documentation have been updated to include sites from the Wreck Inventory Database where appropriate.
- The Monitoring Plan (section 10.3) and section 5.10 of the SEA Environmental Report has been updated to specifically address underwater archaeology and include datasets recommended by the NMS.

More information on this can be found in the SEA Statement.

### 8.5.2 Recommendations on Environment Feedback

Uisce Éireann will:

- Take account of the cultural heritage and archaeological information including on underwater archaeology and wreck sites as Preferred Approaches are taken forward and subject to project level assessments.
- Take account of relevant new and emerging plans and policies, including those identified in the comments received, as identified in the section above. A process for reviewing and addressing updates is outlined in section 9 of the Plan.
- Take account of emerging guidelines, datasets, and reports, including those identified in the comments received, where relevant for further evaluation of options at project stage and in future iterations of the plan.

## 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 five 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

Deputy Mattie McGrath TD for the Tipperary Constituency made a submission focusing particularly on Study Area K which includes Tipperary.

Deputy McGrath commented that security of supply for water to homes, farms, and businesses in Tipperary, particularly in the south of the county has reached crisis point. Deputy McGrath highlighted that Clonmel town has a strong business and industrial community “and are struggling to manage with an inadequate water supply.” Deputy McGrath goes on to note that Clonmel has water outages, boil water notices and low water pressure issues on an ongoing basis and it is critical that any proposals outlined in the RWRP-SE be progressed as a matter of urgency.

Deputy McGrath stated that he does not support any proposals to cease operations at the Poulavanogue water supply in Clonmel and that all investment should be afforded to this water treatment plant (WTP) to address current issues in the town. Deputy McGrath offered his support to the development of a new WTP at Barne and encouraged development as soon as possible.

Deputy McGrath commented that reserve water supplies are always useful in the warm summer periods and as noted in the Study Area technical report the increasing demand for water supply will lead to deficits in many areas. Deputy McGrath stated that “existing infrastructure would be examined and used to its full potential, for example the reservoir at the Ragwell in Clonmel, connected to the Poulavangoue plant needs small investment to be maintained as a functioning reservoir so it can be

kept as a backup supply for the town if issues arise with the existing plants, as is often the case.” He further commented that the use of the Giantsgrave reservoir on the outskirts of Clonmel town is encouraged and that infrastructure and funding is required to improve the links into Clonmel from this supply.

The security of supply in the Carrick On Suir area has also been challenging for a long time now due to ongoing issues from the Linguan WTP. Deputy McGrath expressed his gratitude that the supply issue in Carrick On Suir and the issues with Linguan WTP are being addressed as outlined in option code SAK-202. He further noted that the Galtee Regional Water supply is also encountering outages in particular communities in West Tipperary.

Deputy McGrath raised issues in regards the Ardfinnan Regional Water Supply. He commented that the reservoirs at Edenmore and Jamestown, serving Cahir town and Poulmucka, Clerihan areas, “should be examined for the possibility of sinking boreholes to also feed into the reservoirs, this would be extremely helpful when there are problems with the WTP at Goatenbridge.” In addition to this, he further suggested a new water supply from Poulatar and Poulalee in Goatenbridge which could be tested with the aim of connecting to the mains water line and feeding the Ardfinnan Regional Water Supply when the WTP supply is low.

Deputy McGrath further commented that the large aqua pool on the outskirts of Cahir town at the old roadstone quarry could be considered as a backup source in the times of outages or in times of increasing demand for supply in the town. Deputy McGrath commented that the WTP in Goatenbridge frequently experiences outages and night-time restrictions and the suggested backup supply from the aqua pool outages could lead to a more dependable supply for the town and hinterland.

Deputy McGrath suggested that the location of the Burncourt Ballylooby Regional Supply could offer potential to abstract additional ground water supply from the south side of the Galtee Mountains. Mr. McGrath commented that the WTP has supply issues and that additional sources must be sources to alleviate pressure.

Deputy McGrath explained his preference for new water supplies from mountain sources rather than abstraction from rivers for a number of reasons;

- Tipperary is surrounded by many mountain ranges and abstraction at such sources is more straightforward, more cost effective and less likely to be contaminated with human and industrial waste.
- Many of the wastewater treatment plants are pumping untreated sewage into rivers. Deputy McGrath commented that regardless of the level of treatment that such supplies coming from rivers would receive, he is still concerned about the abstraction of water from these same rivers until such wastewater issues are addressed.

The National Federation of Group Water Schemes (NFGWS) highlighted that most privately sourced group water schemes (GWS) do not wish to be taken in charge by Uisce Éireann. Alternatively, they noted that there are many publicly sourced GWS

that do wish to be taken in charge. The NFGWS explained that these publicly sourced GWS have either been unmanaged or are in the process of upgrading under the Multi-annual Rural Water Program (MARWP) in advance of being taken in charge. NFGWS stated that where taken in charge requests have been democratically decided by the GWS and are being progressed under the MARWP, Uisce Éireann should ensure that appropriate resources are in place to facilitate the operation of these distribution networks as part of the RWRP-SE.

The NFGWS requested a technical assessment to be completed in advance of projects proceeding to highlight potential impacts to group water scheme sources and infrastructure.

### **9.1.2 Response to Supply Feedback**

Uisce Éireann acknowledges Deputy McGrath's concern regarding the supply security of water systems in the south of Tipperary County. The NWRP has identified water supply areas experiencing water shortages and those at high risk of not meeting our drinking water quality standards. In response, the NWRP sets out solutions (Preferred Approach) to address the current and future needs of our supplies over the short, medium, and long term.

The investments identified in the four regional plans will be prioritised collectively through Uisce Éireann's planning and investment cycles. Should a critical need arise prior to the delivery of a Preferred Approach, we will implement interim options as set out in Section 7.6 of the regional plans. These options will allow Uisce Éireann to deliver the Preferred Approach, while at the same time maintaining a safe, secure, and reliable supply in the short term. A decision to progress an interim option will be based on urgent or priority need.

The interim options that have been identified for each water resource zone make the best use of existing infrastructure. In most cases, these options will only be used to allow time to deliver the longer-term solution under the Preferred Approach. The interim options are determined in line with the Preferred Approach and as such, are considered "no regrets" infrastructure investment.

In response to Deputy McGrath's comment that he does not support proposals to cease operations at the Poulavanogue water supply in Clonmel, we confirm that our Preferred Approach for Clonmel has been selected using our robust Option Appraisal and Development process. As part of this process, we have assessed the sustainability of existing abstractions and have determined that the Poulavanogue abstractions serving Clonmel are potentially unsustainable. Our assessment methodology is based on the UK Water method as explained in Appendix C of the NWRP Framework Plan. Under the new abstraction legislation, which will be regulated by the EPA, it is likely that Uisce Éireann will be required to reduce abstractions at these sites. We have therefore selected the new River Suir abstraction as the Preferred Approach. Uisce Éireann confirms that abstractions and/or water treatment plants will not be decommissioned fully until alternative



solutions are operational. This will be the case for the Poulavanogue water supply in Clonmel.

The option development process considers the widest practicable range of solutions to resolve the identified Need within WRZs and across the region. This includes assessing the potential for refurbishing and upgrading existing supplies. All identified options are screened against a set of selection criteria based on policy objectives as outlined in Section 7 of the RWRW-SE.

We consider supply resilience in our assessment and selection of preferred approaches. To develop resilient and secure supplies that are efficient to maintain and operate, we have sought opportunities to interconnect fragmented water supply systems and decommission vulnerable sources. The Preferred Approach for Ardfinnan is an example of this, where Ardfinnan Regional is one of eleven water resource zones that will be interconnected and supplied via the new River Suir abstraction and new water treatment plant at Barnes. This newly formed interconnected WRZ will be served by four water treatment plants and five independent abstraction sources. We recognise that the Preferred Approach for Ardfinnan will take time to deliver. For this reason, we have identified an interim option that involves an upgrade to Goatenbridge WTP. If this interim option does not adequately address critical short term need at Ardfinnan, alternative interim options will be investigated including the large aqua pool on the outskirts of Cahir Town.

The Preferred Approach for Burncourt Ballylooby Regional Supply is to make use of existing infrastructure and increase the groundwater abstraction from the two boreholes that service Ballylooby Springs WTP. Our plan level assessments have determined that additional water can be sustainably abstracted from the existing aquifer source to meet growth. Should more detailed project level assessments determine these sources unsustainable, alternative sources will be considered, including groundwater supply from the south side of Galtee Mountains.

We acknowledge Deputy McGrath's point that mountain sources are less likely to be contaminated with human and industrial waste. In identifying feasible options, we consider a range of criteria that aligns with national policy objectives. We consider minimising cost, environmental impacts, carbon production, and effects on habitats and biodiversity. While mountain sources may provide higher quality water supplies, accessing these supply sources often require longer pipelines that may impact protected areas. Similarly, abstraction sites may be located in environmentally sensitive areas. These aspects are considered during our option development process, which leads to the selection of the best value solutions.

Uisce Éireann is committed to addressing water quality concerns through the development of our Drinking Water Safety Plans. Our approach ensures that our water treatment plants are designed to mitigate the risks identified in the source water. We also invest in nature-based solutions and catchment measures to reduce source risk to our supplies.

Uisce Éireann will accommodate publicly sourced GWSs wishing to transfer ownership to Uisce Éireann. Our demand forecasts include a 'headroom allowance' in our estimation of demand to account for uncertainty in future growth. This includes new demands associated with future connecting GWSs. The 'headroom allowance' provides a buffer in the supply demand balance (SDB) to ensure that the Preferred Approach is sized appropriately to meet future required needs. Our operational and maintenance planning will take account of the associated distribution networks currently being upgraded under the Multi-annual Rural Water Programme (MARWP).

The RWRP-SE is a plan level approach. The Preferred Approach identified in the regional plan will progress to project level through Uisce Éireann's planning and investment cycles. At the project level stage multi-disciplinary technical impact assessments will be carried out to ensure any proposed pipelines, sources and/ or ancillary works have minimal impact on GWS sources and infrastructure.

## 9.2 Demand

### 9.2.1 Summary of Demand Feedback

Waterford City and County Council (WCCC) disagreed where UÉ does not forecast an increase in domestic demand and per capita consumption (PCC), on assumptions of reduced household size and an increase in use of more efficient appliances. WCCC commented that utilising this approach increases the risk of underestimating domestic demand. WCCC reasoned that the demand will be driven by population increase and not household size as such. They commented "while there is no clear national or EU commitment to increase appliance efficiency, although it is likely that future appliance will be designed within more stringent resource efficiency parameters." They further stated that no increase in the PCC rate "will undermine the ability of the final RWRP to meet the future needs of our population." WCCC suggested that a more risk averse approach would be to design-in a level of increase in PCC and reflect this in table 3.9 of the plan.

WCCC commented that a 10% increase in non-domestic demand over the plan period seems conservative in comparison to the population growth rates envisaged in national policy as well as the circa 12,000 additional jobs needed to support new population within Waterford City alone.

WCCC queried the assumption in the Plan that there will be no increase in non-domestic demand outside the large water resource zone (WRZ) in the region. Commenting that it "risks gross underestimation of demand...an additional non-domestic supply of MI/day to 2044 as set out in Table 3.10 appears insufficient in order to drive and accommodate regional and transformative job growth while there is no strategic allowance for major water using industry." WCCC further commented that the allowances in table 3.10 are inconsistent with what is envisaged in the National Planning Framework (NPF) and Regional Spatial and Economic Strategy (RSES). WCCC highlighted that Waterford will not be in a position to compete with



centres such as Dublin when no provision is made for an appropriate level of enabling infrastructure in Waterford City.

IDA Ireland queried the projections for growth in non-domestic water demand in the Draft RWRP-SE commenting that they are at odds with IDA Ireland's objectives for industrial growth nationally and regionally and "in conflict with national policy." The IDA noted their current strategic plan 'Driving Recovery and Strategic Growth 2021-2024' that sets out clear goals for future Foreign Direct Investment (FDI) development in regional locations outside of the Greater Dublin Area (GDA) and is aimed at promoting a more balanced national growth in line the targets of Project Ireland 2040, the NPF, and associated regional strategies. "It is IDA's view that allocating 92% of the total growth in future non-domestic water demand to the GDA is contrary to this policy."

Similarly, IDA commented that "a projected increase of just 3% or 8Ml/day for the remainder of the country outside of the GDA does not sufficiently reflect the likely non-domestic demand based on projections for population growth in the NPF and indeed IDA's projections for future industrial FDI in the regions."

The IDA suggested that forecasts for future non-domestic demand need to include;

- adequate capacity for demand associated with the expansion of existing industrial and commercial customer sites, as well as;
- capacity allowance for new greenfield and brownfield industrial and commercial developments not currently connected.

IDA queried the data from Table 4.8 of the Plan that forecasts an increase in non-domestic demand for the South East region would be in the order of 500 m<sup>3</sup>/day to be reached in servicing 2-3 of the 7 zoned strategic sites in its South East portfolio. The IDA commented that "on the basis of the above example of demand forecast, IDA suggests that projections for non-domestic water demand in the South East region (and potentially in all other regions outside of the GDA) are significantly underestimated."

In the South East region defined by the boundary set out in the Uisce Éireann RWRP-SE, the IDA highlighted that they own and manage seven separate strategic landbanks, in the region of 25 hectares that are zoned for industry, high technology manufacturing or related employment-based activities.

IDA advised that depending on the industry sector, water demand to support individual projects at each of these locations could be in the region of 100-300 m<sup>3</sup>/day, or more. IDA noted their objective within a 25-year horizon is to attract and establish facilities in as many of these locations as possible, in line with regional targets for FDI.

IDA suggested that Uisce Éireann reconsider the basis for forecasting future non-domestic water demand for all regions outside of the GDA, and specifically the South East region in this case. "It is requested that the approach to updating the non-

domestic demand forecasts include an assessment of the quantum and location of greenfield land zoned for industry and related water-dependent employment activities.” IDA advised they would be available to engage and collaborate with Uisce Éireann as necessary to provide details of relevant zoned strategic lands, as well as projections for typical water use associated with specific industrial end users.

Tipperary County Council (TCC) advised of their concern that the non-domestic demand could be underestimated, when considering the Industrial and Employment zoned lands in Clonmel, Cahir, Cashel, Carrick-on-Suir, Tipperary, Thurles, and other locations;

- Clonmel is a key town and is designated as a regional economic driver under the Regional and Economic Spatial Strategy for the Southern Region; and
- the Draft Clonmel LAP 2024 -2030 includes a significant quantum of lands zoned for Employment including the Ballingarrane Strategic Employment lands: a secure and sustainable water supply is a key factor in Clonmel realising this role as an economic driver.

The Southern Regional Assembly (SRA) commented that growth rates for non-domestic demand and consumption, existing and future projected in the RWRP-SE, need to reflect the role of City and Metropolitan Areas as growing economic engines of the Region and State.

Furthermore, they noted that Waterford Metropolitan Area has significant enterprise and industrial sectors with future growth planned for high value manufacturing. “It is essential that water infrastructure has capacity to service existing and future industry and enterprise growth, FDI and indigenous enterprise, in the City and Metropolitan Area.”

The SRA queried the assumption in the plan that there will be no significant increase in non-domestic demand for areas outside of towns and cities. “This position should be revised with upward projections for domestic and non-domestic demand across smaller towns and rural areas to ensure there is built in capacity for servicing employment growth and factoring in increased levels of co-working hubs, research and enterprise in rural areas.”

The SRA commented that “domestic and non-domestic growth demand rates need to be robust to build capacity for population and employment growth and inward enterprise development into these settlements.” They cited RSES and the NPF whereby areas with smaller population levels, can have high employment levels and higher than the national and regional average of jobs to resident worker ratios.

The SRA welcomed the statement that UÉ recognise the ongoing work between the Regional Assemblies and the Local Authorities over the process of Local Authority County/City Development Plan reviews as they are core in implementing the NPF and RSES.

The SRA requested that all Key Towns in the Southern Region that fall within the catchment of the RWRP-SE (Gorey, Wexford Town, Kilkenny City, Clonmel, Dungarvan and Thurles) have adequate water services serviced for growth. Consultation with Local Authorities should continue to ensure the actual growth rates targeted at local level for Key Towns (which may exceed 30% growth) is infrastructure led with water services.

The SRA suggested Uisce Éireann consult with IDA Ireland, Enterprise Ireland and Údarás na Gaeltachta to build headroom for enterprise growth and non-domestic demand across both large urban settlements and rural towns. The SRA welcomed the application of additional headroom that factored in consumption demand from tourism and visitors and encouraged continued consultation with Failte Ireland on building headroom for tourism growth in the South East Region.

### 9.2.2 Response of Demand Feedback

Demand forecasting is subject to uncertainty. There is uncertainty in population growth assumptions, consumer behavior and conservation measures and emerging technology. To account for uncertainty, we have included a headroom allowance (safety margin) in our demand forecast.

Our demand forecast is generated using the best available data and information on the key factors affecting demand. This includes consideration of UK industry experience. Acknowledging this uncertainty and the gaps in local data, we have committed to reviewing our supply demand balance to account for new information and potential changes to policy decisions that can influence supply and demand. This commitment is set out in Section 9 of the draft RWRP-SE. This will allow Uisce Éireann to respond to growth and development needs and prioritise water supply investment in collaboration with local authorities.

Within our Framework Plan and RWRP-SE 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. Waterford City and Council, IDA and SRA have raised concerns that this approach may result in a lack of available capacity to accommodate development. However, one of the benefits of the Preferred Approach for the region is that it facilitates an interconnected supply system which will allow flexibility in the location of future non-domestic demand.

Uisce Éireann continually assesses the potential for non-domestic activity through our interface with the Local Authority Planning Sections and the Connection Developer Services Function in Uisce Éireann. Where data on significant non-domestic growth emerges, we will update the SDB and review our Preferred Approaches accordingly.

Growth projections used within the RWRP–SE are based on best available data from the National Planning Framework (NPF) and Regional Spatial Economic Strategies (RSES's). We recognise the ongoing work between the Regional Assemblies and the local authorities over the course of the development of the Local Authority Development Plans which will include consideration of government policy such as Housing for All. 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.

Uisce Éireann acknowledges the SRA comments on growth projections and confirms it has made an allowance for non-domestic growth in towns and cities identified as strong growth areas in Project 2040. For other areas it has been assumed that there will be no significant increase in non-domestic demand as described in Section 4.3.2.3 of the Framework Plan. However, we commit to review policy and trends in relation to indigenous enterprise growth, FDI and growth in consumption demand from tourism and visitors 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 and Chapter 98 of this draft 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.

## **9.3 Supply Demand Balance**

### **9.3.1 Summary of Supply Demand Balance Feedback**

Tipperary County Council (TCC) recognised that the Supply Demand Balance (SDB) and barrier scores are evolving and that UÉ is committed to the annual updating of same as more data are available through assessments and upgrades.

TCC noted that UÉ have developed a 10-year capacity register based on an amended SDB to provide local authorities with an indication of settlements which have potential capacity constraints and that this capacity register will be made available. TCC welcomed input into the proposed process via the feedback loop between UÉ, the regional assemblies and the local authorities. This will enable UÉ to update the SDB annually in line with the data received and allow UÉ to respond to growth and development needs and prioritise water supply investment in collaboration with local authorities and with reference to the County Development Plans and Local Area Plans.

### **9.3.2 Response to Supply Demand Balance Feedback**

We note 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.

It is Uisce Éireann's objective 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.

We will review policy and trends in relation to this over the coming years and refine our growth forecasts as per the monitoring and feedback process set out in section 8.3.8 of the Framework Plan.

## **9.4 Water Quality and Reliability**

### **9.4.1 Summary of Water Quality and Reliability Feedback**

The Construction Industry Federation (CIF) expressed concern that 80% of Water treatment plants (WTP) in the South East Region are identified as needing intervention to reduce risk and give resilience to the safety of water going forward.

Tipperary County Council (TCC) welcomed the Disinfection Programme to address quality risks in Tipperary water supplies. TCC requested that all Tipperary water supplies be included in this programme.

TCC welcomed the UÉ prioritisation of preparing Drinking Water Safety Plans to protect human health by identifying, scoring, and managing the risks to water quality and quantity. TCC welcomed the proposed liaison with UÉ to protect drinking water.

The Environmental Protection Agency (EPA) recommended that UÉ should continue to focus on addressing issues related to supplies currently on the EPA's Remedial Action List and any future additions. They recommend the Plan include a commitment to addressing these issues on a prioritised basis. They stated, "it will also be important for Uisce Éireann to continue to identify and implement actions and mitigation to address risks identified through the drinking water safety plan approach."

The EPA noted another key consideration is that development proposals are only considered where water supply infrastructure capable of servicing this growth is available. "This is to ensure that the land use planning and water resource planning are integrated and remain closely aligned."

### **9.4.2 Response to Water Quality and Reliability Feedback**

We acknowledge the CIF's concern that 80% of water treatment plants have been identified as needing intervention to reduce risk. However, it is important to note that this assessment of 'Quality Need' is not an indicator of non-compliance with the European Union (Drinking Water) Regulations 2023. Instead, it focusses on our ability to provide a reliable supply. It is an indicator of the need to invest in areas of our asset base through resource planning, to ensure that we can address potential risks or emerging risks to our supplies.

Uisce Éireann has developed strategies and initiatives to manage water quality issues that are aligned with the overall Drinking Water Safety Plan (DWSP) strategy. Acknowledging the critical need to reduce risk across our systems, we have prioritised the implementation of several of these strategies, including:

- An interim Pesticide Strategy.
- Cryptosporidium catchment and source risk assessments and treatment barrier assessments.
- Coagulation control, including pH adjustment and streaming-current control arrangements.
- THM monitoring and intervention.
- Disinfection upgrading and standardisation programme, including ensuring necessary Contact Time for effective disinfection before customer use.
- Reservoir cleaning programme.
- Improved distribution network cleaning, including use of new technologies such as ice-pigging.

We welcome TCC's support of the Disinfection Programme which involves over 864 water treatment plants, pumping stations and reservoirs across the country and an investment of €65 million. We assess the condition and performance of the existing disinfection systems across all water supply systems to determine what works are needed to improve these water treatment plants.

Development proposals are assessed 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.

This process will ensure that 'land use planning and water resource planning are integrated and remain closely aligned.'

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-SE 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.

## 9.5 Deficits

### 9.5.1 Summary of Deficits Feedback

Tipperary County Council (TCC) noted that insufficient capacity in any drinking water supply is of concern to TCC in the delivery of the employment and housing growth potential of County Tipperary. TCC supported the interim and preferred options in the RWRP-SE and requests that UÉ provides early capital investment in these areas.

TCC noted that UÉ has identified reliability issues in Mullenbawn, Rossadrehid, Commons, Coalbrook, Clonmel (Poulavanogue) and Crotty's Lake Water Supplies and the critical infrastructural upgrades required to address these issues have been outlined. TCC requested that UÉ accelerates early capital investment to address these issues in these areas.

TCC noted its concern about insufficient capacity to cater for the sustainable delivery of growth within settlements where a deficit is identified over the lifetime of its County Development Plan 2022-2028 and beyond. TCC would welcome clarification of water supply deficits and early engagement with UÉ to understand the implications for sustainable development of these settlements.

### 9.5.2 Response to Deficits Feedback

Our supply demand balance assessments identify water resource zones where the likelihood of experiencing a supply shortfall is greater than two percent in a year. This determines supply deficit. The NWRP proposes a solution to address the supply shortfall for every water resource zone where a deficit is identified across the 25-year planning period.

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. Our NWRP aims to support the growth objectives outlined in development regional and local development plans. 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.

## 9.6 Conclusions on Need

Having carefully reviewed the submissions received on the theme of Needs, Uisce Éireann considered that no updates to the RWRP-SE are required. For completeness, we note that any relevant clarifications and recommendations from



the RWRP-EM, the RWRP-SW and the RWRP-NW have been considered in the development process and finalisation of the RWRP-SE.

## 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.

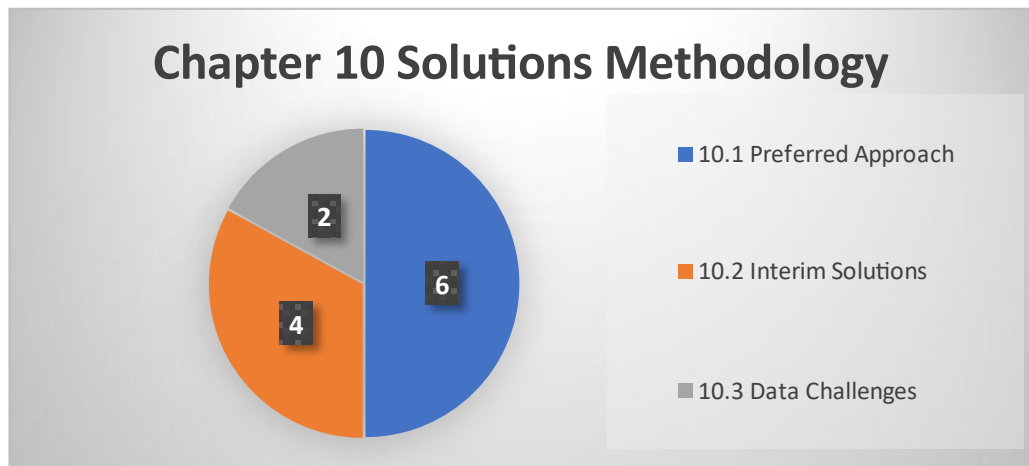


Figure 10.1 Solutions Methodology Theme

### 10.1 Preferred Approach

#### 10.1.1 Summary of Preferred Approach Feedback

Wexford County Council (WCC) requested clarification as to why Davidstown was left out of the supply option for Enniscorthy in the plan. Wexford County Council queried whether the ground water source for Adamstown is available to use as an additional supply for Wexford town and New Ross.

WCC also asked for clarity if Uisce Éireann are obliged to show an alternative approach to the preferred option presented in the plan.

Wicklow County Council (WCC) welcomed the Preferred Approach to rationalise Ballingate Public Supply to Tinahely WRZ as the solution to address current and anticipated water supply deficits. WCC welcomed the proposed increase in ground water abstraction and upgrade for Ballynavortha Water Treatment Plant (WTP) to address current and anticipated water supply deficits. However, WCC noted that there may be limits placed on ground water abstraction under new legislation currently making its way through the Oireachtas. WCC welcomed the Preferred Approach to upgrade the existing WTPs at Raheengraney Public Supply and at Coolboy/Coolafancy Public Supply. They further noted that the Preferred Approach for Coolgreaney Water Supply is in County Wexford and support the proposal to rationalise the supply to Arklow WRZ.

The preferred option identified for the Clonmel Water Supply Scheme is a new abstraction from the river Suir and new WTP at Barne, Clonmel (where a site has been identified). Tipperary County Council (TCC) welcomed the preferred option identified for the Clonmel Water Supply Scheme to provide a secure and sustainable water supply for Clonmel and its environs. TCC commented that the provision of a secure and sustainable water supply for Clonmel is critical. In particular when taking into consideration the town's current limitations and of the growth framework for Clonmel as provided for under the Tipperary County Development Plan 2022-2028, the National Planning Framework (NPF), Project Ireland 2040, and the Southern Regional Assembly Regional Spatial and Economic Strategy (RSES) 2020-2032.

TCC requested that the current Clonmel WRZ WP1 RAL BWN Project (expansion of Monroe Wellfield) be clarified in the RWRP-SE as there is conflicting data in the plan. TCC cited option references TG3-SAK-133 and 138 in Table 5.2 SAK Feasible Options which indicate that the expansion of the Monroe Wellfield is feasible, whereas option references TG3-SAK-135 to 137 in Annex B Study Area K Rejection Register Summary indicate that the proposal to expand the Monroe Wellfield was rejected.

The Office of the Planning Regulatory (OPR) welcomed the preferred approach to the planning of regional water resources to 2044. They commended that Uisce Éireann has arrived at the preferred approach "through a comprehensive and systematic review of the evidence-base, informed by SEA and AA." The Office 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 OPR acknowledged the strategic approach to improving resilience and flexibility on a regional and inter-regional basis.

The OPR also welcomed the identification of the 56 WRZs which require new or increased water supply sources; and the 24 WRZs that require upgrade in capacity and 14 new water treatment plants. It also noted the proposals for decommissioning of existing treatment plans and discontinuing of abstractions, as well as the targeted measures to reduce leakage to 24% of regional demand.

The OPR 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 South East region, most of the which forms part of the Southern Regional Assembly area. The region also overlaps marginally with part of the Eastern and Midland Regional Assembly.

The Southern Regional Assembly (SRA) reiterated the following for the unified NWRP:

- The Regional Preferred Approach and identified benefits are supported and align with Section 8.1.1 of the RSES for Water Supply. Regional Policy Objectives 208-210 support the development of the NWRP and seek strategic water services investment and a move towards a sustainable, secure, and

reliable public water supply in our Region over the 25 years plus horizon while safeguarding the environment. The RSES seeks Uisce Éireann Investment Plans to align the supply of water services with the settlement and economic growth strategy of the RSES and Metropolitan Area Strategic Plans (MASPs) in particular the Waterford MASP of specific relevance to the RWRP-SE. The RSES also seeks that such infrastructure planning takes into consideration seasonal pressures on critical service infrastructure, climate change implications and leakage reduction.

- The final determination of the preferred approach going forward to next stages needs to ensure that robust headroom allowances have been taken into consideration within calculations for existing and future domestic and non-domestic demand.
- To ensure that the Region's competitiveness, to underscore regional parity and balanced regional development, the Study Areas have built in-future service capacity and headroom to attract inward investment, population, and employment growth across the Region (urban and rural areas). This will ensure NPF, RSES and City and County Development Plan targets and ambitions are met for sustainable growth.
- The SRA strongly encouraged the continued partnership approach with Local Authorities to ensure that optimal infrastructure is phased and delivered to guarantee a quality supply to service Core Strategies (urban and rural population and employment growth) through the final agreed Regional Approach.
- The NWRP principles of Lose Less, Use Less and Supply Smarter, which align with the RSES, needs to be delivered through the final approach to ensure sustainable supply, protect water resources and transition to a smarter, climate resilient region.
- The SRA strongly encourage UÉ to make the business case to Central Government on the critical need to invest in water infrastructure and deliver the recommendations under the NWRP and final approach through capital investment.

Inland Waterways Association of Ireland (IWAI) noted several references to new surface water abstractions in Enniscorthy and Carrick-On-Suir and is confident that there will be little impact to navigation potential on these rivers. IWAI also welcomed the recognition by Uisce Éireann of the potential negative impact on the Special Areas of Conservation of the River Barrow and the River Nore in the rejection of certain solutions including the Surface Water Abstraction in Graiguenamanagh.

### **10.1.2 Response to Preferred Approach Feedback**

The RWRP – SE sets out Preferred Approach for both Wexford Town (TG3-SAM-149) and New Ross (TG3-SAL-073) Water Resource Zones at plan level. The Preferred Approach for both WRZs is a new groundwater abstraction / wellfield located at Adamstown and new water treatment plants.

Regarding WCC's query on the preferred approach for Davidstown WRZ, we confirm that the option to connect Davidstown to Enniscorthy for increased resilience was identified and appraised as part of our Option Development Process. The option was assessed as not feasible due to the significant length of pipeline required to meet the small demand, which would result in water quality issues. The option did not meet the Deliverability and Flexibility screening criteria and was therefore not taken forward for further appraisal. Through our supply demand balance assessment, we have determined that an additional supply source for Davidstown is not required for this planning period. This will be reassessed in the next iteration of the Plan.

Under the SEA Directive (Directive 2001/42/EC), Uisce Éireann is required to consider reasonable alternative approaches to deliver the plan's objectives. Our option development process incorporates the identification of a wide range of solutions to address the water supply needs across the region. These solutions are assessed against criteria that align with national policy objectives to identify the best value solutions. Alternative options that were assessed and screened out are described in the technical appendices. Further information on our approach to assessing alternatives is provided in section 8 of our Framework Plan and Section 6 of the RWRP-SE.

As for the Alternative Preferred Approach for County Wexford, development in many of the WRZs of Study Area M is currently constrained by capacity limitations in our existing supply system. Eleven (11) of the 26 WRZs in the study area have limited capacity. The proposed Preferred Approach proposes to address almost 90% of the 2044 Deficit in the study area with increased or new groundwater abstractions that will serve 14 WRZs. However, the available yield of the groundwater sources is based on a plan level assessment that relies on limited available information. If project level assessments indicate a lower-than-expected yield from groundwater sources, a higher volume supply source may be required to supplement the groundwater sources of the preferred approach and meet medium to longer term growth across the study area. Therefore, we have included the alternative Preferred Approach as the next best solution to address the study area Needs which involves interconnecting 13 WRZs located in County Wexford to the Greater Dublin Area in the Eastern and Midlands Region, via the Rathvilly WTP. This option will require new pumps, storage and approximately 140 km of new watermain. The option performed best against four of the best value assessment categories – Best AA (biodiversity), Best Environmental, Lowest Carbon and Most Resilient. This was associated with the benefits from the interconnection which decommissions seven (7) additional WTPs, abandons ten (10) additional abstractions and requires three (3) fewer new WTPs than the Preferred Approach.

Uisce Éireann welcomes Wicklow County Council's support for the preferred approach for Ballingate, Ballynavortha, Coolboy Coolafancy and Coolgreaney water supplies. We note there may be limits placed on groundwater abstraction under new

legislation. If this impacts future supplies, Uisce Éireann will identify and assess alternative options through our optioneering process.

In response to Tipperary County Council's query regarding the feasibility status of the options to expand the Monroe Wellfield, we clarify that the options TG3-SAK-135 to 137 were rejected as they form part of Group Options that require a higher abstraction volume than the feasible options TG3-SAK-133 and 138. The latter are WRZ Options to partly supply the deficit in Clonmel only. The abstraction volume associated with the rejected options is likely to exceed the sustainable yield of the aquifer. We have amended the rejection reason for options TG3-SAK-135 to 137 in Annex B Study Area K Rejection Register Summary, accordingly.

Uisce Éireann welcomes the OPRs' comments on the preferred approach to the planning of regional water resources to 2044.

We recognise the ongoing work between the Regional Assemblies and the local authorities over the course of the development of the Local Authority Development Plans (LADPs) and as advised by the EPA, we will continue to work closely with the SRA and local authorities over the lifetime of the NWRP. We have considered the settlement and economic growth strategies outlined in the RSES and MASPs to support the integration of land use planning and water resources planning as promoted by the National Planning Framework. The interaction between the planning system and Uisce Éireann's plans and programmes is outlined in Figure 2.4 of the draft RWRP-SE. The NWRP takes into account seasonal pressures, climate change and leakage reduction in our assessments. Our water demand forecasts include the impact of tourism, particularly during the summer months when local demand is elevated.

As outlined in Section 4.4 of the Framework Plan, we acknowledged there may be some uncertainty in our estimation of future growth. Therefore, 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 and to ensure that the preferred approach is sized appropriately to meet future required needs. 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) methodology; and
- Improve our data collection to facilitate a more robust headroom analysis.

Within our Water Services Strategic Plan (2020) we acknowledge the critical need to invest in water infrastructure and commit to development and delivery of the National Water Resources Plan. Uisce Éireann 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.

Uisce Éireann welcomes IWAI's confirmation that the new proposed surface water abstractions for Enniscorthy and Carrick-on-Suir will have 'little impact' on navigation on these rivers.

## 10.2 Interim Solutions

### 10.2.1 Summary of Feedback on Interim Solutions

AFU recommended that a more holistic, integrated approach is adopted in the context of Integrated Catchment Management and Framework for Integrated Land and Landscape Management which should include source protection measures. "This could reduce dependencies on infrastructural and treatment solutions to achieve adequate water quality (i.e., end of pipe approaches)." AFU further recommended that UÉ outline the necessary engagement with leading agencies to address these source protection measures, "with more consideration of 'front of pipe solutions.'" AFU recommended the UÉ increase their staff capacity to include personnel with expertise in integrated catchment management.

Furthermore, AFU noted there are additional responsibilities and commitments for Uisce Éireann under the Recast Drinking Water Directive which requires a preventative approach to source protection, favouring actions to reduce pollution at source by introducing the risk-based approach. AFU therefore recommended that these commitments be reflected in the Regional Plan, outlining how UÉ will implement source protection in the South East region.

The Construction Industry Federation (CIF) welcomed the interim shorter- and medium-term solutions to be implemented to meet the current and short-term water infrastructure demand while the longer-term plan can be implemented in full. CIF noted the importance of the RWRP-SE to support growth and economic development across the South East Region.

The EPA noted that the Plan sets out the reasoning behind the need for interim solutions to be provided prior to full implementation of all the aspects of the Plan. They further stated, "while implementing these interim solutions, human health and environmental protection should continue to be critical aspects to consider during this phased move to implementing the preferred approaches."

Tipperary County Council (TCC) noted the UÉ preferred and interim upgrade options for the Tipperary water supplies and recognised that the scale of investment required will take a number of investment cycles. However, TCC noted the following areas whereby UÉ has identified current and future water quantity issues in its Supply Demand Balance calculations; Glengar, Coalbrook-Commons, Fawnagown, Tipperary, Templemore-Templetohy, Templetney-Brackford Bridge, Kilcash, Galtee Regional, Tullohea, Dundrum Regional, Clonmel Town and Environs, Carrick-on-Suir, Burncourt-Ballylooby and Ardfinnan Water Supply Schemes. As well as



significant existing deficits for the Galtee Regional, Ardfinnan Regional and Clonmel Town and Environs Water Supply Schemes.

TCC highlighted that these water schemes supply water to approximately 77,000 people in County Tipperary and insufficient capacity in any drinking water supply is concerning to TCC in its delivery of the growth potential of County Tipperary, in attracting employment and in the provision of housing opportunities. TCC noted their support of the interim and preferred options in the RWRP-SE and requests that UÉ provides early capital investment in these areas.

TCC highlighted the Clonmel Local Area Plan (LAP) 2024-2030 which is at draft stage after recently undergoing public consultation. A submission to TCC on the Draft LAP from UÉ noted the water supply capacity limitations in Clonmel and that UÉ proposed to expand the Monroe Wellfield, to provide additional capacity. TCC noted that this project is currently underway and is welcomed. However, they noted that Table 6.1 does not reference this project as an Interim Option in the RWRP-SE.

### **10.2.2 Response to Feedback on Interim Solutions**

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/>). The aim of the strategy is to protect drinking water sources from pesticide contamination and to improve the quality of sources, 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.

As part of the Recast of the Drinking Water Directive transposition, an Expert Group has been established by the DHLGH to make recommendations to the Minister regarding a new approach to drinking water source protection. In recognition of the importance of multi-stakeholder collaboration in managing shared natural resources, Uisce Éireann are members of this group and 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.

We welcome the Construction Industry Federation (CIF) and Environment Protection Agency (EPA) support of the proposed interim measures.

We also welcome and acknowledge Tipperary County Council's support of interim and preferred options in the RWRP-SE. Regarding the specific query on the expansion of the Monroe Wellfield to provide additional supply capacity to Clonmel, we clarify that this option was unsuitable as the preferred approach to secure supply

over the long term as Monroe Wellfield does not fully provide for the long-term need required for Clonmel Water Resource Zone. For this reason, the expansion of Monroe Wellfield is progressed as interim option for Clonmel. Further information on interim solutions is provided in Section 7.6 of the draft RWRP-SE.

## 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 UÉ in the assessment of their proposed plans for the South East Region are included in the final Plan. “Addressing the current data limitations is crucial for having more transparent and informed decisions, in particular data gaps around catchments and water bodies, with the consideration of the broader environmental capacity (catchment-based assessments), rather than just the infrastructure capacity.”

AFU also noted that the accumulative impacts of abstractions should be assessed in an integrated catchment management approach for greater resilience and environmental protection.

Furthermore, AFU recommended that UÉ should include scheduled actions in the RWRP-SE to address current data gaps to accurately assess hydrological balances and supply-demand estimates, with a clear outline of tangible goals and timelines. Details should also be included of the relevant external cooperation requirements such as formal collaboration between UÉ and the EPA, GSI, ongoing projects such as the GW3D project.

Geological Survey Ireland (GSI) agreed that improved monitoring and gathering better data on quantifying the natural resources should be a priority. However, GSI noted that neither Section 9.3 Future Actions, which outlines a list of commitments subject to funding identified by UÉ to support the implementation of the NWRP, nor elsewhere in the draft plan does UÉ “include a commitment to, or a plan of how they are going to, improve the collection and interpretation of data such as groundwater levels, pumping test data, pumping rates...to better understand and quantify the natural water resources in the South East region.”

### 10.3.2 Response to Data Challenges Feedback

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 outlined in Section 6.4 of the RWRP-SE, 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 that greater certainty in our estimates can be gained through improved data for our baseline supply assessments and forecasts. As outlined in Section 9 of the RWRP-SE, which sets out our commitment to continuous monitoring of the plan, Uisce Éireann will develop and deliver a 5 to 10-year data and intelligence improvement programme 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.

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-SE and discussed above.

#### **10.4 Conclusions on Solutions Methodology**

Having carefully reviewed the submissions received on the theme of Solutions Methodology, Uisce Éireann has amended Annex B Study Area K Rejection Register Summary to clarify that options TG3-SAK-135 to 137 are rejected as they form part of Group Options that require abstraction volumes that are likely to exceed the sustainable yield of the aquifer. Uisce Éireann considered that no further updates to the RWRP-SE are required. For completeness, we note that any relevant clarifications and recommendations from the RWRP-EM, the RWRP-SW and the RWRP-NW have been considered in the development process and finalisation of the RWRP-SE.

## 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 seven submissions in relation to the theme of Regional Plan Consultation Process.

### 11.1 Regional Plan Consultation Process

#### 11.1.1 Summary of Regional Plan Consultation Process Feedback

Transport Infrastructure Ireland (TII) stated that to achieve common national goals there is an essential need to coordinate the planning and delivery of interrelated state infrastructure development, including identifying a coordinating mechanism to ensure proposals brought forward by State bodies, statutory undertakers and the private sector are integrated. TII welcomed the consultation on the RWRP-SE.

The National Federation of Group Water Schemes (NFGWS) noted that following previous discussions with Uisce Éireann in relation to the other three RWRPs, Uisce Éireann outlined the course screening exercise undertaken to date and explained its intention to consult directly with specific GWSs and the NFGWS where options being assessed advance as the ‘preferred option’ for Uisce Éireann. The NFGWS welcomed such consultations, however they highlighted that GWSs are community owned, democratically controlled, private supplies with each individual scheme being owned and controlled by its members. The NFGWS advised that any decision in relation to schemes participating in such options will have to be made democratically by the schemes’ members, and any final decision must be respected.

Tipperary County Council (TCC) welcomed the opportunity to make a submission on the draft RWRP-SE and trust that their submission will be of assistance to Uisce Éireann in finalising the preparation of the RWRP-SE.

Geological Survey Ireland (GSI) addressed their observations on the Plan, specifically on how groundwater had been assessed and recommended that for their observations to be dealt with in a coherent and comprehensive manner further discussion and consideration is necessary. Therefore, GSI advised that specific bilateral discussions between GSI and Uisce Éireann would be beneficial.

In their submission, the Southern Regional Assembly (SRA) acknowledged Uisce Éireann's iterative process of engagement with stakeholders and noted they collaborated positively with Uisce Éireann on several initiatives. The SRA welcomed this consultation opportunity with Uisce Éireann on the Phase 2 of the NWRP and stated they are a committed stakeholder and key consultee for Uisce Éireann under the final NWRP and the Phase 2 RWRPs. The SRA encouraged continued engagement between the SRA and Uisce Éireann on the NWRP and expect their recommendations to be taken on board to help strengthen the final unified NWRP from the Region’s perspective. The SRA further welcomed the opportunity to engage

with Uisce Éireann on these recommendations and is available for future consultation and clarities as required.

Inland Waterways Association of Ireland (IWAI) commented that Waterways Ireland, as the navigation authority for the navigable inland waterways, should be included in all stakeholder discussions with Uisce Éireann. IWAI requested that WI are continually informed of the RWRPs progress so they can engage in any related consultation process.

### **11.1.2 Summary of Regional Plan Consultation Process Feedback**

Uisce Éireann appreciates Transport Infrastructure Ireland (TII) support for the RWRP-SE. We will continue to liaise with Transport Infrastructure Ireland and with other key stakeholders, throughout the implementation phase of the NWRP to minimise risks and disruption to the public.

In response to NFGWS, 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-SE, where appropriate, we considered meeting Water Resource Zone 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.

Uisce Éireann welcomes Tipperary County Council's submission on the Draft RWRP-SE. We will continue to collaborate with Tipperary County Council through the progression of the NWRP.

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 is set out in figure 9.1 in the RWRP-SE.

Uisce Éireann appreciates Southern Regional Assembly (SRA) support for the RWRP-SE. We will continue to liaise with Southern Regional Assembly (SRA) and with other key stakeholders, throughout the implementation phase of the NWRP.

Uisce Éireann held a briefing with Waterways Ireland in November 2022 during the public consultation for the RWRP North West. Waterways Ireland also made a

submission to the consultation on the RWRP-NW which Uisce Éireann responded to. Waterways Ireland has been consulted and referenced as a stakeholder in the RWRP-SE.

## **11.2 Conclusions on Regional Plan Consultation Process**

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

## 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 one sub theme: Phasing. We deal with this sub-theme in this Chapter, setting out first a summary of the relevant mentions in the submissions, followed by our response.

### 12.1 Phasing

#### 12.1.1 Summary of Phasing Feedback

Tipperary County Council (TCC) recommended that the final Uisce Éireann Investment Plan 2025 to 2029 should incorporate any significant amendments from the RWRP-SE. TCC suggested that prior consultation should also take place with TCC in relation to amendments that may potentially affect the future growth of County Tipperary. Tipperary Social Democrats commented that the “plan does not clearly lay out the funding that sits behind the remedial actions/improvements outlined in the plan.”

They further commented their uncertainty on whether the plan was fully funded, and that lack of a detailed budget will impact delivery. They also suggested that “funding and educational programs should also be considered to help reduce/improve “risky” activity like agricultural activity.”

The Construction Industry Federation (CIF) commented that “It is critical that UÉ NWRP 25-year strategy (2019 to 2044) will identify how UÉ will provide a safe, sustainable, secure and reliable water supply to the region.” As a result of historic underinvestment, the CIF noted that many of Uisce Éireann’s treatment facilities, pumps and water main networks within these supplies are in poor condition. The further commented that if no action is taken, population growth, continued aging of our water supply infrastructure and climate change will lead to further deterioration in this situation over time.

The CIF acknowledged it will take a number of investment cycles to deliver the preferred approach to meet the South East water needs, however, they commented that the “ambition to build these critical infrastructure projects in order to facilitate the growing population must remain strong. The CIF further commented it as frustrating to hear that “It is likely that it may take 5-10 investment cycles before we address all issues with the existing water supplies”. They reiterated the industry’s capacity to meet the challenge of building €5 billion worth of UÉ Capital projects by 2024.

The CIF highlighted the critical need for this Plan to be delivered. The CIF stated that capital projects identified in the plan will also be subject to planning which can take a long time to achieve. They also noted that individual environmental assessments will be required in support of planning applications and these applications will also be subject to further rounds of public consultation. Furthermore, the CIF that future



investment needed to deliver these must also be identified and quantified through UÉ's economic regulatory process in line with government policy.

The CIF welcomed 143 interim short term capital maintenance solutions for all Water Treatment Plants (WTPs) to allow Uisce Éireann time to deliver the Preferred Approach, while maintaining a sustainable water supply. The interim solutions are generally smaller in scale and rely on existing infrastructure.

The CIF commented "it is important for residential developers to know what Uisce Éireann Infrastructure projects planning, the required funding, and the project delivery schedule have, in order to organise their own future residential developments." Furthermore, they stated that a foresight on upcoming projects is needed for Civil Construction companies to invest in the required plant, skills, and equipment.

The CIF noted that a key concern is the delivery of housing supply at a time when the housing market is struggling to meet the growing population's demands. "To support the delivery of quality water and waste-water infrastructure provision, it is vital that adequate funding is provided." They commented that the plan should consider "housing supply a core pillar in its investment strategy...taking into account what projects will unlock housing delivery is an important consideration."

The CIF noted that the water supplies in the South East Region require significant transformation and investment to meet the requirements of the future population of the region. They highlighted that population has grown much faster in the region than predicted and stated it as "vital that the projects identified in this plan are included in Uisce Éireann's five year regulated capital investment plan."

Transport Infrastructure Ireland (TII) highlighted that there is a critical requirement to ensure the strategic capacity and safety of the national road network is maintained and significant Government investment already made in the national road network is safeguarded. They further highlighted that the national road network caters for strategic inter-urban travel and links regions, cities, and internal markets as well as port and airport locations for international connectivity and provides critical lifeline links to more peripheral locations.

Therefore, TII recommended the following matters are considered by Uisce Éireann with respect to general and specific implications for the National Roads Network for the RWRP-SE:

1. National Roads and Policy

In accordance with the National Planning Framework, National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the national road network. This requirement is further reflected in the National Development Plan, the National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 Spatial Planning and National Roads Guidelines for Planning Authorities.

TII highlighted in their experience, “the provision of water related schemes along the national road network can, if not planned and executed appropriately, create implications for TII and road authorities in the management and maintenance of the strategic national road network.”

TII noted a number of locations where potential schemes and projects could interface with both the existing and future national road network. They requested that the RWRP-SE and associated projects “should not compromise the construction of the future national road schemes or create adverse implications for the existing national road network in this area.”

In, considering the national planning policy, TII commented that the RWRP-SE needs to establish a relationship between the location of any proposed development and the national road(s) in the area of:

- existing national roads,
- proposals to provide new national roads or improve existing national roads,
- interaction with any national road structures, and
- means of access to/from the development to/from the national road(s).

TII welcomed further consultation as the RWRP-SE and associated implementation proceeds and suggested that Uisce Éireann “should review the existing development protocol with TII to address this and other future projects.”

## 2. Specific Issues to consider for Projects

### a) Traffic Management and Safety.

TII highlighted it is important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network, associated national road junctions and junctions of lower category roads with national roads.

Critically TII requested that the traffic assessment should identify the trips/traffic generating potential of the proposed development and the manner in which this will be catered for and accommodated during construction phase, including haul routes, necessary repairs, and maintenance access thereafter.

TII mentioned the Authority’s Traffic and Transport Assessment (TTA) Guidelines (2014) should be referred to and these include guidance on the preparation of TTA for sub-threshold development. In addition, TII publications should be consulted to determine whether Road Safety Audit(s) are required for schemes.

### b) Crossings

TII pointed out that any crossings of the existing motorway network will require approval from TII under Section 53 of the Roads Act, 1993 (as amended). They requested that any methods or techniques employed in traversing the existing

national road network should ensure that the safety and standards of the national road network are maintained through appropriate best practice construction methods.

In particular, such construction methods and safety standards should be determined in consultation with, and shall be subject to the agreement of, TII and the relevant County Council. In circumstances where the crossing arises on a section of road that has been contracted to a third party under a Public-Private Partnerships (PPP) Contract, the PPP Company should be consulted. TII required specific plans and details for these discussions.

TII commented that in respect to motorway and national road crossings, TII consent and agreements for the construction of a pipeline should ensure for the following basic principles (subject to allowances for local conditions) being met:

- The launch and reception pits for the Pipeline are located outside the road reservation,
- The Pipeline will be installed at such depth so as not to conflict with the drainage for the Motorway or existing national road drainage system,
- Neither the Works nor the Pipeline will damage or interfere with the Motorway or national road,
- There are no bolted joints in that part of the Pipeline traversing the road reservation, and
- Any maintenance and/or future planned upgrades of the Pipeline at the crossing location can be carried out without access to the road reservation.

#### c) National Road Structures

TII remarked that where new structures may be proposed on national roads, the developer is reminded of the requirements of TII's Publication DN-STR-03001 - Technical Acceptance of Road Structures on Motorways and Other National Roads. This Standard specifies the procedures to be followed in order to obtain Technical Acceptance for structures on motorways and other national road schemes and for the submission of as built records.

Furthermore, TII highlighted that Uisce Éireann should be aware there is Technical Acceptance requirements relating to the assessment, alteration, modification, strengthening and repair of all existing road structures (national roads) and same shall be agreed with the Bridge Management Section of TII.

Given the nature of potential schemes in the RWRP-SE, TII recommended the following may need to be undertaken:

- Hydraulic analysis to identify the impact of proposed works on the hydraulic capacity of any TII Structures impacted and the potential for scour at the structure.
- An assessment of scour and other hydraulic actions on national road structures in accordance with UK BD 97/12 should be undertaken where

necessary. Scour prevention measures will be required if the assessment illustrates the potential for scour beneath the foundations.

TII welcomed further consultation as the RWRP-SE designs scheme proceeds and would suggest that Uisce Éireann should review the existing development protocol with TII to address this draft plan and future projects and schemes.

### 12.1.2 Response to Phasing Feedback

In response to Tipperary County Council, the Preferred Approaches identified through this process will be prioritized 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 Tipperary Social Democrats, no statutory consent or funding consent is conferred by inclusion in the NWRP. It will take several investment cycles to deliver the Preferred Approach across all WRZs in Ireland. Any projects that are progressed following this plan will require individual environmental assessments, including, where appropriate, Environmental Impact Assessment and Appropriate Assessment (as required), in support of planning applications (where a project requires planning permission) or in support of licensing applications (for example, for new abstractions). These applications will also be subject to further rounds of public consultation. The future investment needed to deliver these projects must also be identified and quantified through Uisce Éireann's economic regulatory process in line with government policy. More information on project level assessments is provided in Section 6.4. of the RWRP-SE.

The outputs from the RWRPs for all supplies will be assessed nationally and prioritised on an equivalent basis for future investment plans. Uisce Éireann is regulated by the Commission for the Regulation of Utilities (CRU), and one of the prioritisation criteria for our investment plans is Growth and Economic Development.

The phasing and timeframes for delivery of individual projects will be determined through the capital investment process with continual dialogue with the Regional Assemblies and the relevant local authority housing and planning functions, when prioritising growth projects through our Capital Investment Plans.

Uisce Éireann currently provides detailed information on water services and information regarding projects in our Capital Investment Plans. This information is used by the relevant local authorities when formulating their Development Plans. We have also developed a ten-year capacity register

<https://www.water.ie/connections/developer-services/capacity-registers/water->

[supply-capacity-register/](#)) that enables us to interface with the Regional Assemblies and the local authority planning departments during the delivery of the NWRP.

As it will take a number of investment cycles to deliver the Preferred Approach across all Water Resource Zones (WRZs), 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-SE we have identified interim solutions that will be utilised when needed. These solutions will allow Uisce Éireann time to deliver the Preferred Approach, while at the same time, maintain a sustainable water supply. These interim solutions are smaller in scale and rely on existing infrastructure.

Transport Infrastructure Ireland (TII) highlighted that there is a critical requirement to ensure the strategic capacity and safety of the national road network. The potential impacts to transport infrastructure during the construction phase of feasible options was considered in the option assessment process and this will be further considered at project level. We will continue to liaise with the TII and other stakeholders and interested parties throughout the development of the RWRPs.

## **12.2 Conclusions on Plan Implementation**

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

## 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 seven 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.

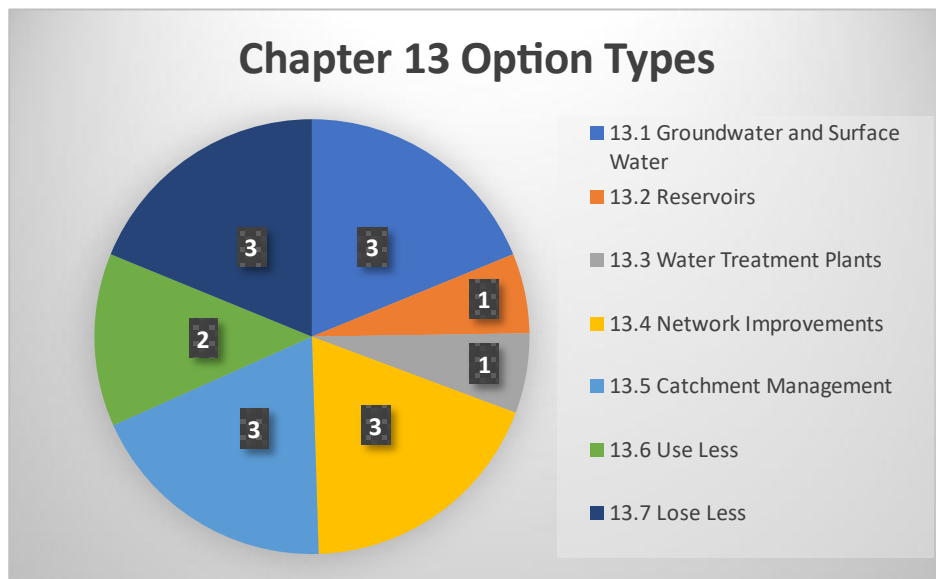


Figure 13.1 Option Types Theme

### 13.1 Groundwater and Surface Water

#### 13.1.1 Summary of Ground Water and Surface Water Feedback

DECC Geological Survey Ireland (GSI) noted that Uisce Éireann outlined the importance of understanding the natural water resources available in the South East region. However, they commented that despite the statements in Section 2.2 (“the available natural resources and the interaction between surface water and groundwater are important considerations when assessing the baseline of our existing water sources, identifying options to support increased water demands, and managing the quality of the water we supply”) and Section 10.1 (to understand the current state of our assets and its surrounding environment, the draft RWRP-SE reviewed the: External baseline across the South East in term of natural resources, population growth and economic development, and impacts of climate change”) “little emphasis is placed on understanding the natural water resources in the South East region”.

GSI welcomed the commitment in Section 9.3 Future Actions to integrate GSI's Regional Groundwater Assessments into the NWRP desktop studies as the information becomes available. GSI welcomed the opportunity to discuss the results of these studies with Uisce Éireann.

GSI welcomed the opportunity to work with Uisce Éireann to better understand the sustainability of our groundwater sources. GSI commented that the RWRP-SE needs to expand more on the impact of upcoming abstraction legislation on groundwater resources. GSI observed that regulations are yet to be finalised and the relevant information to assess the potential impacts of the upcoming legislation is not yet available. However, they noted upcoming abstraction legislation will apply to groundwater and surface water supplies. GSI suggested “to understand the impact of Uisce Éireann’s current abstractions and discharges on the water environment, and therefore to be able to assess sustainability and resilience of future options, a catchment-scale cumulative assessment of all abstractions and discharges is required.”

GSI’s highlighted that their Ground Water Climate project is currently assessing the impact of climate change on groundwater in Ireland. The project is developing predictive future groundwater recharge maps and developing other methodologies to understand and quantify the impact of climate change on Ireland’s groundwater resources. GSI would welcome future project and research collaboration between Uisce Éireann and GSI focused on the impact of climate change on Irish groundwater resources. They noted “it is important that Uisce Éireann consider the outputs from the GSI GW climate project on the impacts of climate change on Irish groundwater resources into their resource planning.”

The Environmental Protection Agency (EPA) advised the new abstraction legislation ‘The Water Environment (Abstractions and Associated Impoundments) Act 2022’ will lead to the establishment of a licensing regime that may overlap in timelines between finalising the RWRPs, and the licensing regime commencing. They commented that the main impact will be on any proposed new abstractions or proposals to increase existing abstractions. The EPA further advised the requirements of the Environmental Impact Assessment and Habitats Directive should be taken into consideration, as appropriate and where relevant.

The EPA stated the abstraction legislation and associated licensing regime will identify the sustainable abstraction yield(s) and will conclude on the conditions that should be met for each abstraction. They observed any decisions made by Uisce Éireann on abstractions arising from this planning process may be subject to change or conditionality to satisfy the legislative requirements.

The EPA highlighted that the Group Water Scheme (GWS) sector and associated GWSs are being reviewed, in advance of the next Rural Water Programme being prepared by the Department of Housing, Local Government and Heritage. They said that given there are overlapping programmes and schemes, it is important that a coordinated approach is considered, in any future licensing regime to be implemented related to GWSs.

### **13.1.2 Response to Ground Water and Surface Water Feedback**



In response to the submission made by GSI, Uisce Éireann acknowledges that more work is required to understand the impact of the abstraction legislation on groundwater resources. Recognising that there will be greater clarity on the sustainability of existing and future abstractions once the new abstraction legislation and regulations are confirmed. Over the coming years, Uisce Éireann will work with the environmental regulator, the EPA and the GSI, to develop desktop and site investigation systems to better understand the sustainability of our groundwater sources (informed by data gathered as part of GSI's ongoing Groundwater 3D project). As further data becomes available, and more specific Irish standards are developed, Uisce Éireann will update the NWRP as appropriate using the monitoring and feedback process set out in Section 9 of this draft Plan.

Uisce Éireann acknowledges that the licensing regime will identify sustainable abstractions / yields and have called out that we foresee requirements for modifications to the way that UÉ currently abstract from our individual water sources. Recognising that there will be greater clarity on the sustainability of existing and future abstractions once the new abstraction legislation and regulations are confirmed. Uisce Éireann notes the benefits raised by not decommissioning a source fully until alternative solutions are operational.

Uisce Éireann will engage fully with the requirements of the new legislation on abstraction.

We also acknowledge that where sources are deemed to be unsustainable by the EPA, GWSs could consider alternative sources to ensure sustainability.

## **13.2 Reservoirs**

### **13.2.1 Summary of Reservoirs Feedback**

Wexford County Council queried if the reservoir in Coolree be explored further and expanded in the future as an additional water resource for Wexford town.

### **13.2.2 Response to Reservoirs Feedback**

Coolree Reservoir will be maintained as a water supply for Wexford Town. However, desktop yield assessment was carried out at plan level and determined that yield in Coolree Reservoir is limited and will be unable to supply full need for Wexford Town. Site specific hydrological assessment of yield will be required to confirm the volumes of water we can sustainably abstract for water supply from Coolree Reservoir.

## **13.3 Water Treatment Plants**

### **13.3.1 Summary of Water Treatment Plants Feedback**

An Fórum Uisce (AFU) noted that any proposed upgrades to infrastructure in the Regional Plan will be long-term investments, going beyond the 25-year horizon of the draft Plan. But commented that “a level of futureproofing is recommended to be considered into the plan, particularly in the face of climate change as part of the

design studies of those works (e.g., design life usually considered for 50 or 100 years for such works).” They highlighted the economic and environmental benefits and the future resilience of the infrastructure assets. AFU recommended the consideration of sea level rise should be included in UÉ’s planning processes for upgrades of water treatment plants in coastal areas of the South East Region to support resilient water services in the long term (i.e., >100 years).

AFU recommended 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.

### **13.3.2 Response to Water Treatment Plants Feedback**

Uisce Éireann has considered the impact of climate change on our sources and on our water demands in the preparation of this plan. Headroom allowance is calculated with reference to conservative demand estimates to consider the likely impact of climate change.

Conservative Climate change factors were applied to the estimated yield from our sources. These climate change factors were determined further to our extensive research with the Irish Climate Analysis and Research Units (ICARUS) Department in NUI, Maynooth, under the Climate sensitive catchments project. This project 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 impact of climate change on water usage has also been considered as customers also use more water during dry weather such as droughts and we considered this in a dry year critical period peaking allowance.

Further to this the Preferred Approach was assessed against adaptability under the following headings - Sustainability, Climate Change, Demand Growth and Leakage Targets. The details of this sensitivity analysis are included in the Study Area reports and the SEA Environmental Report. Further assessment of climate change impacts will be done at project level through hydrological and hydrogeological modelling work.

Uisce Éireann's approach to managing risk to drinking water supplies has not changed since becoming the single public utility for public water. Section 6.3 of the NWRP Framework Plan outlines our approach to managing risk to drinking water supplies which will support quality control of drinking water production. Uisce Éireann is adopting the World Health Organization’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, in compliance with our legislative obligations, including the 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-SE.

## 13.4 Network Improvements

### 13.4.1 Summary of Network Improvements Feedback

Waterford County Council highlighted several locations across Waterford where known constraints exist in the water network, and these are set out in the tables attached to their submission. WCC requested these constraints be addressed promptly under the draft RWRP-SE to facilitate future employment and population growth.

Councillor Thomas Breathnach highlighted that there are a number of water outages in the general Mooncoin area of South Kilkenny. Cllr Breathnach “there is a need for major investment in the pipe network to reduce the incidences of water outages and because the long-term replacement cost of the pipe network will be lower than the cost of the repeated repairs that are required to be carried out.” Cllr Breathnach noted that there are six sections of the network within the Mooncoin area which currently need investment and that the Clogga Cross to Tubrid Reservoir is at design stage with works due in 2024:

Supply		Leaks	Length (M)
Mooncoin Water Supply	Clogga Cross – Tubrid Reservoir	32	200
	Grannagh Lickettstown	42	3330
Clonassy Water Supply	Grange	37	1200
	Portnahully	31	500
	Polerone	38	1400
	Chapel Street	30	1000

Cllr Breathnach noted that L3405 from Miltown to Dunkitt has been subject to frequent leaks would be a candidate for pipe replacement.

Tipperary County Council highlighted that Clonmel (Poulavanogue), Galtee Regional, Kilcash, Templemore-Templetohy, Farranamagh and Springmount are on the EPA Remedial Action List. TCC requested that UÉ accelerates early capital investment to address the relevant issues in these areas to enable their removal from the RAL as soon as possible.

### 13.4.2 Response to Network Improvements Feedback

Waterford County Council specified the need for Uisce Éireann for network upgrades in the specific areas across County Waterford. This was considered in the Draft RWRP-SE.

In response to the comments on the water outages in general Mooncoin area raised by Cllr Thomas Breathnach, Section 5 of the draft RWRP-SE 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 m<sup>3</sup> /day. We note the specific issues raised by Cllr Thomas Breathnach has been passed on to the mains rehab team.

In response to Tipperary County Council request to accelerate early capital investment to address 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.

Also as set out in Section 9, Preferred Approaches will be reviewed in the event of any changes to the Drinking Water Directive and Irish Drinking Water Regulations to ensure that any additional or revised obligations such as further treatment requirements are accounted for. The Preferred Approaches identified through this process will be prioritized 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 prioritizing projects through Uisce Éireann's Capital Investment Plans, we will ensure that these decisions are based on dialogue with the EPA and ensure improvement in water quality is a key metric that feeds into the prioritisation of projects.

Section 7.6 of the draft RWRP-SE 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.

## **13.5 Catchment Management**

### **13.5.1 Summary of Catchment Management Feedback**

An Fórum Uisce suggested that UÉ raise awareness on integrated catchment management internally to augment the implementation of 'front of pipe' solutions.

Tipperary County Council (TCC) noted UÉ commitments to:

- develop a representative raw water sampling strategy;
- develop a live water quality reporting mechanism within an appropriate timeframe; and

- develop a strategy to improve understanding of supply risk, including source risk assessment studies, supply assessments, source surveys, source monitoring, and source models to facilitate a greater understanding of supplies and roll-out of appropriate studies.

TCC noted that UÉ has commenced its source rationalisation programme in County Tipperary to reduce the amount of water supplies through amalgamation. TCC supported this programme as it reduces the level of treatment and source protection activities required.

DECC Geological Survey Ireland (GSI) remarked that to understand the impact of Uisce Éireann's current abstractions and discharges on the water environment and to be able to assess sustainability and resilience of future options “a catchment-scale cumulative assessment of all abstractions and discharges is required.” GSI commented that “Uisce Éireann’s approach is based at the Water Resource Zone scale and does not include the necessary catchment scale approach.” GSI noted that the four regional group areas and the smaller RWRP-SE study areas do not reflect natural water catchment boundaries. However, they noted “that any assessment of the impact of Uisce Éireann's current or future abstractions and discharges on the water environment should be carried out on the entire natural water catchment, even where the catchment extends outside of the regional group areas or the study area.”

### **13.5.2 Response to Catchment Management Feedback**

In response to An Fóram Uisce comment, Uisce Éireann is fully supportive of nature-based catchment management solutions to protect and improve drinking water sources and have expressed interest in being involved in the RBMP proposed multi-agency National Technical Implementation Group.

Uisce Éireann noted feedback from Tipperary County Council on raw water sampling strategy, reporting and improved understanding of supply risk.

Table 2.2 and Figure 2.3 in the framework plan outline the different scales for the management of water supplies required to function as a regulated water service provider, and how these relate to each other. Table 2.2 – Water Resource Spatial Management Units. This discusses cumulative and that sub-regional level is specifically to account for catchments. Also, section 8.3.2.1 in the framework plan discusses the delineation of study areas to take account of cumulative impact on water bodies.

## **13.6 Use Less**

### **13.6.1 Summary of Use Less Feedback**

An Fóram Uisce (AFU) commented that the primary scope of their submission “aims to balance the need for urgency around actions to provide water supply where it is needed, increase the resilience in water supply and water quality in the South East Region, while minimising any environmental impacts of abstractions along a

catchment.” AFU noted their concern about sufficient inclusion of the Use Less Pillar in the draft Plan. They suggested approaching the Three Pillars in a more holistic way, could result in simultaneous improvements at many levels.

An Fóram Uisce (AFU) requested that Uisce Éireann place a stronger emphasis on water conservation in the South East Regional Water Resources Plan (RWRP-SE) given the deficits in the supply demand balance, the future challenges around climate change, population growth, exploitation of nearest resources and inadequate infrastructure. AFU highlighted that studies on climate projections indicate extensive dry periods will become more common, the South East of the country.

AFU commented that Section 5.3 in the draft Regional Plan, the Use Less Pillar and water conservation could be more detailed with more focus on water conservation measures within the draft Regional Plan. The AFU was supportive of the changes made to the final Regional Plan for the North West Region, which included more detail on water conservation measures and recommended that “the same level of detail is included in the final plan for the South and East Region. Considering that this region will experience the most notable increases in spring/summer dry/drought conditions, it should be a key focus of the South and East regional 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.” The AFU cited research it had undertaken on a Framework for Improving Domestic Water Conservation in Ireland which introduced issues around water scarcity in Ireland and the common misconceptions about water availability. Ten policy recommendations were proposed as part of this research. AFU noted that a number of recommendations are relevant to UÉ and the Use-less Pillar and suggested that they are incorporated into the RWRP-SE;

- 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 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 AFU.



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

AFU commented in general there is a lack of communication around water scarcity and drought in Ireland. Research commissioned by the AFU highlighted that “water scarcity” and “shortage” in describing drought impact on Ireland's water resources were rarely used by different bodies in Ireland. AFU noted that “one of the key recommendations from this research is for UÉ to improve their coverage of drought events to increase public interest and conservation action.” AFU recommended that UÉ further improve communications and education to increase awareness of water scarcity and drought in Ireland and offered their support.

AFU recommend that UÉ increase investment in community engagement via community liaison officers across the country, to support awareness campaigns and allow two-way communication between UÉ and the public. “This would allow communities to be involved and co-create community projects for water conservation, supporting an integrated approach to water management and source protection initiatives.” Furthermore, AFU recommended that UÉ develop local community plans to educate the public on water scarcity issues and ways the community can support water conservation measures highlighted in the draft RWRP-SE. AFU welcomes future engagement and collaboration with UÉ in relation to water conservation initiatives and recommended the following in relation to Demand Management and Water Conservation:

- Enhance water education to support a bottom-up understanding of water (from the processes that underpin treatment and supply, to the energy and resources required to produce drinking water).
- Initiate an awareness campaign to highlight water scarcity in Ireland and potential future threats on our water supply as a proactive measure for demand management, rather than crises management.
- UÉ should establish community engagement liaison officers who could lead community engagement, increasing communication between UÉ and the public and supporting water conservation measures. Develop local community plans to increase knowledge around water scarcity issues in the region and ways the community can support water conservation measures in the plan.
- 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.



AFU also recommended that following Uisce Éireann's transition to the sole public utility of public water, Uisce Éireann should provide detail on their planned quality control of the production of drinking water and operation of water treatment plants.

### 13.6.2 Response of Use Less Feedback

Uisce Éireann places a strong emphasis on water conservation and 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 RWRP-SE. Further information regarding the other listed activities is provided below. We have updated Section 5.3 of the RWRP-SE 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 in 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 online 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](http://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 pipelines 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 NWRP-SE, 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-SE has been updated to provide reference to the research carried out by AFU on a Framework for Improving Domestic Water Conservation in Ireland.

## 13.7 Lose Less

### 13.7.1 Summary of Lose Less Feedback

Tipperary Social Democrats expressed concern over the scale of leakages in the South East. They commented “whilst the concept of “Lose Less, Use Less, Supply Smarter” has merit we feel it would be much better for the plan to focus on the Lose Less approach initially until the size of the leakages is significantly lower.” They further commented that the potential gains are significantly higher than what could be achieved through efficiency measures or alternatives. Longer term they would like to see a lower target than 21% for leakages and a higher level of service target than 1-in-50.

The Construction Industry Federation (CIF) noted they have the experience and capacity to complete the National Leakage Reduction Programme where large reductions in leakages are planned. CIF noted that leakage is currently estimated as the largest component of demand in the South East region and reducing the leakages to the targets identified in the plan will be key.

Regarding conservation Tipperary County Council (TCC) noted in their submission the leakage reduction targets set by UÉ to achieve the Sustainable Economic Level of Leakage (SELL) and to reduce leakage levels to 24% of demand in WRZs with a demand in excess of 1,500m<sup>3</sup>/day. TCC requested clarification on how the targets are set and information on leakage reduction targets for all Tipperary WRZs within the RWRP-SE including Thurles Regional, Ardfinnan Regional, Clonmel Town and Environs, Fethard Regional, Dundrum Regional, Galtee Regional and Tipperary Town Water Supply Schemes and in the Templetney-Brackford Bridge Public Water Supply.

TCC commented that “a major and accelerated expansion” of the leakage reduction programmes including leakage management, pressure management, the Find-and-Fix Programme, the First Fix Leak Repair, backyard, and lead services replacement, watermain rehabilitation and non-domestic metering surveys together with increased funding, would be required at local level to achieve these UÉ targets by 2034. TCC reiterated their support to achieve these objectives and to deliver the Leakage Reduction Programme in County Tipperary.

TCC noted the commitment by UÉ to recalculate the SELL within the timeframe of the National Water Resources Plan (NWRP), and the commitment to further review the WRZ specific appropriate levels of leakage and to review the programme and funding for network renewal of high burst frequency watermains.

### **13.7.2 Response to Lose Less Feedback**

Uisce Éireann acknowledges Tipperary Social Democrats appreciation of the scale of the leakage reduction and lose less pillar and level of service.

As outlined in Section 9 of the draft RWRP-SE, Uisce Éireann commits to continuous monitoring of the NWRP and will formally review the plan every 5 years. Leakage targets and targets for Level of Service will be reviewed as part of this process.

Uisce Eireann acknowledge the Construction Industry Federations comments in regards their capacity to meet the infrastructural demands for projects and schemes planned from the Leakage Reduction Programme.

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 targets will be developed during the life of the plan and beyond (Section 5.2.1.3 of this Plan).

## **13.8 Conclusions on Option Types**

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, the RWRP-SW and the RWRP-NW

consultations have also been considered in the development process and finalisation of the RWRP-SE.

### **13.8.1 Clarification on Option Types**

The following sections of the RWRP-SE 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.

### **13.8.2 Recommendations on Option Types**

## 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 three 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.

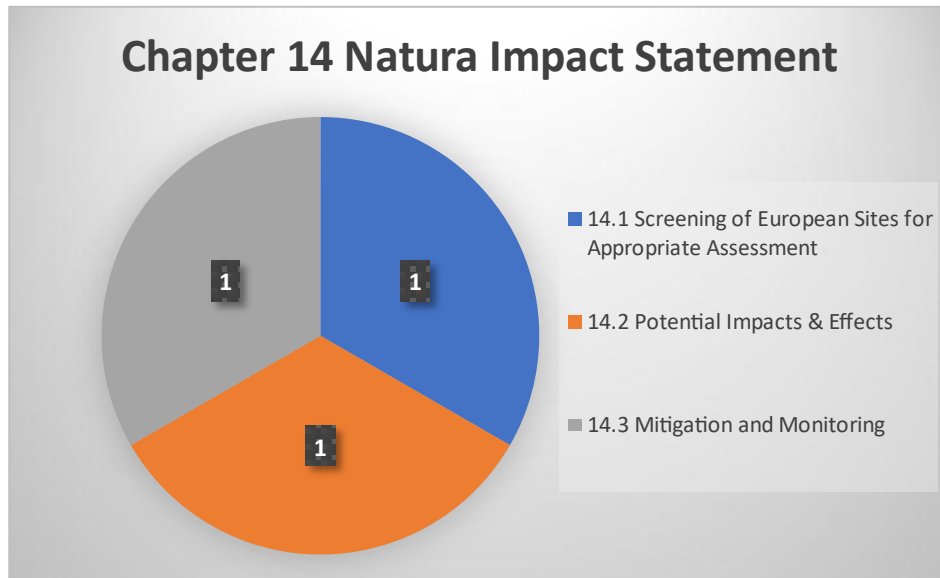


Figure 14.1 NIS Theme

### 14.1 Screening of European Sites for Appropriate Assessment

#### 14.1.1 Summary of Screening of European Sites for Appropriate Assessment Feedback

The Heritage Division of the Department of Housing, Local Government and Heritage (DHLGH) acknowledged the provision of Plan level protection for European sites outlined in Section 2.5.2 of the Natura Impact Statement (NIS). DHLGH welcomed the removal of options at “coarse” and “fine” level project screening with potential for significant impacts on the environment, including options that could result in adverse effects to site integrity.

DHLGH acknowledged that all management option types were considered in the NIS for their potential for significant effects. However, DHLGH noted that in relation to surface and groundwater abstractions, Table 4.2 only refers to new and increased water abstractions and advised that these should be assessed in combination with existing abstractions.

DHLGH stated it was unclear if the draft RWRP-SE was assessed with caution to avoid ruling out components or actions with a potential impact on Natura 2000 sites or to avoid excluding them from further scrutiny in the Appropriate Assessment (AA) Screening Report. DHLGH noted that the scale of water abstraction in the draft RWRP-SE has potential hydrological and hydrogeological impacts on multiple Natura 2000 sites. DHLGH advised “the level of detail provided in relation to the mitigation

measure further assessments and data to inform potential impacts is inadequate to rule out adverse effects to site integrity (AESI).”

### **14.1.2 Response to Screening of European Sites for Appropriate Assessment Feedback**

We acknowledge the Department’s welcoming of the removal of options at coarse and fine screening. This is an important step in the process of considering what options are feasible, and in determining the Preferred Approach.

Existing abstractions are considered in the cumulative assessment undertaken by Uisce Éireann of their abstractions and proposed new abstractions. To note, the potential in-combination effects from surface and groundwater abstractions on European sites, are considered in the in-combination assessment undertaken in the NIS (Section 7 and Appendix E).

The RWRP-SE has been prepared using the best available scientific information at the time of writing and as appropriate at a plan level. Environmental considerations including biodiversity are considered at the earliest stage and are included in the options assessment process adopted in the Framework Plan and applied in the RWRP-SE. Any projects that are progressed following the NWRP will require various individual environmental assessments in support of planning or licensing applications, including field surveys, hydrological and/or hydrogeological assessments, and monitoring amongst others. If at project-level an option that is currently being considered is found to have the potential for adverse effects on site integrity (AESI), then it will not be progressed, and an alternative option will be considered to prevent impacts on any European sites.

## **14.2 Potential Impacts and Effects**

### **14.2.1 Summary Potential Impacts and Effects Feedback**

DHLGH advised that an explanation is needed in Appendix C of the NIS regarding how water table and water availability Likely Significant Effects (LSEs) were assessed as potential impact pathways. They highlighted the NIS states these effects are only likely to be significant where the boundary of the scheme extends within the same ground or surface water catchment as the European site. DHLGH sought clarification as to how the catchments of qualifying interests of European sites and the zone of influence of the abstraction were defined. In particular regarding groundwater abstractions.

DHLGH advised that the sustainable abstraction limits of 10% and 5% of Q95 for assessing impacts to river Special Areas of Conservation (SACs) should be clearly stated in the AA Screening Report. DHLGH cited “this method is still 1) an insufficient evidence base on which to propose bespoke e-flow standards in an Irish context at the current time and 2) is not ground-truthed to Irish conditions, and is purely hydrological, without encompassing hydromorphological or ecological elements.”



DHLGH questioned if the methodology used by Uisce Éireann was adequate to screen out operational water availability effects on river SACs for LSE's and AESI.

Similarly, DHLGH noted that sustainable abstraction limits for lakes are set at 5% and 10% of Q50. DHLGH sought clarification on whether the same method was used to screen out Preferred Approach impacts and requested a scientific rationale behind this approach.

DHLGH requested that the level of detail included in Appendix D of the NIS should be included in the NIS. Concurrently, they advised that the level of detail in Section 4 of the NIS, particularly related to how options were excluded, could be reduced.

DHLGH noted that existing surface and groundwater abstractions are a key in-combination effect of the draft RWRP-SE and advised that they should be assessed in-combination with increased and new abstractions. DHLGH sought more clarity in relation to impacts of existing abstractions which could act in-combination with future abstractions.

DHLGH considered hydrological/hydrogeological effects of water abstraction to be key effects in the draft RWRP-SE. They noted that Appendix D identifies potential impact pathways at the operation stage including “Habitat degradation – changes in water quality (hydrological changes) due to abstraction and water table/availability.”

#### **14.2.2 Response to Potential Impacts and Effects Feedback**

The assessment methodology used for RWRP-SE is set out in Section 2.6 of the NIS. The Zone of Influence (Zoi) of each option is deciphered using the “source-pathway-receptor” model as per recent Office of the Planning Regulator (OPR) guidance (OPR, 2021<sup>1</sup>). Various factors are considered including the nature of the works involved, the location, distance between the works and European sites, and the Qualifying Interests of the European sites with potential to be impacted. When carrying out the assessments, any available site-specific data, such as conservation objectives and mapping, is also used in deciphering the Zoi and any potential impacts.

With regards to assessing the impacts of groundwater abstractions, the domain size associated with these flow systems are 5km in Karstic aquifers, 3km in Productive Fissured bedrock, 1km in Gravel aquifers and 600m in Poorly Productive aquifers. These are the potential domains that were used when assessing the potential impacts of groundwater abstractions on European Designated sites and/or surface waters within European sites. As this is a conservative consideration, the buffers act as a guide only. They may flag sites within a ‘buffer’ for further monitoring etc., but where appropriate, are overruled by site specific data. Where available, site-specific data (pump test results, borehole construction information, geological constraints

---

<sup>1</sup> Office of the Planning Regulator (2021). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01.

etc.) were used for sites within a 'buffer' to suggest no direct linkage between abstraction and groundwater dependent terrestrial ecosystems (GWDTE).

In relation to qualifying interests, where specific information was available (e.g., detailed conservation objectives, mapping etc.), this was used in conjunction with Zone of Contribution data from hydrologists to inform the assessment. Where detailed information was lacking, a precautionary approach was taken, and potential impacts considered, and mitigation provided. The text in Section 2.6.5 of the RWRP-SE includes further information about these assessments.

In relation to the 5% and 10% sustainable abstraction limits used for rivers and lakes, these are included in the RWRP-SE AA Screening Report in Section 2.7.

Uisce Éireann is satisfied that the methodology used is adequate. The methodology has been set out in the NWRP Framework Plan. Water Framework Directive (WFD) objectives have been considered in the RWRP-SE through a sustainable abstraction risk review. In the absence of Irish specific guidance, Uisce Éireann has used the (internationally recognised standard) UK Technical Advisory Group (UKTAG) WFD guidance on baseflows. When Ireland-specific standards come into place, we will update our environmental risk assessments as part of the next iteration of the NWRP. The application of these conservative abstraction standards ensures that any new or increased abstractions from rivers are likely to support conservation objectives for the most sensitive environmental sites, and so any operational effects that have been screened out have been done so using a conservative approach. Through the new abstraction legislation process, abstractions will have to go through the AA process which will require detailed site-specific information. This process will be governed by the EPA.

The same methodology was used to screen out impacts from lake abstractions using 5% or 10% of Q50 rather than Q95 used for rivers. Again, the UKTAG methodology used is the best scientific approach currently available hence its use in the NWRP. It is a conservative approach, and therefore any impacts screened out using this methodology have been done so conservatively.

Appendix D is summarised in Section 6 of the NIS report. It should be noted that Appendix D is part of the NIS and should be read in conjunction with the rest of the document. The information in Section 4 of the NIS ensures all information deemed relevant and necessary by Uisce Éireann is included in the NIS in an easily accessible form, while more complex and detailed information is contained in full in the supporting appendices, and illustrates that other options were considered before coming to the current Preferred Approach.

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 abstractions on European sites, are considered in the in-combination assessment undertaken in the NIS (Section 7 and Appendix E).

Through the new abstraction legislation process, abstractions will have to go through the AA process which will require detailed site-specific information. When this process commences, we will be able to determine further information on the potential impacts of existing and future abstractions, and any with the potential for AESI will not go ahead.

It is noted and we agree with the Department that hydrological/hydrogeological effects of water abstraction are key potential effects in the draft RWRP-SE which is reflected by their inclusion in the assessment and their consideration when assigning scores to options. We confirm that operational effects are included in Appendix D as well as the mitigation required to ensure no AESI occur.

## **14.3 Mitigation and Monitoring**

### **14.3.1 Summary of Mitigation and Monitoring Feedback**

DHLGH advised that greater scientifically based detail is required in Section 6.3.5 for the mitigation measures outlined in Appendix D in relation to the European SAC sites includes 'Further assessments and data to inform potential impacts. They suggested that "this should be based on best scientific evidence such as the EPA EcoMetrics project." DHLGH sought a commitment from Uisce Éireann to establish eco-hydrological connections, through field-based monitoring for specified sites that may be sensitive to abstraction. They advised this for habitats such as turloughs, dunes, fens and other wetlands which are sensitive to groundwater abstraction, and which are very difficult to restore once they are damaged. Furthermore, DHLGH recommended that conceptual and water balance models should be developed for sensitive habitats to understand their water requirements and resilience to changes that may be incurred by water abstraction pressures.

DHLGH stated that hydrological monitoring and modelling should be carried out to develop site specific conceptual models and water balances using known data and knowledge from NPWS. They noted that "desk-top modelling alone would not be sufficient for many of the Special Areas of Conservation."

DHLGH advised that the 'Use Less' options included in Appendix A of the AA Screening Report could be included where necessary as mitigation measures in the NIS.

In line with Objective 5 of Uisce Éireann's Biodiversity Action Plan, DHLGH recommended that wider catchment management measures that result in source water protection should be considered as mitigation. DHLGH suggested that measures such as drain blocking in peatlands could improve water quality and drought resilience. DHLGH further advised that Uisce Éireann should encourage the use of Sustainable Drainage Systems in building developments.

### **14.3.2 Response to Mitigation and Monitoring Feedback**

The best scientific information and methodology available, as outlined in the NWRP Framework Plan, have been used to carry out the assessment for RWRP-SE. The mitigation measures included in the NIS are appropriate for this plan-level assessment and will be expanded on at project-level if required. As noted in Section 6.3.5 of the RWRP-SE NIS, the list of measures is non-exhaustive and will be reviewed at project-level.

The assessments carried out for RWRP-SE are desk-based as this is plan-level, but further in-depth assessments will be expected at project-level. Any projects that are progressed following the NWRP will require various individual environmental assessments in support of planning or licensing applications. As mentioned in the Mitigation section of the RWRP-SE NIS, Section 6.3, further assessments will be required at project-level. Further detailed site-specific hydrological assessments will be required for a number of the options relating to new or increased ground or surface water abstractions. These project-level assessments will include field-based surveys as well as yield assessments, hydrological modelling, and hydrogeological modelling where required. Where appropriate, other data available from various sources including the NPWS and the EPA's EcoMetrics Project may also be used in these site-specific assessments.

The "Use Less" approach is already included as a mitigation measure in the NIS in Section 6.3.3.2 under "General measures for species and habitats."

Uisce Éireann is committed to implementing their Biodiversity Action Plan and will implement the objectives of the Plan where appropriate. This is included under "General Mitigation Measures" in Section 6.3.3.2 of the NIS. Uisce Éireann currently utilise Sustainable Drainage Systems (SuDS) in their developments when required and will continue to do so.

## **14.4 Conclusions on NIS**

### **14.4.1 Clarification on NIS**

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

### **14.4.2 Recommendations on NIS**

Having taken cognisance of the previous Regional Plan consultation responses and the responses received during the consultation for RWRP-SE, no recommendations are deemed necessary.

## 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 three 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.

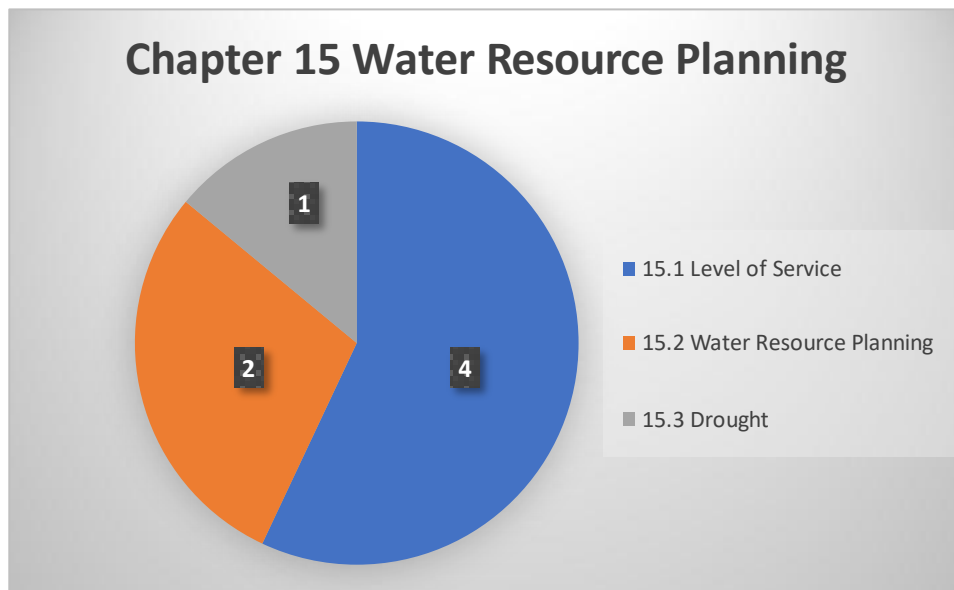


Figure 15.1 Water Resource Planning Theme

### 15.1 Level of Service

#### 15.1.1 Summary of Level of Service Feedback

An Fóram Uisce (AFU) is concerned over the significant improvements required to reach the 1 in 50 Level of Service (LoS) target in the South East and recommended engagement with the public on proposed improvements in the Regional Plan, to build trust with the communities in this region. Furthermore, AFU recommended that Uisce Éireann ensure strong engagement and communication with the public during disruptions.

Tipperary Social Democrats would like to see a lower leakage target than 21% and a higher LoS target than 1 in 50. Tipperary Social Democrats noted that they are aware current service deficiencies mean that more ambitious targets are not realistic. However, they advised that targets should be monitored and revised with the aim of making them more ambitious over time.

Tipperary County Council (TCC) highlighted that a high percentage of water supplies in Tipperary have a lower LoS than Uisce Éireann's target LoS of 1 in 50.

TCC listed water supplies in Templemore-Templetohy, Two Mile Borris, Coalbrook-Commons, Dundrum, Fawnagown, Tipperary, Galtee, Ardfinnan, Clonmel and Carrick-on-Suir as currently having a LoS of less than 1 in 10 in the Dry Year Critical

Period. TCC stated that this low LoS affects the growth and development potential of these areas. TCC recognised it would take multiple investment cycles to achieve a LoS of 1 in 50 in all Tipperary supplies, but they requested the provision of early capital investment in these areas to improve the reliability of supply going forward.

TCC noted that the information in Figure 3.5 is unclear and recommended that a full list of Water Treatment Plants showing their respective LoS be provided.

The Southern Regional Assembly (SRA) recommended that, in line with Regional Policy Objectives outlined in the Regional Spatial and Economic Strategy, Uisce Éireann should make a commitment to supporting the viability of rural towns and villages. They advised coordinating with Local Authorities to invest in the following: water infrastructure, retrofit, improve the quality of service, and support serviced sites and new homes in the small town and village initiatives.

### 15.1.2 Response to Level of Service Feedback

Uisce Éireann has undertaken public consultation on the draft RWRP-SE. The objective of the Preferred Approach for the RWRP-SE 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 on customers during times of drought and periods of dry weather.

A number of communication tools were developed to promote consultation and raise awareness among the public, interested parties and environmental authorities and to encourage participation in the consultation process. Chapter 4 of this report describes communication tools and channels used to promote the RWRP-SE. A total of four public webinars were held over the months of July and September 2023 and 35 interested members of the public registered their attendance. A presentation on the draft RWRP-SE Plan was given at each webinar, followed by a Q&A session with the NWRP team.

When a disruption occurs, Uisce Éireann seeks to maintain safe water services, where possible. Vulnerable customers who have registered with Uisce Éireann receive direct communications from us for planned and unplanned outages lasting more than four hours.

When an outage occurs, Uisce Éireann communicates with customers through social media channels, press releases, [Water Supply Updates](#) section, and the [Latest National News](#) section on our website. The Uisce Éireann customer care helpline is open 24/7 on 1800 278 278 and customers can also contact us on Twitter @IWCare with any queries.

In response to Tipperary Social Democrats submission, 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 (See Section 5.2.1.3 of this Plan).

Leakage reduction activities will be based on industry best practices such as improved operational control, pressure management, calm networks, active leakage control and targeted mains replacement. 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 projects.

The current Level of Service (LoS) in Ireland varies depending on location and ranges between 1 in 10 years and greater than 1 in 50 years. The target Level of Service is required to ensure continuity of supply to our customers during drought periods however, Uisce Éireann acknowledges that it will take many decades to achieve this LoS and that substantial investment will be required. The Level of Service will be reviewed in the next iteration of the NWRP.

We note the submission from TCC highlighting that a high percentage of water supplies in Tipperary do not meet the target 1 in 50 LoS. The objective of the Preferred Approach for the RWPR-SE 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 on customers during times of drought and periods of dry weather.

As it will take several 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 RWPR-SE 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. The interim solutions for the following WRZs are outline below:

- Templemore-Templetouhy WRZ – It is proposed to upgrade Templetouhy WTP to improve water quality and remove it from EPA RAL. We are currently progressing disinfection upgrade for Whitefield WTP and Templemore (College Hill) WTP to improve water quality. Templetouhy WTP will be



decommissioned in the long term and the area will be supplied from Templemore WSZ.

- Two Mile Borris WRZ – It is proposed to rationalise Two Mile Borris WRZ to Thurles WRZ.
- Coalbrook-Commons WRZ - Two additional boreholes were recently constructed at Coalbrook WTP to supplement the existing supply. We are continuing to advance the long-term proposal to supply the Coalbrook area from the adjacent Fethard Regional WRZ. This will ultimately provide a more reliable and secure supply to all consumers in the Coalbrook area.
- Dundrum WRZ – It is proposed to upgrade to Stooke WTP to improve resilience and water quality. An interconnection between Dundrum Regional WRZ and Thurles WRZ is in progress to improve resilience for Dundrum Regional.
- Tipperary Town WRZ – An upgrade of Fawnagown WTP was recently completed. The Preferred Approach is new groundwater abstraction and new WTP to supply deficit within Tipperary Town WRZ.
- Galtee Regional WRZ - The interim solution, which is an additional groundwater source, is currently being developed to address the short term need while the medium to long term need is being developed. As part of the interim solution, Rossadrehid WTP will be upgraded to improve resilience and water quality and facilitate removal from the RAL. The Preferred Approach for Galtee Regional is a new surface water abstraction from the River Aherlow.
- Ardfinnan Regional WRZ - Interim solution for Ardfinnan WRZ is underway. Construction has commenced on the significant upgrade to the treatment process at the Goatenbridge WTP to secure water supply from the plant, ensuring water supplied by the Ardfinnan Regional WRZ is in compliance with drinking water regulations. The Preferred Approach for Ardfinnan Regional WRZ is interconnection with Clonmel WRZ where we are proposing a new surface water abstraction from the River Suir.
- Clonmel WRZ - It will take many years to develop our Preferred Approach, a new surface water abstraction from the River Suir. However, there is an immediate need to increase supply to support growth in Clonmel and the surrounding area. The interim project which is underway is to expand Monroe wellfield and upgrade to Monroe WTP for water quality improvements. With regards to ongoing Boil Water Notices at Clonmel-Poulavanouge WTP, the project is underway to transfer customers currently supplied by Clonmel-Poulavanouge WTP onto Glenary WTP to address Boil Water Notices and outages. It is proposed to upgrade Glenary WTP to improve water quality and divert all flows through the Glenary reservoir to increase resilience and reduce the risk of outages.
- Carrick-on-Suir - We are progressing the Preferred Approach for Carrick-on-Suir WRZ which is additional groundwater supply and significant water quality and quantity upgrade to Carrick-on-Suir (Linguan) WTP. Network

improvements will also be required to facilitate the transfer of water to the Carrickbeg area.

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-SE. The specific options for each study area are listed in the corresponding technical reports in Table 6.1.

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. Information on LoS is determined at WRZ level and the purpose of Figure 3.5 is to provide an overview of the need in the region. Full detail of the SDB balance for every WRZ is provided in Appendix L of the NWRP.

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 with the Regional Assemblies and the Local Authority water, housing, and planning functions.

Where possible, investment plans are aligned with local authority housing and planning functions to support development. However, it should be noted that there are significant legacy issues across our supplies, and it will take many capital investment cycles to resolve these issues. The phasing and timeframes for delivery of individual projects will be determined through the capital investment process with continual dialogue with the Regional Assemblies and local authority housing and planning functions.

Uisce Éireann is committed to facilitating rural growth through the "Small Towns and Villages Programme." Details on the programme can be found on our website:

<https://www.water.ie/news/green-light-for-21-additi/>

## 15.2 Water Resource Planning

### 15.2.1 Summary of Water Resource Planning Feedback

Tipperary County Council (TCC) noted the potential water sustainability impacts of the implementation of recent abstraction legislation (The Water Environment (Abstractions and Impoundments) Act 2022) on groundwater and surface water abstractions, especially from the following schemes:

- Ahernes Glen abstraction and Glenbreda Stream abstraction (Ardfinnan Regional Water Supply Scheme);
- Glengarra River (Burncourt-Ballylooby Regional Water Supply Scheme);
- Crotty's Lake and Lingaun River (Carrick-on-Suir Town Water Supply Scheme);

- Boola River intake, Poulavanogue abstraction and Glenary abstraction (Clonmel Town and Environs Water Supply Scheme);
- Multeen River intake (Dundrum Regional Water Supply Scheme);
- Gurtnapisha, Walshbog, Cloran Stream and Anner River (Fethard Regional Water Supply Scheme);
- College Stream intake and Muskry Stream intake (Galtee Regional Water Supply Scheme); and
- River Clodiagh (Thurles Regional Water Supply Scheme).

TCC acknowledged that there will be a transition period to the new regime as existing supplies need to be maintained and alternative sources are likely to be needed. TCC requested that Uisce Éireann put a plan in place early to mitigate potential impacts and allow these areas to achieve their growth potential.

Inland Waterways Association of Ireland welcomed the references to the navigable inland waterways, namely the Rivers Barrow, Nore, Suir and Slaney in Section 2.2.4 of the plan.

### **15.2.2 Response to Water Resource Planning Feedback**

Uisce Eireann welcomes Tipperary County Council in supporting UÉ's in moving away from the use of potentially unsustainable abstractions. The Preferred Approach for Ardfinnan Regional, Burncourt-Ballylooby, Carrick-on-Suir, Clonmel, Dundrum Regional, Fethard Regional, Galtee Regional and Thurles Regional Water Resource Zones does improve or avoid further deterioration at these sources by reducing existing abstractions or developing additional sources to support growth.

The actual reductions that may be needed in future will depend on the specific requirements of the future legislation. Uisce Éireann will update the NWRP as appropriate to account for these requirements, once known, using the monitoring and feedback process set out in Section 9 of RWRP-SE.

In support of growth, we are progressing interim solutions which are described in RWRP-SE Appendices 1 – 3 section 6.

In response to the submission made by Inland Waterways Ireland, in Section 2.2.4 of the draft RWRP-SE, 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 Barrow, River Nore, River Suir and River Slaney are important rivers for transportation.

## **15.3 Drought**

### **15.3.1 Summary of Drought Feedback**

An Fóram Uisce (AFU) commented that Drought Management Plans, specific to each WRZ, urgently need to be developed for Ireland to better adapt to projected increases in drought during summer months. This is particularly relevant to the Regional Plan for the South East.

The AFU noted that “Climate models indicate extended dry periods will become more common, increasing annually by 16% and increases between 21-27% during summer months. An analysis of annual average discharge change from hydrological models Under RCP 8.5, most of Ireland could be 10% drier by 2100 and some catchments could experience flow reductions close to 30%, where the south and east will be more severely impacted”. They further cited droughts in 2018, 2021 and 2022, where several raw water sources were impacted in the south east region including; Kilkenny City, Borris, Fews and Ballymacarbry, Gorey, Sow Regional, South Regional, Bennetsbridge and Wexford Town.

Since the beginning of June 2023 there have been numerous calls to the public in Wexford, Waterford, and Tipperary to conserve water to protect supply and reduce the risk of outages. UÉ urged the public to reduce hose use and avoid power washing, while overnight restrictions were put in place in several areas including Silverfort, Fethard, Galtee Regional Supply Scheme, Ardfinnan and Enniscorthy among others (source UÉ website).

AFU referenced the 2019 sectoral climate change adaptation plan for wastewater that the Department of Housing, Local Government and Heritage developed which they stated is not currently addressed in the draft RWRP-SE. AFU recommended that UÉ “add an urgent action in the RWRP to support the development of 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.”

AFU acknowledged that UÉ have outlined the learnings from the 2018, 2020 and 2022 events in section 2.4.2 in the plan, However, they commented the “learnings presented are more crises management (reactive) as opposed to proactive measures to reduce the impact of the crises.” AFU noted their support for tracking drought indicators and planning responses and activities. However, AFU recommended that there is early intervention in response to these indicators in an attempt to reduce the extent of the crises, rather than planning for crises management. They further suggested that the Communication campaigns to promote water conservation as noted in the Plan 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.”

AFU recommended that Flood Management Plans, specific to the water resource zones and water treatment plants of the South East region, should be included in the South East Regional Plan.

### **15.3.2 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. The NWRP and the RWRP-SE 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-SE 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 on customers during times of drought and periods of dry weather.

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.

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 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.

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 having proactive measures set out in the Drought Management Plan's (DMP) and over time the need for crisis 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.

Flood Risk is a key consideration in the development of the Preferred Approach, as 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.

## 15.4 Conclusions on Water Resource Planning

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



## 16 Outside the Scope of the RWRP-SE

In this Chapter, we summarise the key references in submissions to issues under the broad theme of “Outside the Scope of the RWRP-SE.” Within the overall Out of Scope theme, we identified two 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.

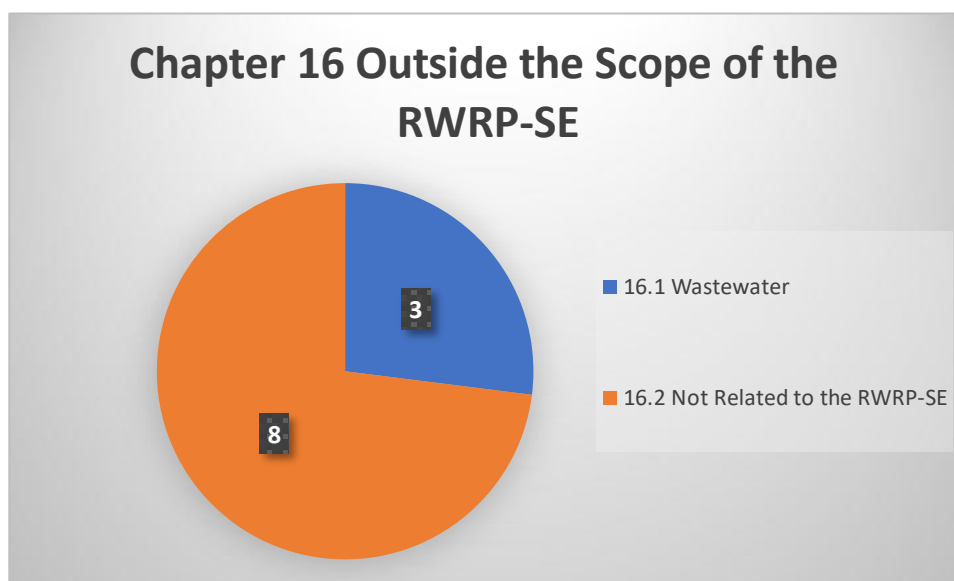


Figure 16.1 Outside the Scope of the RWRP-SE.

### 16.1 Wastewater

#### 16.1.1 Summary of Wastewater Feedback

A stakeholder stated that there is a wastewater treatment plant in Seafield within the tidal zone that is affected by the wastewater outflow points in Bonmahon. They requested Uisce Éireann to address the wastewater issue in Bonmahon urgently.

TD James Browne queried, in the interest of balanced growth, if water mains and wastewater supply could be extended to Davidstown, Enniscorthy, Co. Wexford in addition to Marshalstown and Ballindaggin. Deputy Browne highlighted that Davidstown is the nearest satellite village to Enniscorthy town.

Irish Creamery Milk Suppliers Association (ICMSA) are of the view that wastewater treatment plants pollute Irish waters. ICMSA cited EPA data released in 2022, which stated that “half of Ireland’s sewage failed to be treated to the European Union standards whilst the EU average of sewage being treated up to EU standards is 90%. In 2022 there were thirty-two towns and villages that released raw sewage into the environment every day, there were also twelve large towns and cities that did not treat sewage to the EU standards which are required to protect the environment.”



To deliver quality drinking water ICMSA suggested Uisce Éireann prioritise investment in water treatment plants and wastewater treatment plants in the South East Region.

### 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 impact 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.

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. 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. Uisce Éireann appreciates the concerns raised on the wastewater outflow points in Bonmahon and can confirm these specific issues have been forwarded to the Wastewater Team within Uisce Éireann for further review as this query is out of scope of this RWRP-SE.

In response to TD James Browne on Davidstown, the connection of Davidstown to Enniscorthy query is responded to in Section 10.1.2 – Summary of Preferred Approach Feedback of this report.

With regards for wastewater query for Davidstown, in 2022 the Department of Housing, Local Government and Heritage announced the commencement of a new funding scheme targeting the wastewater collection and treatment needs of villages and settlements without access to public wastewater 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 program, 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 Not Related to the RWRP-SE**

### **16.2.1 Summary of Not Related to the RWRP-SE Feedback**

A stakeholder in Leighlinbridge, Carlow explained that they regularly have water outages between the hours of 5-7pm. They are concerned that a new housing estate being built behind their property will compound the problem.

A stakeholder stressed that water theft is a problem in Kilkenny City and urged Uisce Éireann to put a stop to the problem. This stakeholder made the following recommendations to improve water supply in Kilkenny City:

- Uisce Éireann should address the issue regarding the theft of water from the city water supply via fire hydrants.
- Kilkenny County Council should acknowledge reports regarding the theft of water from the city water supply.

A stakeholder noted that the water supply in Drinagh, Co. Wexford is tainted with lime. They noted that they regularly must replace showers, boil kettles with vinegar and drink bottled water due to this issue. The stakeholder urged Uisce Éireann to address the issue before it is exacerbated by the growing population of Drinagh.

Another stakeholder stated they were having ongoing issues with lime in their drinking water in Wexford which resulted in them having to buy bottled water and replace heating systems and kettles. This stakeholder suggested using nanotechnology in the water treatment plants to reduce lime levels in drinking water. They requested that Uisce Éireann address this problem in areas with hard water supply.

Tipperary Social Democrats suggested that Uisce Éireann consider how they could improve communication of water issues with the public and public representatives. They suggested that the mobile text line recently introduced for business should be extended to the wider public. They requested that this feedback be forwarded to the relevant department within Uisce Éireann.

Adamar Developments noted that the pre-connection enquiry application is contingent on an upgrade of the Wastewater Public Supply (WWPS) located in Carrigabruce, Enniscorthy, Co. Wexford. The lands south of the existing Carrigabruce WWPS can accommodate the new WWPS. Adamar Developments Ltd stated that they are willing to undertake this upgrade on a design and build basis and that the upgrade is at an advanced stage with Uisce Éireann's design team for this proposal.

Councillor Thomas Breathnach notes several possible new sources in his submission. Cllr Breathnach suggested there is capacity at Muckalee and that the supply is free of manganese. Cllr Breathnach further suggested it could be piped to Castlecomer through wayleaves and roadside connections and that the distance is similar to the distance from Thomastown to Inistioge which Uisce Éireann completed several years ago.

Cllr Breathnach commented that drilling commenced previously at Ardra water source but was not continued. He commented that "given the quality and quantity of water encountered it is difficult to understand why."

Councillor Thomas Breathnach noted that reservoirs at Kiltown, Augnamuckey Mayhora and Gorteen and associated networks were included in a cleaning

programme in 2018. Cllr Breathnach queried if there is scope for upgrading works to any of these reservoirs to increase capacity, even on an interim basis.

Councillor Thomas Breathnach highlighted that planning permission has been refused on a number of projects including housing projects in the Castlecomer area at Donaguile and Marymount and a hotel renovation, extension, and townhouse accommodation for Avalon House Hotel. Cllr Breathnach commented that “until a construction schedule for the necessary upgrade in the public water supply is confirmed these developments will be considered premature.”

### **16.2.2 Response to Not Related to the RWRP-SE Feedback**

Uisce Éireann acknowledges the concerns raised on outages in Leighlinbridge and can confirm these specific issues have been forwarded to the relevant team working with our Councillor Clinics and are being examined through our general operational programmes of work, i.e., Mains Rehabilitation Programme, Rationalisation Programme and Leakage Reduction Programme. As Preferred Approaches are being developed, a reduction in the number of concerns being raised is anticipated.

Hydrants are for use only by authorised personnel for firefighting purposes and should not be used for any purpose other than firefighting by the Fire Service. Misuse of fire hydrants has the potential to put lives in danger and prolong or extend damage to premises in the event of an incident where water is unavailable due to unauthorised use issues of unauthorised use of fire hydrants include:

- Insufficient or no water to fight fires
- The loss of water through hydrants limits the water available to supply homes and businesses
- The loss of water reduces the water pressure to supply homes and businesses
- Potential flooding of premises and damage to property
- Serious damage to the pipes and to the hydrants themselves
- Possible contamination of the public water supply

Uisce Éireann is appealing to the public not to tamper or open fire hydrants without permission and request the assistance of the public by reporting details of any such incidents immediately to Uisce Éireann (call 1800 278 278 / international +353 1 707 2828 (lines open 24/7)), or An Garda Síochána.

Uisce Éireann is responsible for the provision of drinking water that complies with drinking water regulations. Hard water contains high levels of natural minerals absorbed from rock and soil is not harmful to your health. Uisce Éireann does not chemically treat water to remove these mineral salts at any of our water treatment plants country wide as they are naturally occurring and fully consistent with safe drinking water. When hard water is heated it forms a white calcium deposit known as limescale. It can leave a hard white coating inside your kettle, kitchen appliances and heating system. You might also see limescale coating the surface of hot drinks, like

tea or coffee. Hard water can also reduce the effectiveness of detergents and soaps, meaning you need to use more.

Uisce Éireann advises the following tips to help prevent limescale build-up in hot water appliances and systems as well as the manufacturer's instructions for any of your appliances.

#### Kettles or other drinking water boilers

- Use a stainless steel descaler or scale collector in your kettle.
- Rinse plastic kettles regularly if limescale is floating on the surface.
- Do not leave leftover boiled water sitting in the kettle.
- Regularly descale your kettle, ask your local hardware store for advice.

#### Hot water heating systems

If your heating system replaces water lost from the system with fresh water, limescale may build up. This can cause your heating pipes to rattle or your radiators to take longer than usual to heat. Heating systems that use the same water in a closed loop do not usually get limescale.

If you are concerned, talk to your plumber. You can also lower the temperature setting of your water heater to help reduce limescale build-up.

#### Washing machines and dishwashers

Dishwashers often have built-in water softeners to prevent limescale. You can also use water-softening products in your washing machine. Always follow the manufacturer's instructions.

#### Install a softening unit

If you find hard water is a problem in your home, you can install a domestic softening unit. Talk to your local plumber or hardware store for advice. Uisce Éireann cannot recommend any particular units or guarantee their effectiveness.

Further information relating to water hardness can be found on our website <https://www.water.ie/water-supply/water-quality/water-hardness/>.

Uisce Éireann currently have a text message and/or phone service for our Domestic - Vulnerable Customers which has been in place for approximately eight years. We introduced this to our business customers over five years ago and had a low take-up of the service. We are doing a public awareness campaign to increase the number of non-domestic customers receiving this service.

Uisce Éireann issued a Public Information Notice (PIN) in September to identify the potential technical solutions in the market to consider offering a similar service to our Domestic customers. This work is ongoing, and we will provide updates to our customers and stakeholders as it progresses.

Uisce Éireann is actively promoting water conservation in schools, business, and communities through various activities. These include our partnership with An Taisce's Green-Schools Programme, our Water Stewardship Programme with non-domestic users and ongoing national and local water conservation campaigns. We promote this information on our website, via our social media channels and the media.

We also provide advice on reducing water usage in homes and businesses on our website <https://www.water.ie/conservation/>. This is supported by our new Conservation Calculator that will assist households to assess their water usage habits and find out how much water they are saving on a daily basis. It also offers 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 <https://www.water.ie/conservation/home/water-conservation-calculator/>

In response to Councillor Thomas Breathnach on Clogh – Castlecomer area, significant improvements are planned for the area. The National Water Resources Plan for Clogh – Castlecomer WRZ is to develop a new groundwater/wellfield to address deficit.

Treated water storage for Clogh - Castlecomer (WRZ) was reviewed as part of the NWRP feasible options review process.

The option of supplying Clogh-Castlecomer from Muckalee area (option reference TG4-SA6-52) is included in RWRP-EM. This option was screened out as it involves an abstraction above the plan identified sustainable abstraction limit.

Uisce Éireann is satisfied with the review of all potential groundwater options in Clogh - Castlecomer and surrounding area.

### **16.3 Conclusions on Outside the scope of the RWRP-SE**

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

## 17 Next Steps

Following on from the public consultation, submissions and observations received will be taken into consideration, and the RWRP-SE updated. The final RWRP-SE will then be produced, accompanied by a Strategic Environmental Assessment Statement and an Appropriate Assessment Determination in winter 2023.

Once 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](http://water.ie/nwrp)



# National Water Resources Plan

## Phase 2

Draft Regional Water Resources Plan  
South East Region  
Consultation



---

## Introduction

The National Water Resources Plan (NWRP) is Uisce Éireann'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 was adopted and can be found at [www.water.ie/nwrp](http://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 are subject to their own public consultation phases. The RWRP-EM and RWRP-SW are now adopted with the consultation phase of the RWRP-NW now complete.



We are now carrying out the fourth and final public consultation on the draft RWRP-SE.

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 RWRP Eastern and Midlands was issued for consultation in December 2021 and closed April 2022. The RWRP-EM and associated environmental reports were updated and adopted in September 2022.

The second RWRP South West Region was issued for consultation in June 2022 and closed in August 2022. The RWRP-SW and associated environmental reports were updated and adopted in March 2023.

The third RWRP the North West Region was issued for consultation on 20 November 2022 and closed on 21 February 2023. Following that process, all submissions will be taken into consideration and will be included in the post consultation report which will be published later this year. Current progress on the RWRP-NW is available at:

**[www.water.ie/projects/strategic-plans/national-water-resources/rwrp/north-west/](http://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/north-west/)**

At the end of Phase 2 the outcome of the four plans will be combined and prioritised collectively.

## Regional Water Resources Plan South East Region

The below map outlines the area which is covered by the RWRP-SE. A full list of townlands, towns, settlements, and counties included in the RWRP-SE can be found at [www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/](http://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/)



Figure 2. Key towns of the South East Region

---

## What is the South East Region?

The South East Region includes seven (7) counties: Limerick, Tipperary, Waterford, Kilkenny, Carlow, Wicklow and Wexford.

Thirteen percent (13%) of the national population is located within the region. Fourteen percent (14%) of the regional population and one percent (1%) of Ireland's total population is located in Waterford City. The South East region includes six (6) key towns: Kilkenny, Wexford, Thurles, Gorey, Clonmel and Dungarvan. There are six (6) settlements with a population of over 10,000 people.

Uisce Éireann supplies around 161 million litres of water per day to a population of 369,240 people and 29,700 businesses in the South East Region. This represents 9% of our total supply nationally.







Figure 3. Key characteristics of the South East Region

## What are the issues in the Region?

In the South East Region, there are 143 Water Treatment Plants that feed water into 111 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 Uisce Éireann risk factors we set out in the Framework plan, we identified the following needs which must be addressed as part of the draft RWRP-SE:

8 / 20 | National Water Resources Plan | Phase 2 Consultation



- > 57% of the WRZs are in supply Deficit, which means they do not have the capacity to meet current or future needs
- > 80 of the 143 Water Treatment Plants need some form of investment to reduce risk to water quality
- > Levels of service across the South East 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-SE, we reviewed 1055 unconstrained options and developed 798 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.

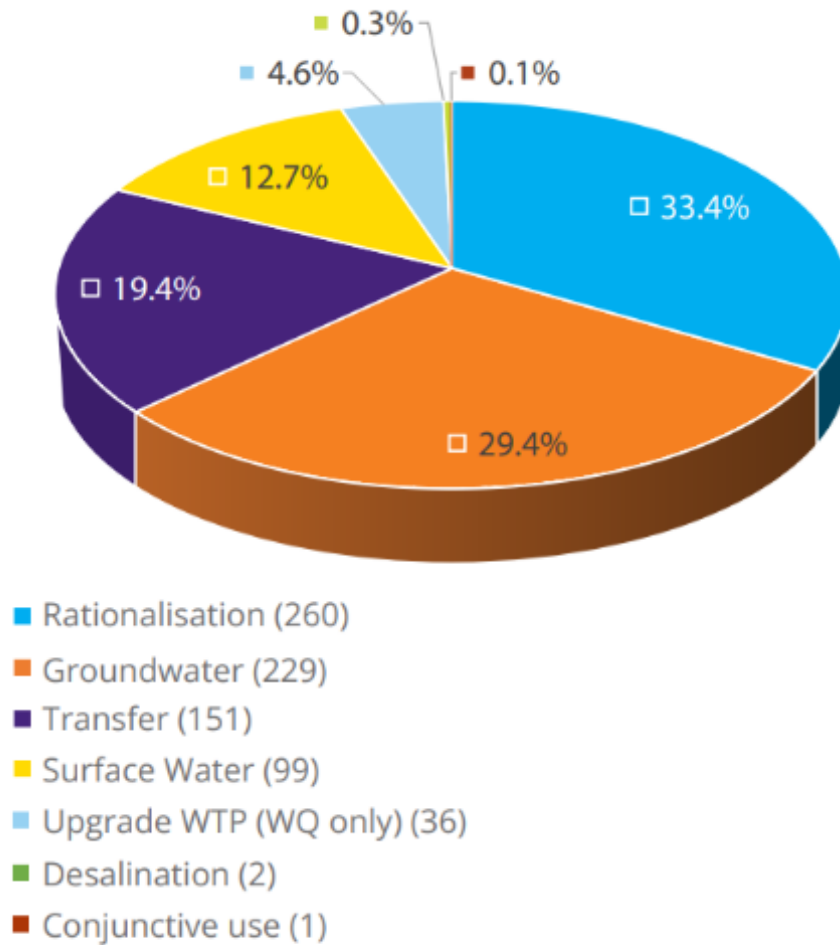


Figure 4. Feasible Option Types

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-SE has for the first time allowed Uisce Éireann to collectively assess needs across all of the 111 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 12 new interconnected WRZs, reducing the number of WRZs in the South East Region from 111 to 58.
- > Upgrading 80 existing WTPs to reduce water quality risks across all WRZs.
- > Increasing the capacity of 24 (of the remaining 56) WTPs to address the current supply deficit and to meet forecast growth.
- > Interconnecting supplies via 455 kilometres of trunk mains.
- > Development of 14 new WTPs.
- > Eventual decommissioning of 63 WTPs.
- > Reducing leakage to 24% of regional demand through pressure management.

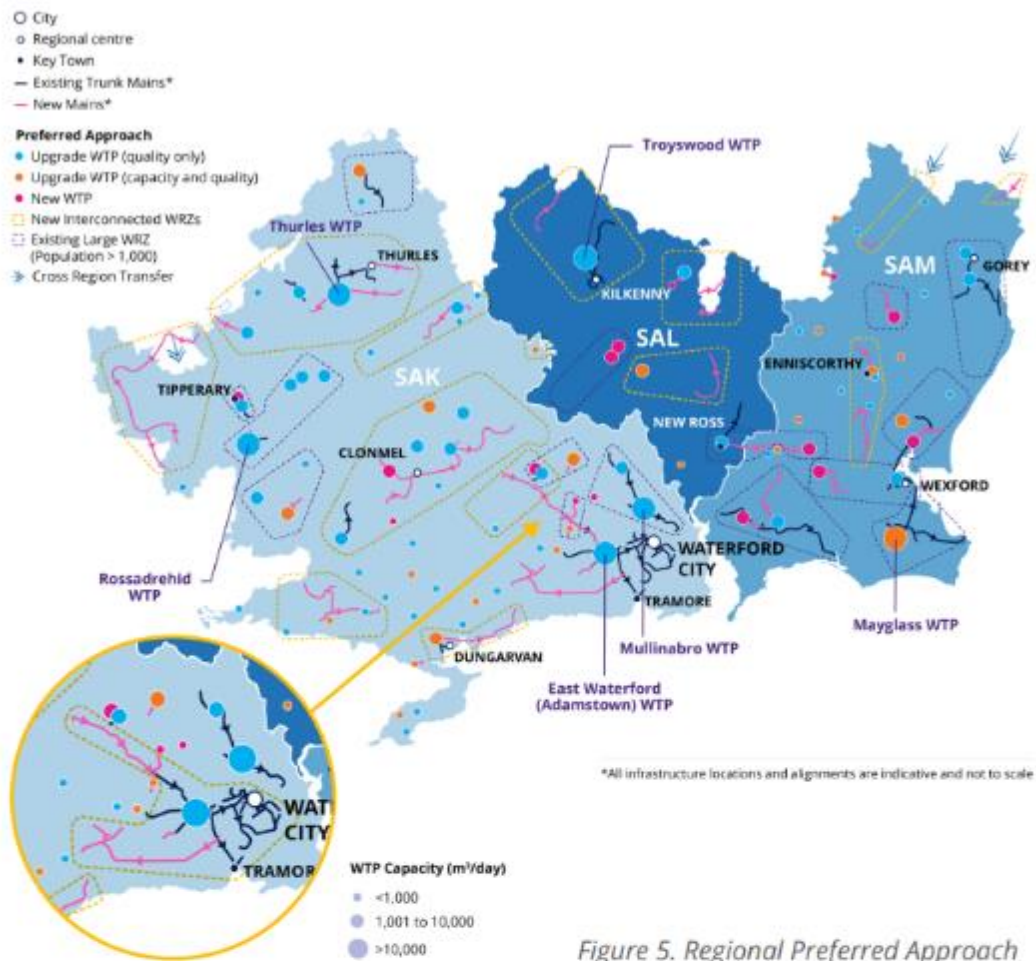


Figure 5. Regional Preferred Approach

## 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 58 of the remaining/new WRZs in the South East 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 WRZs 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.



National Water Resources Plan | Phase 2 Consultation | 13

---

## How can I get involved?

**Uisce Éireann is now seeking feedback on the public consultation for the draft RWRP-South East and associated SEA Environmental Report and Natura Impact Statement.**

A twelve-week consultation will run from the 11 July to 3 October 2023, during which time the draft RWRP South East and associated environmental reports can be viewed and downloaded at **[www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/](http://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/)** 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/projects/strategic-plans/national-water-resources/rwrp/south-east/>**

Individual submissions will be reported anonymously and feedback from organisations will be attributed to them. Feedback received outside the scope of the draft RWRP-SE 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 Uisce Éireann



projects, or in reference to any other area of the Uisce Éireann business should be sent directly to those project teams, unless applicable to how they are included in the RWRP-SE. Information on Uisce Éireann projects and contact details can be found on **[www.water.ie](http://www.water.ie)**

In line with the General Data Protection Regulations (GDPR) effective from 25 May 2018, Uisce Eireann's updated Privacy Notice, is available to view online at **[www.water.ie/privacy-notice/](http://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 **3 October 2023** as follows:

Email: **[nwrp@water.ie](mailto:nwrp@water.ie)**  
Post: **National Water Resources Plan,  
Uisce Éireann, P.O. Box 13216,  
Glenageary, Co. Dublin**  
Freephone: **1800 46 36 76**

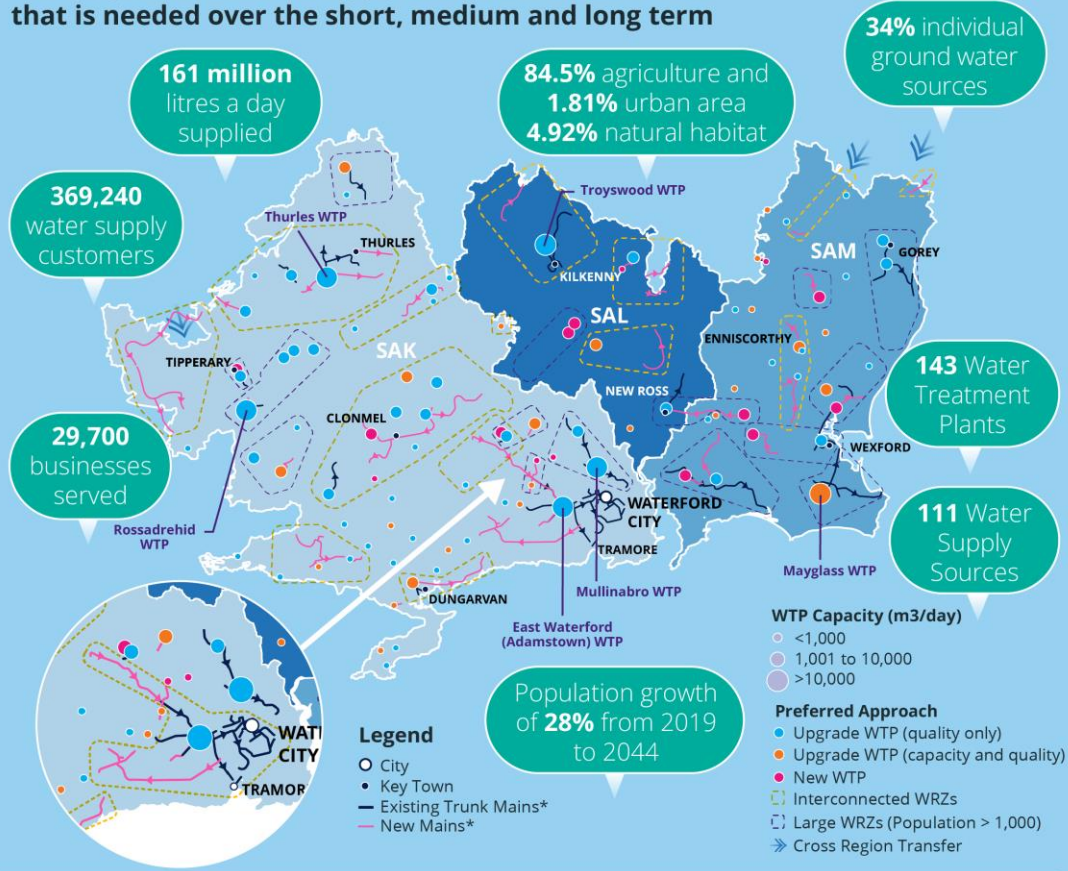
A dedicated helpline is available for anyone who would like to discuss any aspect of the consultation prior to making a submission. Freephone: 1800 46 36 76

# Appendix B RWRP-SE Infographic



## Regional Water Resources Plan (RWRP) South East 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 South East

- Reducing leakage to **24% 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 **80 existing Water Treatment Plants** in terms of size and barrier performance
- We will provide **14 new WTPs**
- We will decommission **63 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



### **NWRP Phase 2 - Regional Water Resources Plan South East**

Uisce Éireann today begins a twelve-week public consultation on the draft Regional Water Resource Plan – South East which will continue until 3 October 2023. The region covers approximately 9,200 square kilometres, encompassing counties Limerick, Tipperary, Waterford, Kilkenny, Carlow, Wicklow and Wexford.

The plan sets out options for providing a more secure, reliable and sustainable water supply for 369,240 customers in the South East region over the next 25 years.

Uisce Éireann's National Water Resources Plan (NWRP) will be the first resources plan for the entire public water supply in Ireland. The NWRP 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 NWRP 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 NWRP will also provide a transparent roadmap on how Uisce Éireann will plan for its water assets to align with national policy.

Given the scale of the area to be covered, the NWRP is being rolled out in two phases. The NWRP Framework Plan was first adopted in the summer of 2021 and Uisce Éireann 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.



The draft RWRP-SE describes the South East 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 111 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 143 Water Treatment Plants (WTPs) in the South East Region, which collectively serve 369,240 people or 9% of the population of Ireland and 29,700 businesses via approximately 17,730 kilometres of distribution network. Speaking at the launch of the public consultation, Mairéad Conlon, Regional Water Resources Strategy Lead for Uisce Éireann said, “The development of a draft plan on how Uisce Éireann will supply water across the South East region is an important step. It will allow Uisce Éireann 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 Limerick, Tipperary, Waterford, Kilkenny, Carlow, Wicklow and Wexford over the next 25 years. 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 South East region,” explained Mairéad.

Uisce Éireann is now seeking feedback on the public consultation for the draft RWRP-SE and associated SEA Environmental Report and Natura Impact Statement (NIS). The documents are available to view on our website at <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/>.

A 12-week statutory public consultation will run from 11 July to 3 October 2023.

Submissions can be made by post or email by 3 October 2023 to:

**Email:** [nwrp@water.ie](mailto:nwrp@water.ie)

**Post:** National Water Resources Plan, Uisce Éireann, PO Box 13216, Glenageary, Co. Dublin

This public consultation provides everyone with the opportunity to feed into the process of how Uisce Éireann 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 July and September 2023. These webinars will provide information on the draft RWRP-SE and allow opportunities to pose questions to our team. If you would like to take part in an online public webinar on the draft RWRP-SE and associated environmental reports, you can register your interest on our website at <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/>.

Uisce Éireann 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](http://www.water.ie/nwrp).

[Find out more about NWRP](#)

# Appendix D Sample Newspaper Advertisements

## Foilsíonn Uisce Éireann an Dréachtphlean Réigiúnach um Acmhainní Uisce do Réigiún an Oirdheiscirt le haghaidh Comhairliúcháin Poiblí

Tá an dréacht-phlean Réigiúnach um Acmhainní Uisce – Oirdheisceart (PRAU-OD) foilsithe ag Uisce Éireann. Is é an PRAU-OD an plean Réigiúnach deiridh um Acmhainní Uisce as ceithre cinn a foilsíodh le haghaidh comhairliúcháin phoiblí agus leagfaidh sé amach straitéis Uisce Éireann chun an córas poiblí um sholáthar uisce a aistriú agus a fheabhsú sa réigiún.

Áirítear i Réigiún an Oirdheiscirt na contaetha: Luimneach, Tiobraid Árann, Port Láirge, Cill Chainnigh, Ceatharlach, Cill Mhantain agus Loch Garman.

Is é is cuspóir foriomlán leis an PRAU-OD 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-OD:

- Feidhmíocht fheabhsaithe ar fud na soláthairí uisce uile ó thaobh Cáilíocht agus Cainníocht de.
- Aistriú straitéiseach ón soláthar ilroinnte atá ann cheana chuig soláthar idirnascha atá níos athléimní agus níos inbhuanaithe; agus
- Beith in ann tacú le fás agus forbairt ar fud Réigiún an Oirdheiscirt.

Tá comhairliúcháin poiblí 12 seachtain ar siúl faoi láthair chun bonn eolais a chur faoi fhorbairt an PRAU-OD. Mairfidh an comhairliúcháin ó 11 Iúil go dtí an 3 Deireadh Fómhair 2023. Tá liosta iomlán de na bailte fearainn, bailte, ionnaíochtaí agus contaetha sa PRAU-OD ar fáil ag <https://www.water.ie/rwrp/southeast>

Cuireann Uisce Éireann fáilte roimh aiseolas ar an dréachtphlean PRAU-OD agus an Measúnacht Straitéiseach Timpeallachta (MST) agus an Ráiteas Tionchair Natura (RTN) a bhaineann leis, atá ar fáil ag <https://www.water.ie/rwrp/southeast>

Tá cóipeanna crua den dréachtphlean PRAU-OD agus de na doiciméid a bhaineann leis ar fáil le fáichaint orthu ag Oifigí Pleanála na nÚdaráis Áitiúil.

Is féidir tuairimí agus aiseolas a sheoladh chuig Uisce Éireann faoin Máirt an 3 Deireadh Fómhair 2023 trí:

**Ríomhphost:** [nwrp@water.ie](mailto:nwrp@water.ie)

**Post:** Dréachtphlean Réigiúnach um Acmhainní Uisce, Uisce Éireann, Oifig Poist 13216, Gleann na gCaorach, Co. Bhaile Átha Cliath.

Déanfar gach aighneacht a bhreithniú agus, más iomchuí, glacfar aiseolas ábhartha isteach sa PRAU-OD deiridh a fhoilseofar in 2024, in éineacht leis an Ráiteas MST agus an Cinneadh MC. Foilseofar Tuarscáil Chomhairliúcháin freisin, i ndiaidh athbhreithniú a dhéanamh ar an aiseolas ar fad a gheofar le linn na céime comhairliúcháin phoiblí seo.

Tá Tuarscálacha Comhairliúcháin don Chreat-Phlean PNAU agus do Phleananna Réigiúnacha eile ar fáil ar suíomh gréasáin ag [www.water.ie/nwrp](http://www.water.ie/nwrp)

Óstáilfaidh Uisce Éireann sraith de sheimineáir ghréasáin don phobal i mí Iúil agus i mí Mheán Fómhair 2023 chun an dréachtphlean PRAU-OD agus na tuarscálacha timpeallachta gaoimhara a chur i láthair. Chun clárú tabhair cuairt ar <https://www.water.ie/rwrp/southeast>

Ag cosaint ár n-uisce don saol atá romhainn



## Uisce Éireann publishes the draft Regional Water Resources Plan South East for Public Consultation

Uisce Éireann has published the draft Regional Water Resources Plan – South East (RWRP-SE). The RWRP-SE is the final of four Regional Water Resources Plans launched for public consultation and it will set out Uisce Éireann's strategy to transform and improve the public water supply system in the region.

The South East region includes counties Limerick, Tipperary, Waterford, Kilkenny, Carlow, Wicklow and Wexford.

The objective of the RWRP-SE 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-SE will involve:

- Improved performance across all 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 South East Region.

A 12-week public consultation is now underway to inform the development of the RWRP-SE. The consultation will run from 11 July to 3 October 2023. A full list of townlands, towns, settlements and counties included in the RWRP-SE can be found at <https://www.water.ie/rwrp/southeast>

Uisce Éireann is inviting feedback on the draft RWRP-SE and associated Strategic Environmental Assessment (SEA) Environmental Report and Natura Impact Statement (NIS), which are available at <https://www.water.ie/rwrp/southeast>

Hard copies of the draft RWRP-SE and associated documents are available to view at Local Authority Planning offices.

Comments and feedback can be sent to Uisce Éireann by Tuesday 3 October 2023 via:

**Email:** [nwrp@water.ie](mailto:nwrp@water.ie)

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

All submissions received will be reviewed and, where appropriate, relevant feedback will be incorporated into the final RWRP-SE, which will be published in 2024, 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.

Consultation Reports for the NWRP Framework Plan and other Regional Plans are available to view on our website at [www.water.ie/nwrp](http://www.water.ie/nwrp)

Uisce Éireann will host a series of webinars for members of the public in July and September 2023 to present the draft RWRP-SE plan and associated environmental reports. To register visit <https://www.water.ie/rwrp/southeast>

Safeguarding our water for our future



## Appendix E Planning Counters, Public Service Buildings and Libraries

Location	Appointment	Opening Hours	Contact Details	Address
Planning Department Carlow County Council	No	Mon-Fri 9:15am-5pm.	Tel: (059) 9170 300 Email: planningdevman@carlowcoco.ie	Carlow County Council, Athy Road, Co. Carlow R93 E7R7
Planning Department Cavan County Council	No	Mon-Fri 9:15am-1pm, 2-3:30pm	Tel: (049) 4378300 Email: plan@cavancoco.ie	Cavan Courthouse, Farnham Street, Co. Cavan H12 R6V2
Planning Department Clare City Council	No	Mon-Fri 9am-5pm.	Tel: (065) 6821616 Email: planoff@clarecoco.ie	Clare County Council, Áras Contae an Chláir, New Road, Ennis, Co. Clare, V95 DXP2
Planning Department Cork City Council	No	Mon-Fri 10am-4pm.	Tel: (021) 4966222 Email: planning@corkcity.ie	Cork City Council, City Hall, Anglesea Street, Co. Cork T12 T997
Planning Department, Cork County Council	No	Mon-Fri 9am-5pm.	Tel: 021 4276891 Email: planninginfo@corkcoco.ie	Planning and Development, Cork County Council Ground Floor, County Hall, Carrigrohane Road, Co. Cork T12 R2NC

Leterkenny Public Service Building Donegal County Council	No	Mon-Fri 9am-4:30pm	Tel: (074) 9153900 Email: karenblake@donegalcoco.ie	Leterkenny Public Service Building Neil T Blaney Road Letterkenny Co. Donegal F92 XT4C
Planning Department Dublin City Council	No	Mon-Fri 9am-5pm.	Tel: (01) 222 2149 Email: Fiona.murphy@dublincity.ie	Planning Counter, Civic Offices, Wood Quay, Dublin 8 D08 RF3F
Planning Department Dun Laoghaire Rathdown County Council	No	Mon-Fri 9:30am-4:30pm.	Tel: (01) 2054871 Email: planning@dlrcoco.ie	Dundrum Office Park, Main Street, Dundrum, Dublin 14 A96 K6C9
Planning Department Fingal County Council	No	Mon-Thurs 9am-5pm.	Tel: (01) 8905541 Email: customercareunit@fingal.ie	Fingal County Council, County Hall, Main Street, Swords, Co. Dublin K67 X8Y2
Planning Department Galway City Council	No	Mon-Fri 9am-4pm.	Tel: (091) 536 400 Email: customerservice@galwaycity.ie	Galway City Council, City Hall, College Road, Co. Galway H91 X4K8



Planning Department Galway County Council	No	Mon-Fri 9am-4pm.	Tel: (091) 509043 Email: planning@galwaycoco.ie	Áras an Chontae, Prospect Hill, Co. Galway H91 H6kX
Planning Department Kerry County Council	No	Mon-Fri 9am-5pm.	Tel: (066) 7183500 Email: plan@kerrycoco.ie	Kerry County Council, Co Buildings, Rathass, Tralee, Co. Kerry, V92 H7VT
Planning Department Kildare County Council	Yes	Mon-Fri: 9:00-5:00pm.	Tel: (045) 980845 Email: plandept@kildarecoco.ie	Head Office, Áras Chill Dara, Devoy Park, Naas, Co. Kildare, W91 X77F
Planning Department Kilkenny County Council	No	Mon-Fri 9am-1pm, 2pm-5pm.	Tel: (056) 7794000 Email: planning@kilkennycoco.ie.	Kilkenny County Council, County Hall, John Street, Co. Kilkenny R95 A39T
Planning Department Laois County Council,	No	Mon-Fri: 9:00-5:00pm.	Tel: (057) 8664000 Email: Ebrownri@laoiscoco.ie	Laois County Council, Áras an Chontae, JFL Ave., Portlaoise, Co. Laois, R32 EHP9

Planning Department Leitrim County Council	No	Mon-Fri 9:30am-1pm, 2pm-4:30pm.	Tel: (071) 965 0450 Email: Mshanley@leitrimcoco.ie	Áras An Chontae, St. Georges Terrace, Carrick on Shannon, Co. Leitrim, N41 PF67
Planning Department Limerick City & County Council	No	Mon-Fri 9am-5pm.	Tel: 061 556 556 Email: planning@limerick.ie	Planning and Environmental Services Floor 1 Limerick City and County Council Dooradoyle Road Dooradoyle Co. Limerick V94 WV78
Planning Department Longford County Council	No	Mon-Fri 9am-1pm, 2pm-5pm	Tel: (043) 3343300 Email: lmckee@longfordcoco.ie	Planning Department, Longford County Council, Áras An Chontae, Great Water Street, Co. Longford N39 NH56
Planning Department Louth County Council	No	Mon-Fri 9am-5pm.	Tel: (042) 933 5457 Email: frances.hodgers@louthcoco.ie	Louth County Council, Town Hall, Crowe Street, Dundalk, Co. Louth, A91 W20C
Planning Department Mayo County Council	No	Mon-Fri 9:30-1pm, 2pm-4:30pm.	Tel: (094) 9064000 Email: planning@mayococo.ie	Planning Section Mayo County Council Áras an Chontae The Mall, Castlebar, Co. Mayo F23 WF90

Planning Department Meath County Council	No	Mon-Fri 9am-1pm, 2pm-5pm.	Tel: (046) 9097000 Email: <a href="mailto:planning@meathcoco.ie">planning@meathcoco.ie</a>	Meath County Council, Planning Department, Buvinda House, Dublin Road, Navan, Co. Meath C15 Y291
Planning Department Monaghan County Council	No	Mon- 9:15am-1pm, 1:30pm-5pm.	Tel: (047) 30500 Email: <a href="mailto:planning@monaghancoco.ie">planning@monaghancoco.ie</a>	Monaghan County Council Planning Offices 1 Dublin Street Co. Monaghan H18 X982
Planning Department Tipperary County Council	No	Mon-Fri 9:30am-4:30pm.	Tel: (052) 6165286 Email: <a href="mailto:planning@tipperarycoco.ie">planning@tipperarycoco.ie</a>	Tipperary County Council Civic Offices, Emmetts Street, Clonmel, Co. Tipperary E91 D426
Planning Department Offaly County Council	No	Mon-Fri 9am-4pm.	Tel: (057) 934 6800 Email: <a href="mailto:planning@offalycoco.ie">planning@offalycoco.ie</a>	Aras an Chontae, Charleville Road, Tullamore, Co. Offaly R35 F893
Planning Department Roscommon County Council	No	Mon-Fri 9:30am-5pm.	Tel: (090) 663 7100 Email: <a href="mailto:planning@roscommoncoco.ie">planning@roscommoncoco.ie</a>	Roscommon County Council, Aras an Chontae, Roscommon Town, Co. Roscommon F42 VR98.

Planning Department Sligo County Council	No	Mon-Fri 9am-5pm.	Tel: (071) 9111111 Email: <a href="mailto:planning@sligococo.ie">planning@sligococo.ie</a>	Sligo City Hall, Quay St, Abbeyquarter North, Co. Sligo F91 PP44
Planning Department South Dublin County Council	No	Mon-Fri 10am-12pm, 2pm-4pm.	Tel: (01) 4149000 Email: <a href="mailto:planningdept@sdublincoco.ie">planningdept@sdublincoco.ie</a>	South Dublin County Council County Hall, Tallaght, Dublin 24 D24 A3XC
Carrickphierish Library Waterford	No	Mon-Fri 1am-8pm	Tel: 0761 10 2696 Email: <a href="mailto:carrickphierishlibrary@waterfordcouncil.ie">carrickphierishlibrary@waterfordcouncil.ie</a>	Gracedieu Rd, Carrickphierish, Co. Waterford X91 NN9F
Planning Department Westmeath County Council,	No	Mon-Fri 9:30am-4pm.	Tel: (044) 9332000 Email: <a href="mailto:planning@westmeathcoco.ie">planning@westmeathcoco.ie</a>	Westmeath County Council, Aras an Chontae, Mount Street, Mullingar, Co. Westmeath, N91 FH4N
Planning Department Wexford County Council	No	Mon-Fri 9am-1pm, 2pm-5pm.	Tel: (053) 919 6000 Email: <a href="mailto:planning@wexfordcoco.ie">planning@wexfordcoco.ie</a>	Customer Service Unit Block B, County Hall Carricklawn Co. Wexford Y35 WY93

Planning Department Wicklow County Council	No	Mon-Fri 9am-5pm	Tel: (0404) 20100 Email: <a href="mailto:plandev@wicklowcoco.ie">plandev@wicklowcoco.ie</a>	Wicklow County Council, County Buildings Whitegates, Wicklow Town Co. Wicklow A67 FW96
---	----	-----------------	--	---

## Appendix F Sample Stakeholder Emails

### Subject: Draft RWRP South East Consultation

Dear Stakeholder,

Thank you for your engagement to date on the development of the National Water Resources Plan (NWRP).

**We are currently progressing Phase 2 NWRP - Regional Water Resources Plans (RWRPs) and are now seeking feedback on the fourth and final RWRP for the South East (draft RWRP-SE) and associated SEA Environmental Report and Natura Impact Statement.**

A 12-week consultation will run from 11 July 2023 to 3 October 2023 during which time the documents will be available to view on our website at <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/south-east/> 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](mailto:nwrp@water.ie)

**Post:** National Water Resources Plan, Uisce Éireann, PO Box 13216, Glenageary, Co. Dublin.

Uisce Éireann would like to offer you a briefing over the coming weeks to discuss the draft RWRP-SE plan and associated environmental reports, and to answer any questions you may have that will assist you in making your submission. **Please let us know your availability by return email.**

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.

1. In section 2 of the draft RWRP-SE 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 South East region we consider 111 water supplies (Water Resource Zones) represented across 3 Study Areas. Do you have any comments on the Study Areas?
3. Section 3 of the draft RWRP-SE and each of the technical appendices 1-3 outline the Need in terms of water quality, quantity, sustainability, and resilience across the region and in each of the Study Areas. Do you have any comment on the Need?
4. Section 4, 7 and 8 of the draft RWRP-SE, and the technical appendices 1-3, set out solutions we can undertake to address some of these needs in the interim, while we develop the preferred approaches. Do you have any comments on this?
5. Section 6 and the technical appendices 1-3 of the draft RWRP-SE summarise our process for developing options to address the needs in the South East 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 1-3 (K-M)

and the Environmental Review for Study Areas 1-3 (K-M) set out how the Preferred Approach has been identified in more detail. Have you any feedback on this?

7. The draft RWRP-SE 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-SE?

9. We have produced an 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?

All submissions made on the draft RWRP-SE and associated environmental reports will be reviewed and relevant feedback incorporated into the final RWRP-SE 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 2024.

View our updated Privacy Notice at [www.water.ie/privacy-notice](http://www.water.ie/privacy-notice) which is in line with the General Data Protection Regulation (GDPR) effective from 25 May 2018.

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>.

The RWRP-Eastern and Midlands, RWRP-South West and RWRP-North West and associated environmental reports have been adopted and can be viewed and downloaded at <https://www.water.ie/nwrp>.

We look forward to engaging with you further on the development of the NWRP in the coming months.

Yours sincerely,

NWRP Team  
**Uisce Éireann**

**T: 1800 46 36 76**

**E: [nwrp@water.ie](mailto:nwrp@water.ie)**

**[Colvill House, 24-26 Talbot Street, Dublin Ireland](#)**

## Appendix G Stakeholder Briefings

Stakeholder	Date
Public Webinar 1	25 July
Public Webinar 2	26 July
Limerick Councillors	26 July
Tipperary Councillors	28 July
Carlow Councillors	31 July
Department of Housing, Local Government and Heritage (DHLGH)	15 August
Wicklow Councillors	24 August
Commission for Regulation of Utilities (CRU)	1 September
Southern Regional Assembly (SRA)	8 September
Elected Representatives	12 September
Public Webinar 3	13 September
Public Webinar 4	14 September
National Stakeholder Forum	19 September
Wicklow Councillors	28 September