Tionscadal Soláthair Uisce
Water Supply Project

Water Supply Project
Eastern Midlands Region
Non-Statutory Consultation
Submissions Report 2025

October 2025

Uisce Éireann
Irish Water

Jacobs

TOBIN

Table of Contents

List of Abbreviations

Above Ordnance Datum (AOD)

Community Development Association (CDA)

Community Investment Fund (CIF)

Ecological Clerk of Works (ECoW)

Environmental Impact Assessment (EIA)

Environmental Impact Assessment Report (EIAR)

Environmental Protection Agency (EPA)

European Union (EU)

Geological Survey Ireland (GSI)

Inland Fisheries Ireland (IFI)

Irish Peatland Conservation Council (IPCC)

Large Energy Users (LEUs)

Major Projects Advisory Group (MPAG)

Million litres per day (Mld)

HSE National Environmental Health Service (HSE)

National Parks and Wildlife Service (NPWS)

National Water Resources Plan (NWRP)

Natura Impact Statement (NIS)

Regional Water Resources Plan (RWRP)

Regional Water Resources Plan – Eastern and Midlands (RWRP-EM)

Science, technology, engineering, maths (STEM)

Small and medium enterprise (SME)

Special Area of Conservation (SAC)

Trihalomethanes (THMs)

Ultraviolet (UV)

Water Framework Directive (WFD)

Executive Summary

Introduction

The Water Supply Project Eastern and Midlands Region (the 'Proposed Project') aims to secure a new water source from the River Shannon at Parteen Basin. The Proposed Project infrastructure will have the capacity to meet the water supply needs of up to 50% of Ireland's population until 2050 and beyond. It focuses on providing safe, secure, resilient, and sustainable drinking water supplies across the region and is crucial for adapting to climate change and ensuring a resilient water supply for the future.

The Proposed Project will deliver water to the Greater Dublin Area and has the capacity to supply the volume of water needed by 2050 in 35 further Water Resource Zones in the Eastern and Midlands Region. This aligns with the Preferred Approach for the Eastern and Midlands Region as set out in the Regional Water Resources Plan – Eastern and Midlands (RWRP-EM) (Irish Water 2022).

The Proposed Project involves abstracting raw water from the River Shannon and transferring it through a 172km steel pipeline to a new reservoir at Peamount, Co. Dublin. The pipeline will include six Infrastructure Sites[1] to clean and move the water and ancillary features like valves and washouts needed to operate it in the long term.

Non-Statutory Public Consultation was held on the proposals at the beginning of 2025, and this Non-Statutory Consultation Submissions Report is being published in advance of the submission of the planning application [2]for the Proposed Project. It provides a summary of the feedback received during the consultation and Uisce Éireann's response to it.

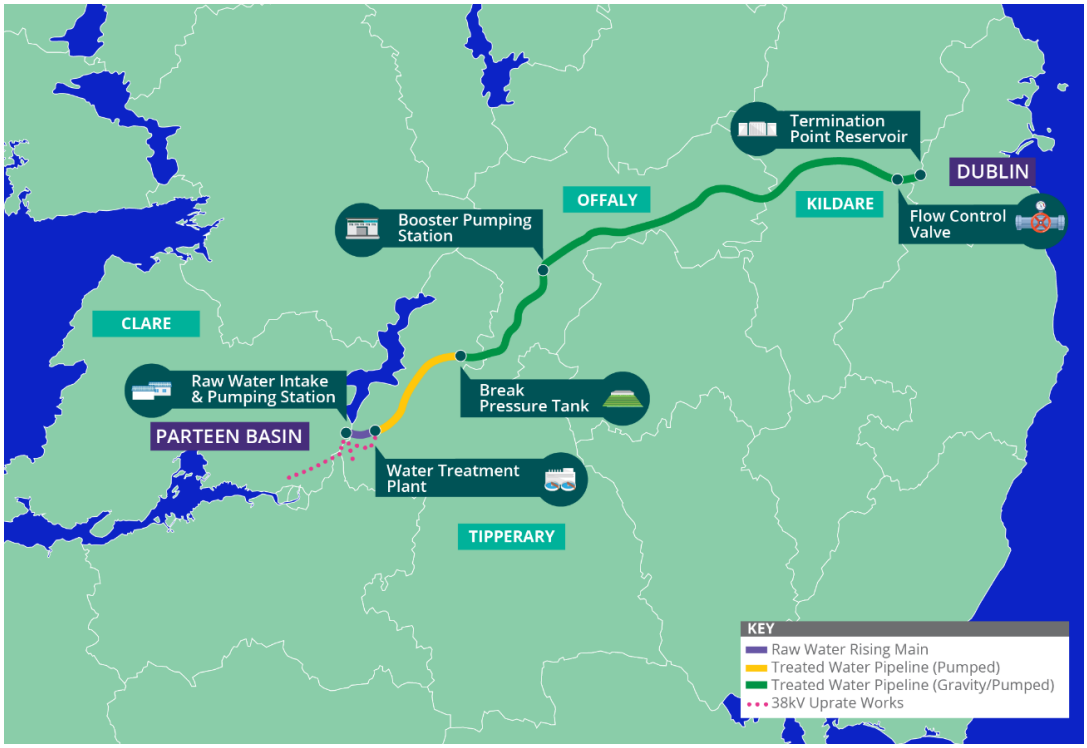


Image ES1: Water Supply Project Eastern and Midlands Region

[1] The Flow Control Valve has been redefined as an Infrastructure Site since the Non-Statutory Consultation.

[2] A Strategic Infrastructure Development (SID) planning application for a project by Uisce Éireann is an application made directly to An Coimisiún Pleanála for projects of significant economic or social importance to the country

Background

The Proposed Project has progressed significantly and is currently at an advanced stage of its design. Uisce Éireann plans to seek planning permission from An Coimisiún Pleanála[3] to construct and operate the Proposed Project. The planning application, including all necessary plans, reports, and environmental assessments, will be submitted to An Coimisiún Pleanála in 2025. This will include a Consultation Report summarising the engagement undertaken on the Proposed Project including the 2025 Non-Statutory Consultation. Additionally, an application for a Compulsory Purchase Order will be submitted to secure consent for obtaining the land needed to build the Proposed Project.

Uisce Éireann has actively sought and responded to public feedback throughout the development of the Proposed Project. This feedback, along with further technical and environmental studies, will inform the final project details.

Consultations on previous iterations of the project under relevant European Union (EU) environmental regulations, along with technical studies and stakeholder engagement, have helped shape the current Proposed Project now progressing through planning.

Image 1.2 provides a Project Roadmap which includes a summary of the main stages in the development of the Proposed Project.

[3] An Bord Pleanála has been renamed to An Coimisiún Pleanála, effective June 18, 2025. This change is part of the implementation of Part 17 of the Planning and Development Act 2024. References to An Bord Pleanála in any existing legal documents or proceedings will be understood as referring to An Coimisiún Pleanála.

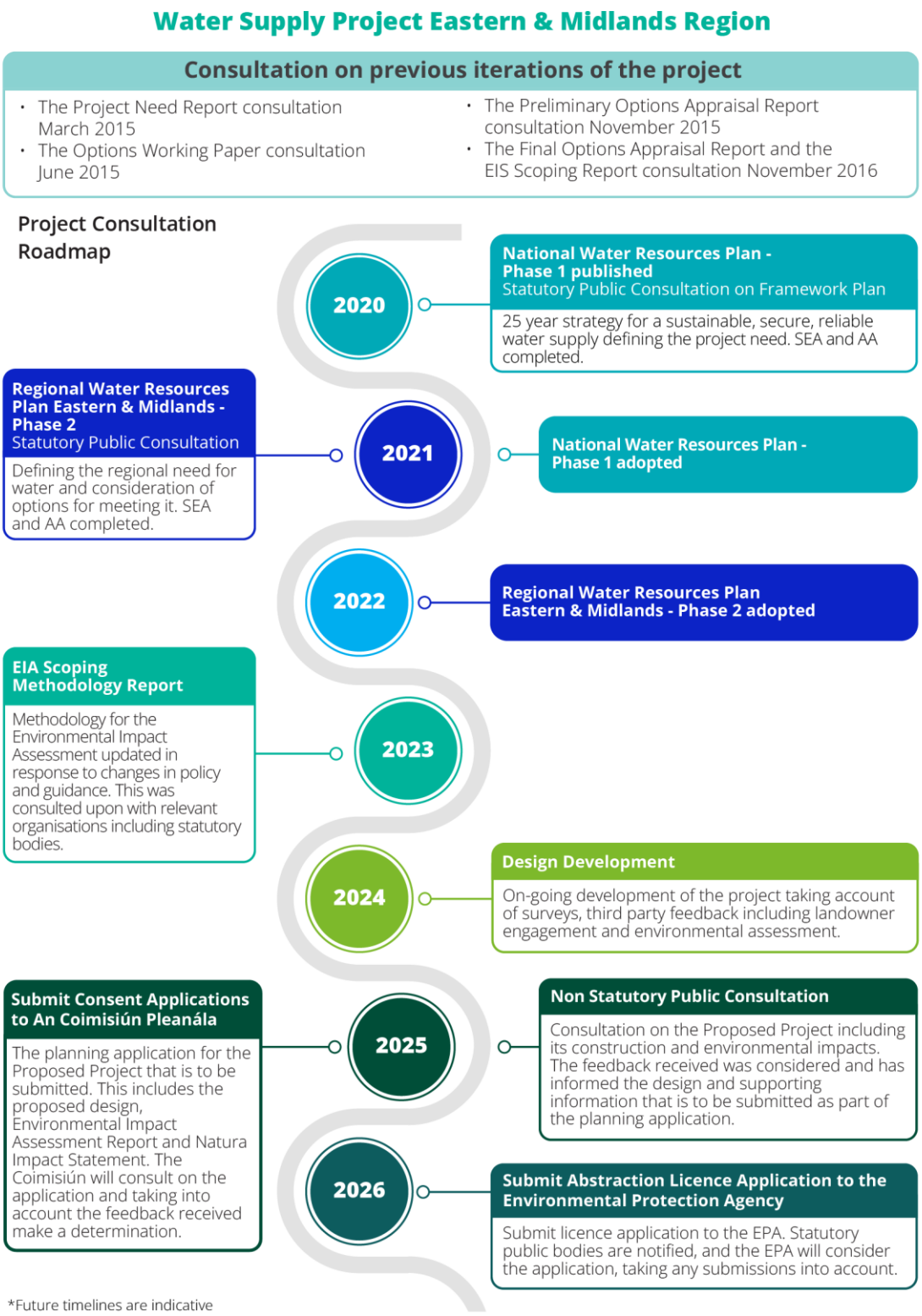


Image ES2: Proposed Project Roadmap

Consultation Publicity and Activity

Uisce Éireann held an eight-week consultation from 7 January to 4 March 2025, to gather feedback from stakeholders and the public on the Proposed Project. It plans to submit a planning application to An Coimisiún Pleanála in 2025.

Feedback was sought from statutory and key stakeholders, local authorities, Uisce Éireann customers and the public.

The Project Team employed a number of different methods of communication to engage with the various stakeholders and the public.

Image ES3: Consultation Activity

Feedback from Public Consultation

During the non-statutory public consultation period, 121 submissions were received from both individuals and organisations combined. They varied from observations and recommendations from State bodies such as Regional Assemblies, An Fóram Uisce, EirGrid, councils, Inland Fisheries Ireland and Geological Survey Ireland (GSI) to issues of interest to local authorities as well as specific items of concern to environmental and community groups such as Irish Peatland Conservation Council, Salmon Watch and River Shannon Protection Alliance.

There was a significant number of observations and concerns received from Shannon-based angling, swimming and sports clubs from Castleconnell to Lough Derg.

Of the 121 submissions received, 75 were sent by email, 35 were completed via online feedback form, nine hardcopies of the feedback form and two letters.

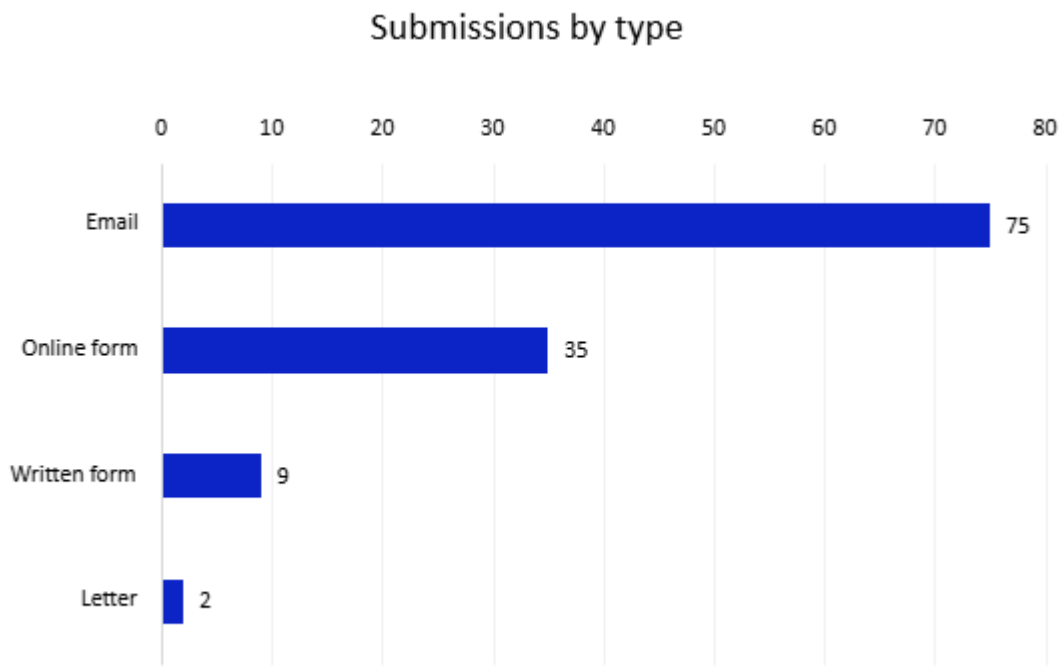


Image ES4: Submission by type.

Next Steps

Uisce Éireann plans to seek planning permission from An Coimisiún Pleanála to progress the proposed project. The planning application, including all necessary plans, reports, and environmental assessments, will be submitted to An Coimisiún Pleanála in 2025.

1 Introduction

Uisce Éireann will be making a planning application to An Coimisiún Pleanála in 2025, for the Water Supply Project Eastern and Midlands Region (the 'Proposed Project'). Therefore, Uisce Éireann undertook a public consultation on the Proposed Project in order to receive feedback that will be used to finalise the design and documentation that will form that planning application. The consultation took place over an eight-week period between 7 January and 4 March 2025.

The purpose of this Non-Statutory Consultation Submissions Report is to document the feedback from this public consultation and set out Uisce Éireann's response to the matters raised by stakeholders on the Proposed Project.

This Non-Statutory Consultation Submissions Report is structured as follows:

CHAPTER 1: This section (Introduction)
CHAPTER 2: Summarises the consultation publicity and activity
CHAPTER 3: General analysis of the feedback from the public consultation
CHAPTER 4: Summarises the submissions received during the consultation period from the 7 January to 4 March 2025 and categorises them into submission themes
CHAPTER 5: Next steps in the Proposed Project.

Each submission received by the Project Team was acknowledged and logged (Appendix J). All submissions were then compiled and reviewed by the Project Team.

1.1 Project Background

Uisce Éireann consulted upon and adopted its National Water Resources Plan (NWRP), comprising a Framework Plan (Phase 1) and four Regional Water Resources Plans (Phase 2) (including the Eastern and Midlands Plan). The Eastern and Midlands Plan set out the Preferred Approach for the Eastern and Midlands Region, which is a New Shannon Source with transfers.

The Proposed Project will secure a new source of water from the River Shannon at Parteen Basin in accordance with that Preferred Approach. The Proposed Project infrastructure will have the capacity to meet the domestic, commercial and industrial water supply needs of up to 50% of Ireland's population into the medium to long-term future to 2050 and beyond and provide safe, secure, resilient and sustainable drinking water supplies across the region. The Proposed Project will allow Uisce Éireann to adapt to climate change and will provide a supply which is resilient to those changes and is critical for the future of the Eastern and Midlands Region.

This is a generational project and is the first major 'new source' infrastructure in the region in the last 60 years. It will deliver a safe, secure, sustainable source of water supply necessary to support the growing population and economy, including the demand for housing. It is a project that will enable Uisce Éireann to adapt to the effects of climate change by diversifying water supply sources. It will provide the Greater Dublin Area, consisting of Dublin, and parts of Meath, Kildare and Wicklow, with a new supply of water and will have the capacity to supply communities in Tipperary, Offaly and Westmeath along the route. It will support balanced regional development by facilitating the redirection of supplies currently serving Dublin to Louth, Meath, Wicklow, Carlow and Kildare, and provide infrastructure with capacity for future connections across the Midlands including, for example, Mullingar (once future projects are brought forward).

The Proposed Project will abstract raw water from the River Shannon at Parteen Basin and transfer it through a 172km steel pipeline to a new reservoir at Peamount, Co. Dublin. Along the pipeline there

will be six Infrastructure Sites and ancillary pipeline features, such as valves and washouts needed to operate and maintain the pipeline. The Infrastructure Sites are shown on Image 1.1.

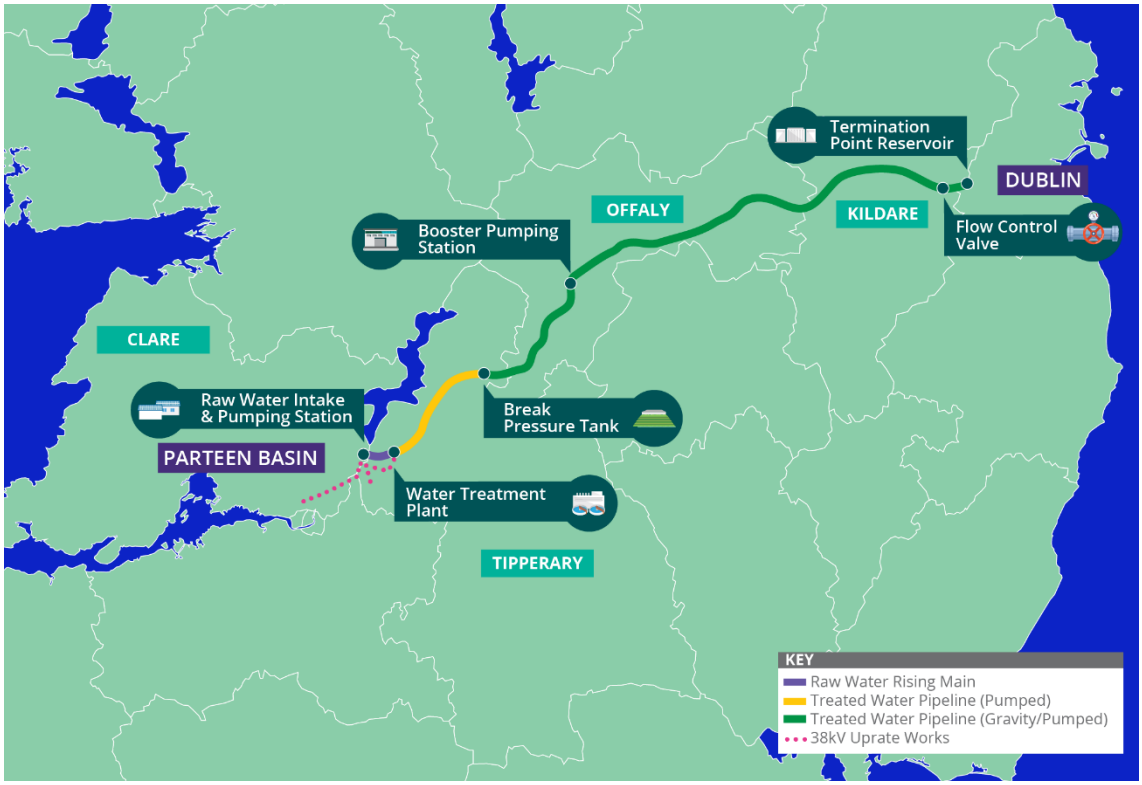


Image 1.1 Water Supply Project Eastern Midlands Region

1.2 Project Development

Uisce Éireann has sought, listened to and responded to public feedback at every stage of the project's development. The feedback from this consultation alongside further technical and environmental studies, engagement with landowners and other stakeholders will inform the details of the final planning application for the Proposed Project. For example, feedback requesting changes to the route of pipeline and requesting further engagement with agricultural holdings has been evaluated and assessed as part of producing the planning application documents.

1.3 Project Roadmap

Image 1.2 provides a Project Roadmap which includes a summary of the main stages in the development of the Proposed Project and shows the link between this consultation and the planning application that will be submitted for the Proposed Project.

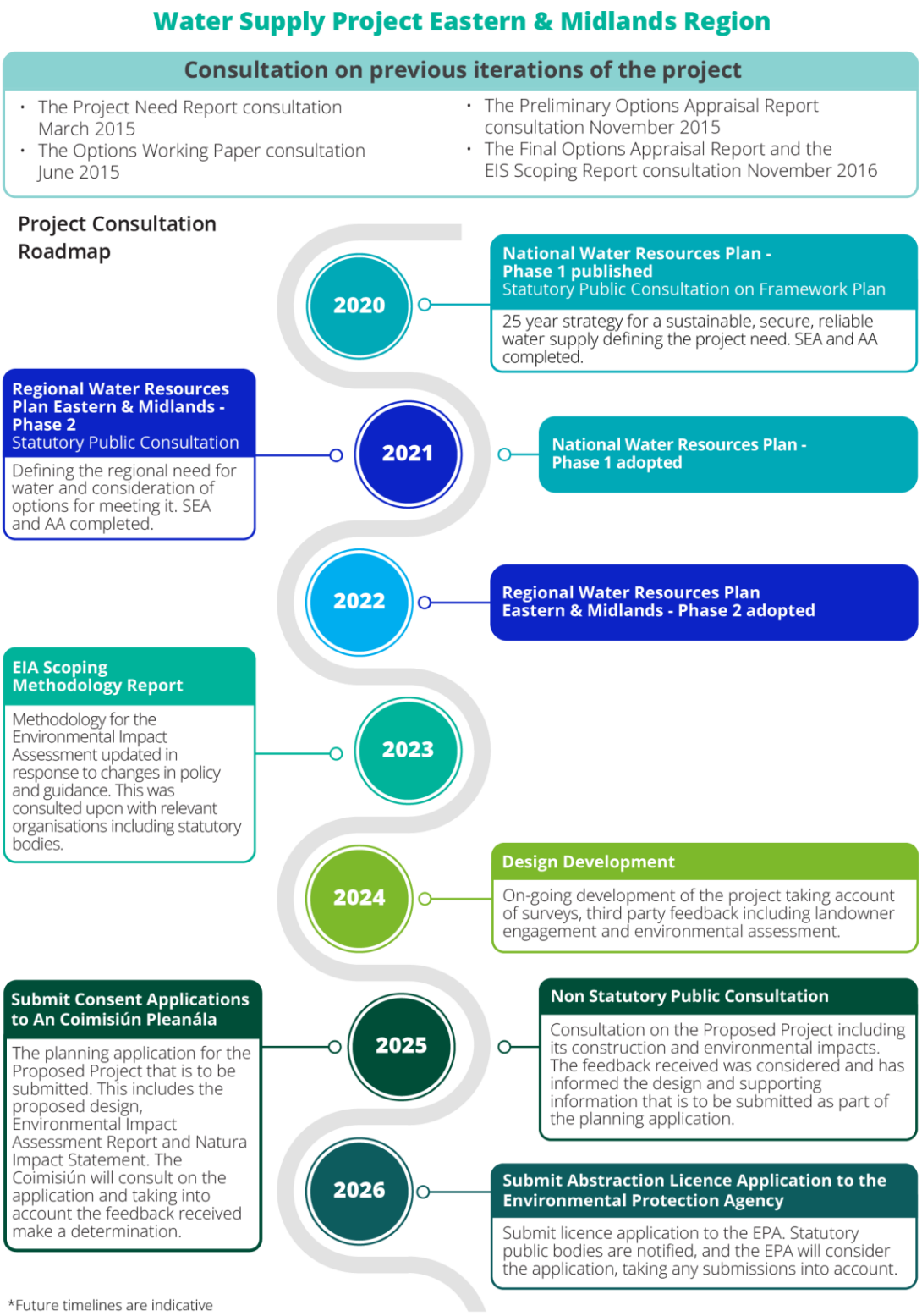


Image 1.2: Proposed Project Roadmap

2 Public Consultation Publicity and Activity

2.1 Consultation Process

Uisce Éireann used a variety of methods of communication to engage with the various stakeholders and the public during the consultation. This included pre-consultation briefings, website materials and hardcopies of consultation materials, a virtual consultation room, online webinars, media communication and newspaper notices.

2.2 Information Materials

The documents available as part of this consultation included:

- Project Consultation Brochure
- The Project Summary Report 2025
- Project Summary Report 2025: Appendix 1 – Details of the Proposed Project
- Project Summary Report 2025: Appendix 2 – Calculation of the Water Supply Requirement
- Project Summary Report 2025 – Supporting Figures – Figures 1 – 85
- Pipeline and Ancillary Pipeline Features factsheets describing the pipeline and providing information on permanent features along it, including the Flow Control Valve
- Infrastructure Site Factsheets
- Artistic impression fly-throughs of the permanent Infrastructure Sites.

A copy of the Project Consultation Brochure can be found in Appendix A and sample factsheets in Appendix D.

2.3 Pre Consultation Briefings

As part of the development of the Proposed Project and in advance of public consultation, a pre-consultation engagement phase was undertaken with key stakeholders, and a series of online briefings were facilitated by Uisce Éireann.

Emails offering pre-consultation briefings were issued to all stakeholder organisations detailed in Table 2.1 over various dates in October and November 2024. The purpose of the briefing was to update stakeholders on progress and discuss any new information available.

Stakeholder	Date of Briefing
An Fóram Uisce	5 November 2024
Bord na Móna	5 November 2024
Dept. of Housing, Local Government & Heritage	22 November 2024
Eastern & Midland Regional Assembly	22 October 2024
Dublin City Council	7 November 2024
EirGrid	8 November 2024
ESB	19 November 2024
Greater Dublin Strategic Infrastructure Group	11 November 2024

Stakeholder	Date of Briefing
Irish Rail	6 November 2024
Inland Fisheries Ireland	30 October 2024
National Federation of Group Water Schemes	27 November 2024
Offaly County Council	12 November 2024
Tipperary County Council	25 October 2024
Waterways Ireland	21 October 2024
Westmeath County Council	23 October 2024

Table 2.1: Pre Consultation Briefings

2.4 Advertising

At the launch of the consultation, eight advertisements were placed in national and regional newspapers including:

1. Irish Independent
2. Clare Champion
3. Clonmel Nationalist
4. Leinster Leader
5. Limerick Leader
6. Midland Tribune
7. Offaly Independent
8. Nenagh Guardian

The advertisements advised where copies of the consultation documentation could be obtained or viewed, the dates of the consultation, as well as the various means of engaging with the Project Team.

A sample copy of the advertisements can be found in Appendix M.

A further series of advertisements was placed on local radio to promote the public consultation. Tipp FM, Midlands 103 and KLR all held the 30 second advert from 6 to 19 January 2025 with over 120 radio slots in total.

2.5 Media

Press releases were issued to national and local media organisations across the study area where information events were to be held. This included information on the consultation, the purpose of the consultation, a description of the Proposed Project, and how members of the public could participate and make a submission.

Spokespersons were made available for interview and press briefings on the day of the launch and throughout the consultation. In total, six media interviews with national and regional media were carried out following the launch of the consultation.

National and regional coverage was generated across all media channels throughout the consultation period. In total, over 80 articles were published about the Proposed Project and the associated consultation in national and regional newspapers in the weeks following the launch.

2.6 Social Media

The launch of the consultation was promoted on social media using the Uisce Éireann X, Facebook, Instagram and LinkedIn pages, as displayed in Table 2.2 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 graphics was developed for use on social media to explain details of the Proposed Project and public consultation.

In total, three organic posts were shared across Facebook, X, Instagram and LinkedIn. Targeted (paid) Facebook posts were shared on the 7 January, 14 and 27 February 2025 with a combined reach of over 1.3 million.

Platform	No. of Posts	Statistics
Facebook	3	3,480 reach
LinkedIn	3	7,771 impressions
X	3	2,008 views
Instagram	3	1,393 reach

Table 2.2: Social Media Statistics

2.7 Project Website

A dedicated section of the website was created with details of the public consultation. This went live on 7 January 2024. An Irish version of the webpage was also made available.

The Project Summary Report 2025 (Uisce Éireann 2025a) and appendices were made available to view or download from the webpage, along with all other relevant information, including the brochure, consultation roadmap, infographic, factsheets and flyovers. Details on how to participate in the consultation were included.

For the period of the Proposed Project public consultation (between 7 January and 4 March 2025), there were 3,491 page views, and 2,711 unique users. A breakdown of the page views is outlined in Table 2.3.

Webpage	Views	Users
Consultation landing page	2,860	2,217
Aerial artistic impressions of Infrastructure Sites	175	141
Publications	146	105
FAQs	143	119

Webpage	Views	Users
Infrastructure factsheets	123	106
Irish language page	32	20
Publication & previous consultation	12	3
Total	3,491	2,711

Table 2.3: Webpage Statistics

2.8 Online Survey Form

In addition to the other methods of making submission to the consultation, an online survey form was designed to help people make submission. This had been trialled on a previous Uisce Éireann project and proved successful as it helped group feedback into the Terms of Reference, and rather than being a blank page that people may find intimidating or hard to start, it gave guidance and referenced the supporting documents that went out during the consultation.

Thirty-five of these forms were submitted during the consultation, and the feedback has been included in the relevant feedback sections within this report. The online survey can be found in Appendix K, which also includes a table of the questions asked.

2.9 Virtual Room

A virtual room was created and available to view from the project website, which hosted all the consultation material and ways to give feedback, from 7 January 2025 until 4 March 2025. A total of 581 users visited the virtual room and spent on average over five minutes viewing the information.

Stakeholders could submit a feedback form as part of the consultation. The online feedback forms offered a convenient, cost-effective, and efficient way to collect structured, honest, and easily analysable input from stakeholders.

2.10 Public Webinars

Two public webinars were held on 7 and 18 February 2025, and 79 members of the public registered their interest.

The public webinars were promoted through press releases, as well as to all elected representatives and on Uisce Éireann' s social media channels.

Updates were made to the Uisce Éireann website and an email update was issued to all stakeholders on the project mailing list. A presentation on the Proposed Project was given at each webinar, followed by a Q&A session with the Project Team.

A pre-recorded webinar was available and updated to the website.

2.11 Public Display of Consultation Documents

In order to ensure the Proposed Project and associated environmental reports were readily accessible, hardcopies, including appendices, were provided for public display in 31 local authority offices and at one county library 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 was promoted through the project website, social media and newspaper advertisements. An audit of all 31 displays was undertaken by the Project Team during the consultation period where the team confirmed that all documents were received and available for the public as advertised. In addition, hardcopies and electronic copies of these reports were available upon request through the project email address and phone line.

Thirty-six libraries in Tipperary, Offaly, Kildare and Limerick were given a consultation poster and brochure to advertise the consultation dates and how to make a submission.

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

2.12 Consultation Events

Six in-person public consultation information events were held during the consultation period. On 15 January, 288 attendees gathered in Ballina to kick off the series of consultations, followed by 124 participants in Nenagh on 16 January. Subsequent events took place in Tullamore (95 attendees), Johnstown Bridge (49 attendees), Maynooth (97 attendees), and, finally, Birr (76 attendees), which was rescheduled due to Storm Eowyn. These events provided stakeholders with detailed insights through a range of materials including brochures, executive summaries, project reports, and visual displays, including infrastructure boards and two interactive Geographic Information System screens.

In total, 729 individuals engaged directly through these events. The schedule of open days and attendance is presented in Table 2.4.

Location	Venue	Location	Date	Total Attendance	Landowner Attendance
Ballina	Lakeside Hotel	Ballina	15 January	288	14
Nenagh	Abbeycourt Hotel	Nenagh	16 January	124	33
Tullamore	Tullamore Court	Tullamore	22 January	95	33
Johnstown Bridge	Hamlet Court Hotel	Johnstown Bridge	28 January	49	18
Maynooth	The Glenroyal Hotel	Maynooth	29 January	97	34
Birr	County Arms Hotel	Birr	30 January	76	27

Table 2.4: Consultation Events

2.13 Direct Engagement

At the launch of the consultation, a number of stakeholders and organisations were contacted by email, including:

- Stakeholders who had engaged in previous rounds of consultation
- Public representatives
- Statutory and non-statutory organisations
- Chief Executives of the local authorities within the study area
- Landowners.

The email correspondence provided information on the preferred scheme, links consultation documents, the consultation Terms of Reference, details on how to engage and the contact details for making a submission. A sample of the correspondence issued is included in Appendix H. More than 140 organisations and 11 local authorities were contacted at the launch.

2.13.1 Councillor Briefings

Councillor briefings were offered to each local authority along the pipeline corridor. Details of the briefings that were held are presented in Table 2.5.

Local Authority	Date
Tipperary County Council	13 January
Fingal County Council	21 January
South Dublin County Council	5 February
Dún Laoghaire Rathdown County Council	6 February
Offaly County Council	17 February
Kildare County Council	18 February
Limerick County Council	24 February
Clare County Council (Killaloe MD)	25 February
Wicklow County Council	3 March

Table 2.5: Councillor Briefings

2.13.2 Oireachtas Briefing

A project briefing was held for Members of the Oireachtas on 12 February in Buswells Hotel, Dublin. In total, 18 members or their representatives attended this event.

2.13.3 Stakeholder Briefings

During the consultation period, the Project Team was available to meet with all interested stakeholders. Five meetings were held with statutory bodies, organisations and interested groups during the consultation period.

A full list of all organisations who were engaged during the consultation period is provided in Appendix F.

2.13.4 Local Authority Briefings

Meetings were also offered to local authority Executive/Director of Services within the study area. These are listed in Table 2.6.

Local Authority	Date
Tipperary County Council	13 January
Fingal County Council	21 January
South Dublin County Council	5 February
Dún Laoghaire Rathdown County Council	6 February
Offaly County Council	11 February
Tipperary County Council	13 February
Clare County Council	14 February
Offaly County Council	17 February
Kildare County Council	18 February
Limerick City & County Council	24 February
Clare County Council	25 February
Wicklow County Council	3 March

Table 2.6: Local Authority Briefings

2.14 Landowner Engagement

Consultation and engagement with landowners have been a key priority throughout the development of the Proposed Project. There are approximately 500 landowners along the route of the Proposed Project and engagement has been ongoing with these landowners since 2016. This has primarily been undertaken via four Landowner Liaison Officers who have been advising landowners on the progress of route development and technical design and arranging access for environmental surveys and ground investigation surveys.

Landowner Liaison Officers were present at each of the consultation information events outlined in Table 2.4 and engaged with 159 landowners. A summary of the issues raised by landowners is included in Section 3.5.

2.15 Information Services and Making a Submission

The Project Team introduced a dedicated phone line during this period of consultation to improve accessibility. The free phone number, 01 202 7770, was publicised in national newspapers, on all of the

consultation documents, and on the website. The phone line was staffed by the Project Team during office hours throughout the consultation period.

Submissions were invited via the following channels:

Email: watersupply@water.ie

Post: Water Supply Project Eastern & Midlands Region Uisce Éireann, P.O. Box 13748, Edmonstown, Dublin 16.

Consultation Feedback Form (see Appendix K)

3 Analysis of the Feedback from Public Consultation

This section of the report outlines the approach taken to analysing the 121 submissions received during this consultation period.

3.1 Submission Overview

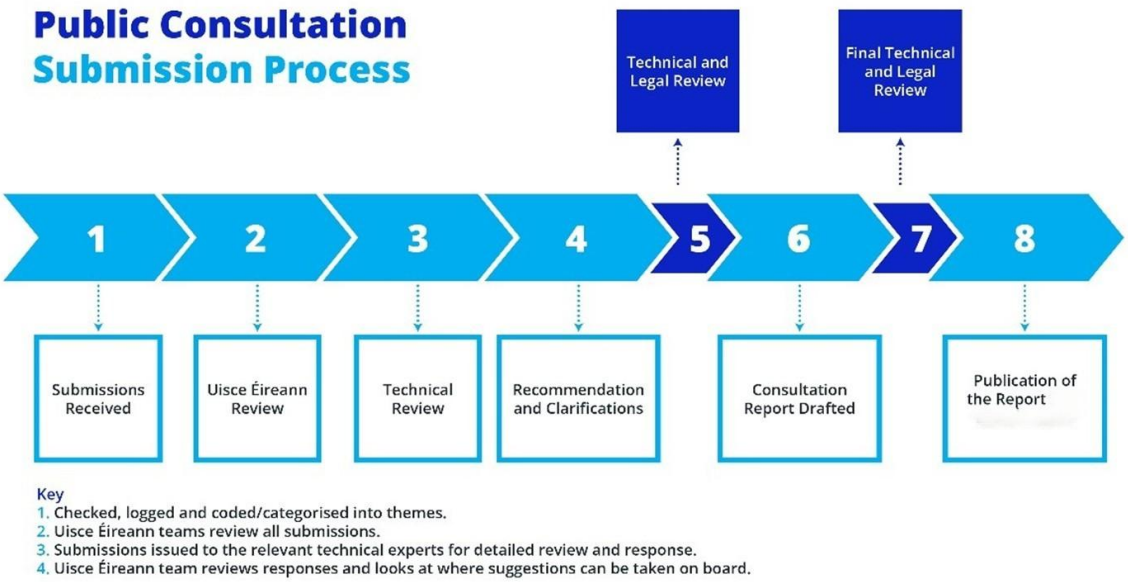


Image 3.1: Submission Process

A total of 121 submissions were received.

Of all submissions, 75 were sent by email, 35 were completed via online feedback form, nine hardcopies of the feedback form and two letters.

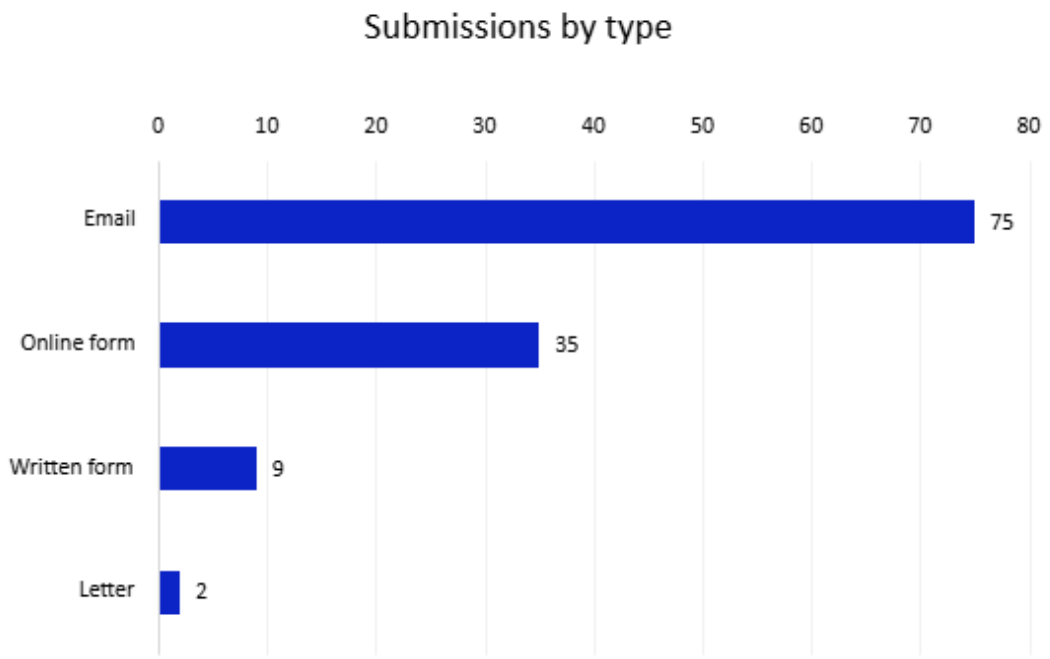


Image 3.2: Submission by Type

Image 3.2 shows a breakdown of respondents by type. The biggest group was individuals – 62 respondents. 13 sports clubs submitted their response, 10 landowners, 5 business organisations and 5 elected representatives. Other groups were government agencies (10), environmental groups (4), private and state-owned companies (4 and 2), councils (3), government bodies (3), community groups (2) and NGO and environmental authority (1 and 1).

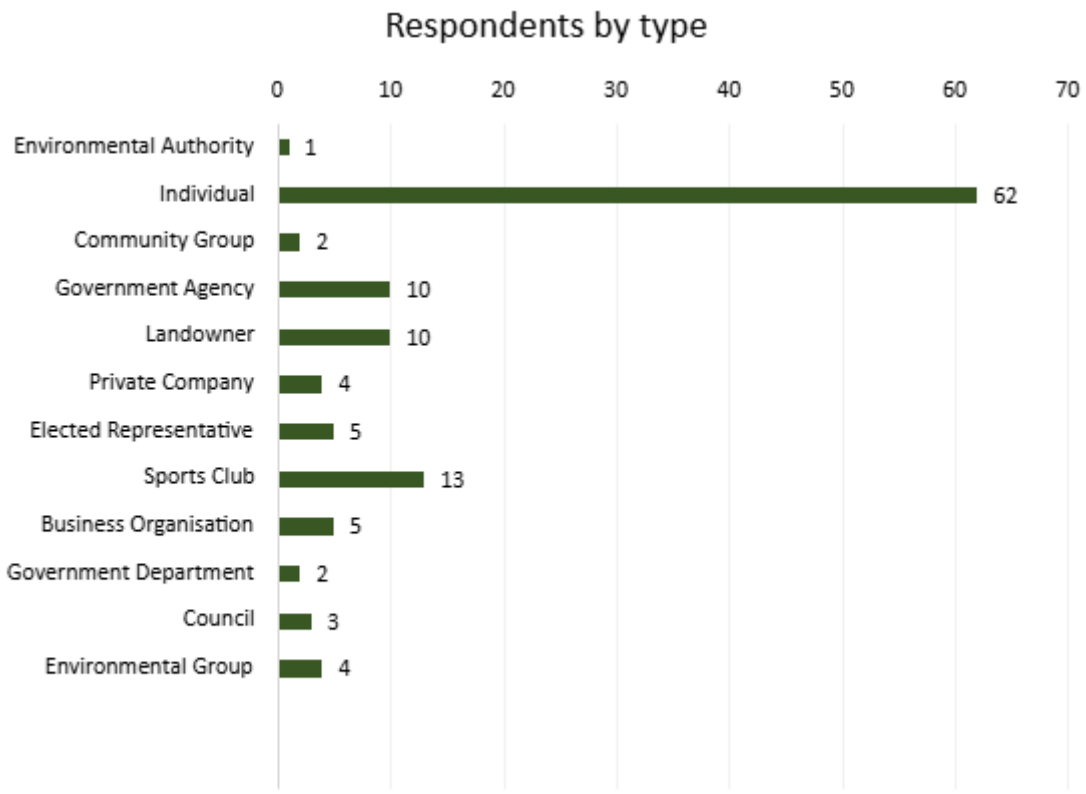


Image 3.3: Stakeholder Respondents

For a full breakdown of who made a submission please see Appendix J.

3.2 Methodology

Each submission was reviewed in its entirety by the Project Team and is 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 the General Data Protection Regulation.

Submissions made by organisations or elected representatives have been attributed to the relevant organisation or person.

Following a review of the feedback received, the key themes from the submissions which emerged were identified and summarised to assist consideration and review; see Table 3.1.

For ease of the reader, the sections in Chapter 4 comprise a summary of all submissions received under each heading, followed by Uisce Éireann's response to the key points raised in blue italics. It is important to note that some feedback may be applicable across multiple chapter headings and has therefore been considered in more than one section where relevant.

The views reflect those of individuals and organisations who made submissions during 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.

Theme	References
Need for the Project	62
Alternatives	52
Pipeline and Infrastructure Sites	17
Construction	9
Operation	15
Environmental Issues	76
Landowners	13
Community Gain	13
Public Consultation	21
Out of Scope	24

Table 3.1: References per Theme

3.3 Changes as a Result of Non-Statutory Consultation

A summary of the changes considered in response to the feedback received during the Non-Statutory Consultation is outlined below. A number of changes were made to the design which were assessed as part of the environmental assessment and are reported on in the Environmental Impact Assessment Report (EIAR) which will be submitted with the planning application.

The feedback from the consultation included a small number of requests for a design change. These broadly fell into three categories: a request for a change to the alignment of the pipeline, a change to the proposed Planning Application Boundary, and a change to the proposed power connection to the Line Valves.

There were 17 requests made for a change to the alignment of the pipeline itself during the consultation period. These were generally made in order to reduce the potential effect on the existing land use or a proposed land use.

It should be noted that although these re-route requests were made as part of the Non-Statutory Consultation, the landowner engagement had been ongoing prior to the consultation and has continued after it. Therefore, these re-route requests are simply part of a much wider re-route process, which is described in Section 4.7, and these 17 re-routes are within the 140 re-routes reported in Section 4.7.1.

For these 17 particular re-routes, eight of them were accepted as there were no technical or environmental reasons why the re-route could not be accommodated. Eight of them could not be accommodated for technical and/or environmental reasons. One of them did not require a re-route as the alignment could be accommodated within the Planning Application Boundary.

In addition to request for re-routes, there were a number of other design changes raised as part of the consultation. These included two requests to change the Planning Application Boundary, both of which

were accommodated. One of these removed an existing access from within the Proposed Project Boundary as consulted upon and the other increased the land included to avoid the severance of part of a field of land.

One stakeholder, a resident of Birdhill with property located close to the proposed site of the Water Treatment Plant and route of the pipeline, expressed concerns about the location of the plant so close to residential buildings with the associated inconveniences of noise, dust, disruption, and environmental and scenery destruction. They asked if an alternative route 250m north was possible as it would impact fewer properties.

To accept this request for a change in the route of the pipeline would be to reverse a previous decision to change alignment during the previous iteration of the project. Historically, the indicative 50m corridor, as published in the Final Options Appraisal Report (Irish Water 2016a) stayed further north when compared with the alignment published as part of the Non-Statutory Consultation, Project Summary Report 2025 (Uisce Éireann 2025a). The pipeline had been moved south in response to a previous landowner request to move the alignment of the pipeline so that it more closely followed the boundary of their fields. This is shown in Image 4.1 which shows in purple the previous alignment and in green the alignment proposed in response to the landowner re-route request.

Clonarrow Windfarm Limited identified power connections for the Proposed Project located on land where critical infrastructure (turbine location/access tracks/internal cabling) for the proposed Clonarrow Windfarm will be located. They requested an amendment to the design of the pipeline at this location.

The Proposed Project, as described in the Project Summary Report 2025 (Uisce Éireann 2025a), would include an overhead power line connection from an existing poleset to a proposed Line Valve that would be on the same piece of land as the Clonarrow Windfarm. In response to the consultation submission from Clonarrow Windfarm Limited, an alternative alignment for this Line Valve power connection has been proposed to ESB Networks.

Uisce Éireann notes the areas represented within the Proposed Project Boundary indicate the extent of the lands being assessed, within which the Proposed Project can be feasibly developed, including the provision of necessary electrical power connections to the proposed Uisce Éireann Infrastructure Sites, temporary Construction Compounds and depots and the 51 Line Valves along the route of the 172km pipeline route.

It is acknowledged that this is still in development and subject to further changes as the planning application is finalised.

Uisce Éireann also intends to seek the agreements necessary to construct the works with other state bodies along the pipeline route including those with ESB Networks in respect of the power connections required.

As the proposed electrical infrastructure is being assessed and included within the planning application, these have been referenced within the recent consultations and it has been explained that ESB Networks will acquire any necessary wayleaves at the appropriate time in line with its usual process, including use of its powers under Section 53 of the 1927 Electricity Supply Act. Uisce Éireann, as the potential electrical supply customer, will endeavour to work with ESB Networks once a connection application has been submitted to ensure all temporary and permanent impacts on lands are kept to a minimum

Section 4.8 provides a summary on the matters raised by Cloughjordan Community Development Association (CDA). As a result of these requests, an indicative circular walk will be incorporated into the landscape proposals at the Break Pressure Tank. This will connect into the Knockanacree Woodland to the south of the site.

Many people who took part in the Non-statutory Consultation shared concerns about how the Proposed Project might affect the environment, and what steps would be taken to prevent or reduce those effects.

Detailed information was included in the Project Summary Report (Uisce Éireann 2025a), and the project design has followed a clear process called the environmental mitigation hierarchy (shown in Image 3.2).

This hierarchy starts by looking for ways to completely avoid negative environmental impacts. If that's not possible, it then considers other options to reduce or manage those impacts as effectively as possible.

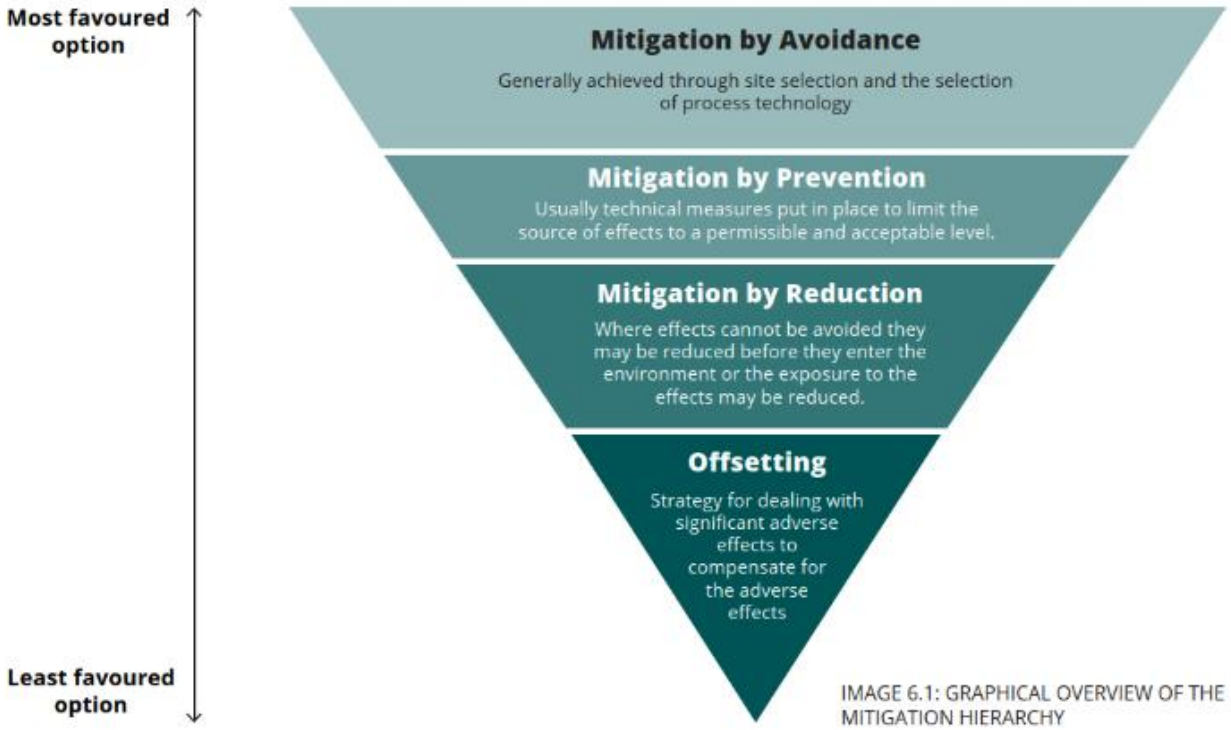


Image 3.4: Overview of the Mitigation Hierarchy

As part of the project design, Uisce Éireann has taken active steps to avoid or reduce potential environmental impacts by following the environmental mitigation hierarchy. This approach has shaped several important design decisions, including:

- Using water responsibly: The Proposed Project will use a sustainable water source. Only a small portion (up to 2%) of the existing long-term average flow from the Parteen Basin will be used for drinking water instead of hydropower generation.
- Carefully planning the pipeline route: The route has been chosen to avoid environmentally sensitive areas wherever possible.

- Choosing suitable sites: Infrastructure locations have been selected to minimise environmental impacts, such as visual effects, while also considering technical needs and cost.
- Designing an efficient pipeline: The pipeline has been designed to balance material use, energy efficiency, and carbon footprint. This includes optimising the pipe size and reducing the need for pumping.
- Protecting wildlife: The water intake at Parteen Basin has been designed to safeguard biodiversity, including measures to prevent fish from being trapped.
- Reducing disruption during construction: Special construction methods will be used to avoid disturbing rivers, roads, and railways, and to help prevent the spread of invasive species.
- Using renewable energy: Solar panels will be installed at key locations to help power the system in a sustainable way.
- Preserving nature: Hedgerows along the Planning Application Boundary will be retained where possible, and soil will only be disturbed in suitable weather to avoid damage.
- Minimising traffic impacts: Construction routes have been planned in consultation with local authorities to avoid sensitive areas.

Uisce Éireann made these choices to help protect the environment while delivering a service that's vital for people and communities, both now and in the years to come.

What Happens Next in the Planning Process?

As part of the planning application for the Proposed Project, a Construction Environmental Management Plan will be submitted. This will include a Surface Water Management Plan, which will outline how water will be managed during construction to protect the environment.

All of this will form part of the EIAR, which will be submitted to An Coimisiún Pleanála[4] as part of the planning application. The application will also include all relevant plans, reports, and assessments, such as the Natura Impact Statement (NIS)[5] and a Water Framework Directive (WFD) Compliance Assessment.

In addition, applications for a Compulsory Purchase Order will be submitted. An application to the Environmental Protection Agency (EPA) for an abstraction licence will follow the submission of the planning application.

[4] An Bord Pleanála has been renamed to An Coimisiún Pleanála, effective 18 June 2025. This change is part of the implementation of Part 17 of the Planning and Development Act 2024. References to An Bord Pleanála in any existing legal documents or proceedings will be understood as referring to An Coimisiún Pleanála.

[5] A Natura Impact Statement (NIS) is a key document required under the EU Habitats Directive and Ireland's Birds and Natural Habitats Regulations. It assesses the potential effects of a plan or project on Natura 2000 sites – protected areas designated for their ecological importance.

3.4 Summary of Landowner Queries and Requests

A summary of issues raised included:

- Queries on reinstatement and the construction process
- Re-route requests due to long-term or permanent interruption to agricultural land as a result of construction and permanent pipeline features
- Clarification on whether destock will be compensated under crop loss or disturbance
- Location of private wells and disturbance due to construction. Mitigation request to reduce the risk of contamination
- Existing watercourses and drains on farmland and the risk of flooding due to construction
- New electrical infrastructure to Line Valves
- Queries on agri-forestry and reinstatement
- Clarity on compensation.

Where requests have been received from affected landowners to have the pipeline route amended, the request has been facilitated if it:

- Is technically feasible
- Would have no adverse environmental impact
- Is acceptable to any other impacted landowners.

Compensation

Widespread concern about:

- Compensation amounts, timing, eligibility, and clarity
- Tenant vs. landowner compensation
- Tax implications and need for written clarification
- Compensation for destocking, crop loss, and long-term productivity loss.

Requests for

- Annual payments
- Free water or lifetime water supply
- Uisce Éireann to cover the costs of independent engineers and agronomists
- Additional payment for valve sites or re-routing.

Reinstatement

Strong emphasis on:

- Quality and supervision of reinstatement
- Ensuring land is returned to its original condition
- Impact on land drainage and subsoil structure
- Reinstatement of forests (especially with ash dieback) and quarries.

Land Use and Restrictions

Uncertainty over:

- What can be built over the Permanent Wayleave
- Impacts on future planning, forestry, and residential development
- Effect on grants, zoning status, and eligibility for agricultural schemes.

Construction Impacts

- Concerns about construction timeline, noise, dust, traffic, and supervision of contractors
- Issues around Pipe Storage Depots, access roads, and heavy machinery usage on farmland
- Requests for re-routing to avoid gallops, homes, farmyards, forestry, and sensitive areas.

Project Timeline and General Support
Multiple requests for:

- Timeline of work and compensation
- Clarification on when construction begins
- Some landowners are supportive if disruption is minimised
- Others are opposed or distrustful, citing previous negative experiences.

Valves and Pipeline Infrastructure

- Requests to relocate valves (Air Valves, water main valves, washouts) to field boundaries or ditches to reduce disruption
- Concerns about valves located in the middle of fields, near homes, wells, or interfering with farming activity
- Requests for photos and detailed maps of valve locations
- Queries on the depth and bed on which the pipe will sit
- Concerns about pipeline proximity to homes, noise, dust, and general disruption.

Land Drainage and Surface Water Management

- Concerns about disruption to land drains, river flow, and wetland areas
- Fears of flooding, rising water tables, and poor surface water management post-construction
- Concerns about how existing deep drains (4–6ft) will be handled or reinstated
- Questions about water flowing along pipeline route post-installation.

Access and Farm Operations

- Concerns about mandatory crossing points for cattle and farm machinery
- Issues with fields being cut off, unusable areas, or split farming plots
- Need for continued access during and after construction for farming purposes.

Wildlife and Environment

- Queries on badger setts, river impact, and wildlife surveys
- Concerns about peat-heavy land and long-term environmental effects
- Requests for a list of trees allowed over wayleave.

Communication and Engagement
Frustrations about:

- Previous poor handling of engagement
- Need for ongoing clear communication
- Some landowners refused to engage or requested only written contact
- Requests to exclude tenants from communication.

4 Summary of Submissions

4.1 Need for the Proposed Project

4.1.1 The Need for the Proposed Project General

Several stakeholders, including the Southern Regional Assembly, Eastern Midlands Regional Assembly and An Fóram Uisce, recognised the strategic importance of the Proposed Project. They expressed their support for the Proposed Project and understood the necessity of securing a sustainable water supply to meet the growing population, economic development, and the impacts of climate change.

Some stakeholders were generally opposed to the Proposed Project based on environmental, cost, balanced regional development, infrastructure grounds, project timeframe, and sustainability grounds. They raised issues with current water and wastewater infrastructure as well as leakage rates in the Greater Dublin network.

An Taisce commented on the Proposed Project's demand projection timeframe of 2050 and suggested a longer-term outlook to the end of the century would be a more appropriate timeframe due to capital costs, increased population projections and future climate change effects.

Projections within this plan are limited to the year 2050 in alignment with the National Planning Framework(2025) and the most recent Central Statistics Office population forecasts. This timeframe reflects the horizon over which there is a reasonable degree of confidence in demographic, economic, and environmental data. Beyond 2050, the uncertainty associated with long-term projections increases significantly, reducing their reliability for strategic planning purposes. As such, extending projections beyond this point would not provide a robust basis for decision-making.

The Proposed Project is designed to meet normal operational supply needs well beyond 2050, even though its capacity is based on peak demand projections for 2050[6].

Lough Derg Anglers and Killaloe-Ballina District Angler Group raised concerns regarding the Proposed Project. They suggested the funding could be better allocated to alternative projects within the region and that the "*proposed plan of abstracting the region's main natural resources possesses a threat to future social and economic growth within the area*".

The Proposed Project infrastructure will have the capacity to *develop a new water supply source capable of meeting up to 50% of Ireland's water needs—domestic, commercial, and industrial—through 2050 and beyond. It is a nationally significant initiative designed to ensure safe, secure, resilient, and sustainable drinking water across the region. The Proposed Project will primarily serve the Greater Dublin Area and enable redistribution of water to other eastern communities through the enhanced supply.*

The Elected Members of Nenagh Municipal District suggested an independent review of the Proposed Project should be carried out at national level in order to review the need for the Proposed Project before any further steps are taken.

The Commission for Regulation of Utilities, who was appointed as the external assurance body for water services, conducted an independent review of the Proposed Project in accordance with the Public Spending Code External Assurance Process and the sectoral guidelines issued by the Department of

[6] Water Supply Project Eastern and Midlands Project Summary Report 2025 I https://www.water.ie/sites/default/files/2025-01/WSP_Project-Summary-Report_No-ExSum_250102_WEB.pdf

Housing, Local Government and Heritage. This review, undertaken in 2023/24, concluded with a recommendation that the Proposed Project proceed to the next stage of development. The Major Projects Advisory Group (MPAG) provided strategic oversight during the review of the Proposed Project. As part of the Public Spending Code External Assurance Process, MPAG reviewed the Preliminary Business Case (Uisce Éireann 2024a) and the independent assessment by the Commission for Regulation of Utilities. Their role was to evaluate the Proposed Project's value for money, risk, and alignment with national priorities, and to advise the government on whether the Proposed Project should proceed to the next development stage.

Elected Members of Nenagh Municipal District highlighted that there are currently 82 data centres in Ireland with an additional 14 under construction and planning approval for a further 40. They requested Uisce Éireann to advise of the following:

- Could the expansion nationally have a negative impact?
- Could there be adjustments made by Uisce Éireann to increase the agreed water extraction?
- How can this extraction be monitored?

They further commented that if Ireland's Climate Action Plan goals for 2030 are to be met, 80% of electricity consumed in Ireland must come from renewable sources and queried how will this affect water as a renewable source and how could this impact on Tipperary and the local authority Climate Action Plan (Tipperary County Council 2024) going forward.

The need for a major new water supply for the region has been identified and detailed in the NWRP and has been informed by the Supply Demand Balance in the region, which is the difference between the water available for supply compared with the demand for water. The projected demand includes domestic and non-domestic (i.e. commercial and industrial) demand; operational usage (such as flushing water mains and fire hydrants); apparent losses and leakage. Demand forecasting also considered leakage reduction, growth in demand and uncertainties. The NWRP Framework Plan (Irish Water 2021a) and four Regional Water Resources Plans that have been adopted were the subject of statutory consultations and have been adopted by Uisce Éireann.

Uisce Éireann carried out a full review of its commercial customers to determine water consumption across all known data centres. To further support its detailed analysis, Uisce Éireann also engaged with a number of external stakeholders as well as reviewing relevant publications in respect of data centres across Ireland. Engagements included those with Baxtel, the Central Statistics Office and Cloud Infrastructure Ireland. Total data centre consumption as a percentage of overall water demand is low, estimated as between 0.13% and 0.16% of total water demand.

Data centres can be cooled by water or air. In respect of those data centres that are cooled by water, that water may be sourced from boreholes or from the public water supply (or a mix of both). In addition, Uisce Éireann understands data centres also recycle the water sourced from the public mains and send it back through the data halls several times, therefore not continually drawing upon the public mains and utilising water more efficiently for cooling purposes. While Uisce Éireann knows how much water it supplies on a daily/monthly basis across the country, it cannot outline how much water is used to cool a data centre should a data centre have alternative sources of water. In addition, such data centres may also switch to air cooling as a method of cooling data centre halls.

When Uisce Éireann examined the consumption of public water supplies at all known data centre locations nationally in 2022, only 22 data centres were identified as likely consuming water for the purposes of cooling data halls (i.e., consuming water above the demand typically attributed to offices/warehouses). All other locations consume a level of water compatible with standard offices or

warehouses nationally, and therefore it is assumed these sites are not consuming water as their primary cooling systems.

Government policy supports the development of sustainable data centres by encouraging a conservation and use-less approach where possible. Uisce Éireann, working with data centre applicants through its Connection Enquiry process, has found that new data centres are now availing of water efficient technology which minimises their requirement for water in their cooling processes, supporting its water conservation approach and the wider sustainability agenda.

Uisce Éireann has taken the lead on Water Stewardship with support from its partners Central Solutions and the Lean and Green Skillsnet to offer a first of its kind certified Water Stewardship Programme free of charge to large water users, supporting Uisce Éireann's business customers to lower their water consumption and reduce operating costs while also protecting the environment. There is a dedicated section on the Uisce Éireann website with further information on water stewardship: https://www.water.ie/conservation/business/water-stewardship/.

4.1.2 Benefits of the Proposed Project

The ESB submission supported the Proposed Project's objective to reduce the current and future dependence on the River Liffey source for drinking water supply, most specifically the dependency on water storage at Poulaphouca Reservoir which is owned and operated by ESB.

Medtronic Ireland welcomed the forward planning completed by Uisce Éireann, to address the impending capacity issues in the Eastern Region of Ireland. They noted that the Proposed Project removes the almost sole reliance for water in the east from the River Liffey, providing a second source, piped from the River Shannon. Medtronic recognised the importance of the Proposed Project and wished to state their support for it.

IDA Ireland, Enterprise Ireland and Dublin Chamber recognised the need to deliver a new safe, sustainable, secure, and resilient source of water to meet the water supply demands of population, housing, and economic growth.

Limerick City and County Council supported the need for a sustainable water supply for the Eastern and Midlands Region, especially Dublin. However, they stressed that this should not harm the Shannon region's ecology, current water demand, or future growth in Limerick City and County, including the Limerick-Shannon Metropolitan Area, particularly considering climate change.

Uisce Éireann welcomes the support for the Proposed Project from Medtronic Ireland, IDA Ireland, Enterprise Ireland, ESB, Dublin Chamber and Limerick City and County Council. The overall aim of the Proposed Project is to develop a new source of water supply with capacity to meet the domestic, commercial, and industrial water supply needs of up to 50% of Ireland's population into the medium to long-term future to 2050 and beyond and provide safe, secure, resilient and sustainable drinking water supplies across the region.

The Proposed Project is of national strategic importance. It will provide a new water supply to the Greater Dublin Area and facilitate the re-distribution of water to other communities in the east as a result of the augmented supply to the Greater Dublin Area. The proposed drinking water abstraction is water that would otherwise be used in hydropower generation. A maximum of 2% of the long term annual average flow at Parteen Basin will be diverted for drinking water supply instead of being used for hydropower generation.

Furthermore, the infrastructure proposed will have the capacity to provide water to communities along the pipeline route between the Parteen Basin and Peamount, County Dublin.

Growth in Limerick City and County, including the Limerick-Shannon Metropolitan Area, is allowed for in the NWRP which aims to complement the growth and economic development of Regional Spatial and Economic Strategies and Local Development Plans. In this way, water service infrastructure development proposed in the NWRP is aligned with the National Planning Framework's aim to support population growth in Limerick City of 61% to 2040. Limerick's growth is supported through the NWRP and the Regional Water Resources Plan for the South West, which includes targeted upgrades and resilience measures.

Tipperary County Council emphasised the importance of infrastructure to support growth and insists that investment in Uisce Éireann infrastructure should be plan-led, aligning with the National Planning Framework, Regional Spatial and Economic Strategies, and County Development Plans.

Tipperary County Council stated the Proposed Project should clearly outline the infrastructural works that will directly benefit Tipperary as part of the overall initiative.

Uisce Éireann note the views of Tipperary County Council. Uisce Éireann follows a plan-led growth approach through engagement with planning authorities in the development of statutory plans such as Regional Spatial Economic Strategies, City and County Development Plans, and Local Area Plans. Uisce Éireann's participation in the statutory planning processes through consultation on county, regional and strategic plans allows it to determine key areas for investment in the medium to long-term to support the delivery of new homes and economic growth.

The Water Services Strategic Plan 2050 (Uisce Éireann 2025b) has been developed to align with Ireland's national and regional planning policies. This means it supports and complements key frameworks such as the National Planning Framework, County and City Development Plans, and Local Area Plans.

By following these planning guidelines, Uisce Éireann ensures that future water services are delivered in a way that supports sustainable development, protects the environment, and meets the needs of communities across the country.

Together, these initiatives form a cohesive and forward-looking approach to water services planning, ensuring that Ireland's water infrastructure is resilient, future-proofed, and capable of supporting both environmental sustainability and economic growth.

In Tipperary, the Proposed Project infrastructure will provide the capacity for a future connection of treated water to Cloughjordan, Borrisokane, Newport and Ballina which will provide infrastructure needed to support population growth of over 15% by 2044.

It will also provide the capacity and flexibility to support greater commercial water demand for existing businesses and potential future investment in these areas.

This will also support other significant investments by Uisce Éireann in the county. Since 2014, Uisce Éireann has invested circa €134 million in water and wastewater infrastructure projects in the county. Based on current projections it is estimated that a further €136 million will be invested beyond 2024 to complete projects that are currently commencing or in planning.

Enterprise Ireland noted, "*although Ireland has made substantial investments in water and wastewater infrastructure over the years, further significant investment is required to ensure that Ireland can*

continue to meet enterprise needs and sustain economic growth". They further suggested, "*calls for service levels commensurate with tariffs. The enterprise sector provides one quarter of the funding for Uisce Éireann – the second largest contributor after direct State support. Ensuring that water and wastewater services provided to business are of high quality by international standards, commensurate with the tariffs charged, is essential to delivering a competitive environment for businesses*".

The Department for Enterprise, Trade and Employment cited The National Competitiveness and Productivity Council which notes the negative impact of infrastructure deficits on Ireland's economy. The Ireland's Competitiveness Challenge 2024 report (National Competitiveness and Productivity Council 2024) stresses that infrastructure is crucial for competitiveness, supporting small and medium enterprises (SMEs) and Foreign Direct Investment. The Department highlighted that addressing infrastructure deficits is essential to keep pace with international competitors, especially given Ireland's exposure to global developments.

The Department commented that significant investment in public infrastructure, including water and wastewater, is needed to meet future demand and avoid constraints on SMEs and foreign-owned firms.

Uisce Éireann welcome comments from The Department of Enterprise, Trade and Employment and Enterprise Ireland and agree that sustainable levels of water services are needed to maintain economic growth and attract Foreign Direct Investment. Uisce Éireann is making significant investments in water and wastewater infrastructure across Ireland as part of its Strategic Funding Plan 2025–2029 (Uisce Éireann 2024b). Uisce Éireann plans to invest €16.9 billion by 2029, €10.3 billion for infrastructure and asset development and €6.6 billion for operational costs. This includes improving treatment plants, reducing leakage, and ensuring environmental compliance.

Another stakeholder commented that while the benefits of the Proposed Project are significant, there are concerns about climate resiliency and public awareness. They noted that the public may not fully understand the vulnerabilities of the water system and that "*the true scale of the risks of the water supply to the Greater Dublin Area and Ireland in general are not appreciated*". To ensure real climate resilience, the Proposed Project should be combined with measures to educate and enforce water conservation in the region.

The objectives of the Proposed Project include the need to improve the sustainability and resilience of the drinking water supply in the Eastern and Midlands Region and, specifically, it will allow Uisce Éireann to adapt to climate change and provide a supply which is resilient to those changes. This has been achieved through the careful selection of the source of the new water supply. The proposed abstraction is in essence an abstraction from water normally used in the hydropower plant and, furthermore, it can be sustained into the future even accounting for likely future trends in climate change.

In Ireland, households don't pay directly for the water they use. That makes it more challenging to encourage people to use water wisely, especially when the environmental and operational costs of water treatment and delivery are largely invisible.

That's why Uisce Éireann is taking proactive steps to raise awareness and promote water conservation across homes, businesses, and communities. Through the Water Services Strategic Plan 2050 (Uisce Éireann 2025b), Uisce Éireann has committed to a wide range of actions that help people understand the value of water and how to use it more sustainably.

What Uisce Éireann is Doing

Supporting businesses through the Water Stewardship Programme: Uisce Éireann's flagship Water Stewardship Programme helps businesses identify and reduce water waste – from installing low-flow devices to improving site-level efficiency. Over 700 water stewards have already been trained, and Uisce Éireann is expanding the programme to reach new customer groups.

A standout example is Uisce Éireann's partnership with the Health Service Executive, which led to the development of a best practice guide for water conservation in Irish hospitals.

Raising Public Awareness

Uisce Éireann is developing a community education and engagement programme to help people understand the value of water and the services it provides. This includes:

- *Real-time updates on water usage, incidents, and quality*
- *Communications campaigns and events*
- *Educational materials tailored to different audiences*

Exploring Innovation

Uisce Éireann is also investing in pilot projects to explore technologies like rainwater harvesting and greywater recycling, working with research partners to test and scale solutions that could reduce demand on treated drinking water.

Every litre of water saved helps reduce the pressure on our environment, our infrastructure, and our energy use. This can help support connections for housing. By combining education, innovation, and collaboration, Uisce Éireann is working to build a culture of conservation, even in a system where most people don't see a bill.

4.1.3 Cost/Benefit of Alternative Options

Several stakeholders raised concerns over the transparency and communication of the projected costs for the Proposed Project.

Some called for greater transparency around the projected costs and the economic risks associated with the Proposed Project. Others, including business and enterprise groups, emphasised the importance of ensuring that the funding model does not place an undue burden on the enterprise base or local communities.

Elected Members of Nenagh Municipal District commented that "*Uisce Éireann and the Commission for the Regulation of Utilities need to reconsider this proposal and to consider allocating these funds to enhanced leakage reduction programmes*".

Another stakeholder commented that "*Uisce Éireann must provide an independent economic and financial assessment, ensuring full transparency for taxpayers on the economic risks of potential environmental damage, legal challenges, and construction overruns have not been addressed*".

An Fóram Uisce recommended that the expected and true costs of the Proposed Project must be communicated and transparent throughout the Proposed Project, and every effort should be made to ensure the Proposed Project is delivered within budget. This is to "*ensure the public understand that while the cost of the Proposed Project is high, there are benefits across all parts of Ireland through supporting population growth, a stable economy and the delivery of housing targets*".

Ballymore Eustace CDA queried whether Uisce Éireann is rationalising its drinking water services capital programme, to take account of the Proposed Project.

Several stakeholders, including IDA Ireland, Enterprise Ireland, the Department of Enterprise, Trade and Employment, and Ibec, strongly advocated against passing the costs of the Proposed Project onto the enterprise base. They highlighted the significant economic contributions made by businesses through taxation, job creation, and spending. Enterprise Ireland further recommended national-level consideration of cost recovery principles in tariff setting for essential services, taking into account existing financial burdens on system users.

Shannon Chamber requested transparency on whether there would be financial implications for businesses and residents in the Shannon region and if the water extraction and redistribution process would lead to higher water costs for local businesses and consumers.

Uisce Éireann has outlined in the Preliminary Business Case (Uisce Éireann 2024a) the steps taken to ensure robust cost estimation, independent review, and ongoing oversight through the Government's Infrastructure Guidelines process. The Proposed Project is still in the early stages of the project lifecycle. The current preliminary project cost estimate of €4.58 billion to €5.96 billion has been developed, in accordance with the principles set out in the Infrastructure Guidelines, by international engineering experts Jacobs and verified by an expert review panel. The expert review panel comprised of experts from independent Irish and international experts from Ernest Young, Mott McDonald and Oxford Global Projects.

The cost-benefit analysis forecasts that the Proposed Project will deliver €12.25 of benefits for every €1 of costs, and it therefore represents a positive investment for the State. The estimates for the cost-benefit analysis were included in the Preliminary Business Case (Uisce Éireann 2024a)[7] for the Proposed Project, which was independently reviewed by the Commission for Regulation of Utilities and MPAG and published in June 2024. In addition, when the Preliminary Business Case was approved, Uisce Éireann engaged stakeholders on it.

As the Proposed Project progresses through the three Decision Gates under the Infrastructure Guidelines, a rigorous system of checks and balances will mean that the project estimate is updated and reassessed to ensure value for money.

It is currently expected that the Proposed Project will be funded through the existing Exchequer mechanisms outlined in the Memorandum of Funding Agreement between the Department of Housing, Local Government and Heritage and Uisce Éireann.

Consideration of Alternatives

Some stakeholders questioned whether the Proposed Project is the best use of public funds, and whether alternative approaches, such as enhanced leakage reduction, have been fully explored. Suggestions included reallocating investment to existing water infrastructure improvements or reconsidering the Proposed Project in the context of the broader capital programme for drinking water services.

Before deciding on the current proposal, Uisce Éireann carefully examined a wide range of possible alternatives. These included different water sources, routes, and infrastructure options. The final proposal was chosen based on what would best meet long-term needs while balancing environmental,

[7] Water Supply Project Preliminary Business Case Preliminary Business Case https://www.water.ie/sites/default/files/2024-06/22122023%20WSP%20PBC%20Final%201.4.pdf

technical, and economic factors. This decision was also shaped by detailed analysis and input from stakeholders.

During previous iterations of the project, Uisce Éireann undertook a rigorous evaluation of water supply options between 2014 and 2018, using multi-criteria and cost-benefit analyses, financial assessments, and stakeholder engagement.

In parallel, the NWRP developed a 25-year strategy to ensure sustainable and resilient water supply nationwide. The Eastern and Midlands Regional Water Resources Plan (RWRP-EM) (Irish Water 2022), part of the NWRP, assessed over 1,100 unconstrained options, narrowing them to 594 feasible alternatives including groundwater, reservoirs, and transfer schemes.

Among these, the New Shannon Source with transfers was identified as the only solution capable of serving multiple Water Resource Zones and addressing regional deficits, including the Greater Dublin Area It offered superior resilience and service improvements.

A comparative assessment with Desalination, the main alternative, found that while both could meet Greater Dublin Area needs, Desalination lacked regional benefits, had higher energy demands, and was less resilient. These factors made it incompatible with national energy goals.

The Proposed Project will, in accordance with the RWRP-EM (Irish Water 2022), provide infrastructure with the capacity, through future connections, to meet the drinking water need for a Water Supply Area consisting of 36 Water Resource Zones across the Eastern and Midlands Region and is being advanced for planning.

4.1.4 Government Policy

Chambers Ireland emphasised that the Proposed Project is critical for achieving housing targets and supporting population growth, particularly in the Greater Dublin Area. They stressed that long-term infrastructure, including reliable water and wastewater systems, is essential for national development.

They also highlighted:

- The need for balanced regional investment in infrastructure
- The capacity limitations in Uisce Éireann's network are hindering the National Development Plan
- These businesses are increasingly affected by water infrastructure constraints
- That delays in national projects worsen these issues, especially in high-growth areas like the Greater Dublin Area.

Chambers Ireland concluded that a secure and continuous water supply is vital for both economic viability and housing delivery.

Uisce Éireann acknowledges observations made by Chambers Ireland. The NWRP identified, at a national level, that a new sustainable source of water is necessary to augment supplies in the Eastern and Midlands Region to address deficits in supply, support future growth, and increase the reliability of the current water supply system now and into the future. The Proposed Project has been developed to deliver a long-term, sustainable and resilient water supply for the Eastern and Midlands Region, to meet the water demand from residential, commercial and industrial development to the year 2050 and beyond.

The Proposed Project Is designed to address the vulnerabilities in the current water supply system. By introducing a new water source from Parteen Basin on the River Shannon, the Proposed Project aims to diversify the water supply, thereby enhancing resilience against climate change and other potential disruptions.

Ireland's population is growing, increasing the demand for housing. The National Planning Framework projects an additional 1 million people living in the State by 2040.

Uisce Éireann's (2024) Strategic Funding Plan 2025–2029 originally estimated investment to support approximately 33,000 homes per year under the Housing for All programme.

The Government has since raised the target to 303,000 new homes by 2030, averaging over 50,000 homes per year. To meet this new target, an additional ringfenced funding stream of €1.7 billion will be needed between 2025 and 2029. Uisce Éireann has scaled its capital delivery from €300 million in 2014 to €1.3 billion in 2024.

Planning for growth is evidence-based, aligned with national data, housing and job growth policies, and climate action plans. Targeted investment in urban areas helps maximise capacity in larger treatment plants. Promoting compact growth and high-density development is key to achieving housing targets.

Chambers Ireland expressed concern over historical underinvestment and planning delays in Ireland's water infrastructure, noting that a congested planning system has frequently stalled critical national projects. They emphasised that significant capital investment is essential to build robust water and wastewater services, which are vital for community resilience, business competitiveness, and economic growth.

They also stressed that delays increase the cost and complexity of future investments and that reliable utility infrastructure is crucial for Foreign Direct Investment.

They stressed that immediate and sustained investment is needed to support population growth and national development.

Uisce Éireann agrees with Chambers Ireland in terms of the risk of delay and remains committed to delivering the Proposed Project as quickly as possible. Uisce Éireann considers the schedule to be robust, and risks to both pre- and post-construction works have been considered appropriately.

The schedule set out in the Business Case is ambitious and reflects the criticality of the Proposed Project. Delays in planning, licensing, and/or arising from legal challenges and other potential delays are treated as risk items and are included within the cost contingency allowances. An independent external review of construction timeline assumptions was undertaken as part of a constructability review of the Proposed Project by international construction experts. This review concluded that Uisce Éireann construction programme assumptions were reasonable.

4.1.5 Population Growth and Balanced Regional Development

Enterprise Ireland, IDA Ireland, Eastern and Midlands Regional Assembly and Dublin Chamber welcomed the Proposed Project in particular as it would continue to enable Dublin's growth as Ireland's capital city which is critically important to Ireland's economic well-being and international reputation.

Dublin Chamber commented that any "*delays will have serious consequences for the delivery of housing, economic growth and development in the Greater Dublin Area*". While the Eastern and Midlands Regional Assembly further noted the Proposed Project will facilitate economic development throughout the Eastern and Midlands Region and will support balanced regional development through the redirection of water supply to counties Louth, Meath, Wicklow and Kildare and will have the capacity for future connections across the Midlands.

Eastern and Midlands Regional Assembly suggested that Uisce Éireann must consider contingency plans to address potential delays in project delivery to ensure water supply resilience for the Eastern and Midlands Region. They further noted Chapter 7 of the Regional Spatial and Economic Strategy (Eastern and Midlands Regional Assembly 2019), which outlines priorities for protecting the environment and climate action. They also cite the Dublin Metropolitan Area Strategic Plan (Chapter 5 of the Regional Spatial and Economic Strategy) which emphasised the importance of aligning project timelines with the phased delivery of strategic development areas to ensure coordinated growth. Eastern and Midlands Regional Assembly recommended "*ongoing collaboration should continue between infrastructure providers, state agencies and local authorities in the Dublin Metropolitan Area to inform cross sectoral investment plans and capital spending plans relevant to the Water Supply Project for the Eastern and Midlands Region*".

Uisce Éireann acknowledges the feedback in relation to population growth. Uisce Éireann follows a plan-led growth approach through engagement with planning authorities in the development of statutory plans such as the Regional Spatial and Economic Strategy, City and County Development Plans, and Local Area Plans. It is Uisce Éireann's objective to meet future customers' needs in line with growth rates and land zoning as set out in the Regional Spatial Economic Strategies, National Planning Framework and Local Authority Development Plans. Uisce Éireann's participation in the statutory planning processes through consultation on county, regional and strategic plans allow it to determine key areas for investment in the medium to long-term to support the delivery of new homes and economic growth.

Uisce Éireann will incorporate the increasingly refined growth rates into its demand forecasts through the monitoring and feedback process set out in Section 8.3.8 of the NWRP Framework Plan (Irish Water 2021a)[8]*.*

In regards Dublin Chambers concerns on project delays, the schedule set out in the Preliminary Business Case (Uisce Éireann 2024a) is ambitious and reflects the criticality of the Proposed Project. Delays in planning, licensing, and/or arising from legal challenges and other potential delays are treated as risk items and are included within the costed contingency allowances.

As a result of the long lead-in time for projects in Ireland, Uisce Éireann must progress Interim Options in order to stabilise Water Resource Zones with critical Supply Demand Balance issues. Interim options are usually minor upgrades to existing water treatment plants or development of 'no regrets' infrastructure that might stabilise the supplies in a Water Resource Zone for a period of time (albeit without addressing the fundamental issues in the Water Resource Zone or the issue with Level of Service).

The proposed supply-side Interim Options for the Greater Dublin Area as set out in the Regional Water Resources Plan – Eastern and Midlands (RWRP-EM) (Irish Water 2022) include:

- *An upgrade of Leixlip Water Treatment Plant*
- *The development of improved connectivity between Ballymore Eustace Water Treatment Plant and the Greater Dublin Area Water Resource Zone*
- *Short-term modification of the operating and abstraction procedures on the River Liffey.*

The infrastructure associated with the above represents 'no regrets' infrastructure as the proposed assets are required for water quality compliance and bulk network resilience in the Greater Dublin Area irrespective of the permanent project to resolve the Greater Dublin Area need. The proposed

[8] NWRP Framework Plan https://www.water.ie/sites/default/files/projects/strategic-plans/national-water-resources/2.-NWRP-Framework-Plan_For-Final-Adoption_2021_05_25.pdf
And Preliminary Business Case https://www.water.ie/sites/default/files/2024-06/22122023%20WSP%20PBC%20Final%201.4.pdf

modifications of procedures on the River Liffey are immediately reversable, and the derogation will be time limited. All of these proposed modifications are subject to their own processes and agreements.

It should be noted that there are also interim options identified for all Water Resource Zones currently in deficit in the RWRP-EM (and the other three Regional Water Resources Plans for the South West, North West and South East). The interim options in the RWRP-EM are mostly small plant upgrades. In addition to infrastructure upgrades, leakage reduction targets are a core component of all interim and long-term options. Reducing water loss through leaks in the distribution network is a critical strategy for improving overall water availability. These targets are embedded within each RWRP and are tailored to the specific conditions and performance of the local water infrastructure. These measures alongside leakage reduction targets will allow for growth in the interim.

Reducing leakage is a key part of every water supply plan Uisce Éireann develops. When calculating how much water will be needed in the future, Uisce Éireann already factors in the improvements expected to be made in leakage reduction. Therefore, Uisce Éireann does not plan to meet future demand by simply adding more supply — it also works to use the existing water more efficiently. These leakage targets reflect Uisce Éireann's long-term commitment to a more sustainable and resilient water network, and progress is already underway, regardless of which long-term solution is chosen.

Councillor Ray McInerney supported the need for a reliable water supply to the Greater Dublin Area but expressed concern that the Proposed Project may worsen regional inequality. He argued that over-reliance on Dublin for economic development neglects rural areas like Clare, contributing to issues such as housing shortages and strained public services in the Greater Dublin Area. Councillor McInerney urged Uisce Éireann to rebalance investment, prioritising underserved regions to promote equitable national growth and reduce the urban–rural divide.

Councillor Seamie Morris echoed concerns about inadequate infrastructure in the Nenagh Municipal District area, noting that overcapacity Wastewater Treatment Plants are hindering development in several towns. He criticised the Proposed Project for diverting vital resources from the Mid-West instead of funding essential local water and wastewater upgrades.

Limerick Greens, supported by Shannon Chamber and the Southern Regional Assembly, emphasised Limerick's strategic role in Ireland's Mid-West growth, with the National Planning Framework projecting a 68.2% population increase by 2040 and major job growth, especially in manufacturing. They stressed that this growth depends on a sustainable water supply, warning that without the Proposed Project, development could stall, and pressure could shift back to the already overburdened Dublin region.

The Southern Regional Assembly urged Uisce Éireann to include interventions for Water Resource Zones in Study Areas 7 and 8, which won't directly benefit from the New Shannon Source, to avoid future capacity issues. They warned that failing to do so would undermine national goals for balanced regional development and called for close collaboration with local authorities to align infrastructure with regional growth plans.

Uisce Éireann acknowledges the concerns for balanced regional development as highlighted by the Southern Regional Assembly, Shannon Chamber, Limerick Greens, and Councillors Morris and McInerney.

This Proposed Project will include provision for future infrastructure with the capacity to supply communities and industry in Tipperary, Offaly and Westmeath. It will also contribute to the balanced regional development and secure, sustainable new water supply that will act as a supply spine for the country, providing additional capacity to support an increase in water demand throughout the region.

This provides an opportunity for future growth throughout the heartland of Ireland, helping to attract investment and to support balanced regional development. These potential future connection points will be subject to consenting processes.

Uisce Éireann reviews the National Planning Framework, Regional Spatial and Economic Strategy, and all Development Plans as they are published to ensure that Uisce Éireann is fully cognisant of the planning policy, population targets and employment targets therein. These are key inputs into Uisce Éireann's strategic plans and investment along with other drivers such as compliance and sustainability. Uisce Éireann produces capacity registers annually to provide an indication of the available water and wastewater treatment capacity to assist planning authorities in their forward planning activities.

Uisce Éireann can confirm that in estimating growth projections to inform projects, Uisce Éireann consider the National Planning Framework, regional growth rates, Economic and Social Research Institute and County Development Plan targets and then add an allowance for uncertainties and spare capacity to facilitate peaks in demand which occur in freeze thaw and warm weather events.

The Tullamore and District Chamber of Commerce emphasised the critical importance of the 'Tullamore Spur' in the Proposed Project. During the public consultation, it was noted that the 'Tullamore Spur' would not be included in the An Coimisiún Pleanála application at this stage. The Chamber urged Uisce Éireann to advance the proposals for this section to the planning stage.

The Chamber highlighted that Tullamore Town currently faces significant water supply challenges, including contamination and high calcium/lime content in the northern side, and variable supply quality and quantity in the south and east. These issues hinder efforts to attract new industries, particularly pharmaceutical companies that require a high-quality water supply.

Potential future connection point locations have been identified along the route of the pipeline. These are the locations identified along the length of the Proposed Project that need a future connection to supply water to a Water Resource Zone for which the New Shannon Source was identified as the Preferred Approach in the RWRP-EM (Irish Water 2022). Any connections to future water supplies from these points will be progressed via future projects and will be subject to their own consenting process.

4.1.6 Capacity

Kennedy Analysis requested further clarity on the potential future connection points to serve communities in Tipperary, Offaly and Westmeath along the route.

The following are the possible locations for future potential future connection points points:

- *At the Water Treatment Plant for Newport/Killaloe Water Resource Zones*
- *Immediately west of the Break Pressure Tank at Cloughjordan for Newtown/North Tipperary Water Resource Zone*
- *Two locations between the Booster Pumping Station and Termination Point Reservoir for Tullamore/Mountbolus Water Resource Zone and Mullingar Regional Water Resource Zone.*

The potential future connection points are locations identified along the length of the Proposed Project that need a future connection to supply water to a Water Resource Zone for which the New Shannon Source was identified as the Preferred Approach in the Eastern and Midlands Plan. Any connections to future water supplies from these points will be progressed via future projects and will be subject to their own consenting process. However, these opportunities will not be available if the Proposed Project isn't approved.

Ibec agreed that the Proposed Project would help reduce Dublin's reliance on the River Liffey and help safeguard water supply for the Eastern and Midlands Region during future shocks such as droughts, ensuring continued service for people and businesses.

Shannon Chamber sought assurances that a high-quality water supply will be maintained for the greater Shannon region: "*any potential reduction in water availability could affect local businesses, so it is important that Uisce Éireann provides guarantees of a reliable supply for these sectors*".

The aim of the Proposed Project is to provide a sustainable water supply from a New Shannon Source to address critical supply issues in the Greater Dublin Area with provision for future supplies to multiple Water Resource Zones in the Eastern and Midlands Region. Growth in Limerick City and County, including the Limerick-Shannon Metropolitan Area, is allowed for in the NWRP which aims to complement the growth and economic development of Regional Spatial and Economic Strategies and Local Development Plans. In this way, water service infrastructure development proposed in the NWRP is aligned with the National Planning Framework's aim to support population growth in Limerick City of 61% to 2040. Limerick's growth is supported through the NWRP and the Regional Water Resources Plan for the South West, which includes targeted upgrades and resilience measures.

A stakeholder expressed concern that the current storage and reservoir capacity is inadequate to support the water supply demands of a growing population and expanding economy.

In Ireland, many suitable river sites—especially in the Wicklow Mountains—have already been developed over the past 150 years, including Vartry, Poulaphouca, and Bohernabreena reservoirs. Building dams is complex, often involving land flooding and displacement of communities. Due to environmental regulations, constructing new dams and reservoirs is now rare in Europe. The Proposed Project will support the creation of an interconnected network that will support population, housing and economic growth to up to 50% of the State's population. By diversifying water sources and interconnecting supplies across the Eastern and Midlands Region, the Proposed Project enhances resilience to climate change impacts such as drought.

Ballymore Eustace CDA queried the following:

- Has Uisce Éireann carried out a water balancing exercise with regard to the destination and requirement of the 300 million litres per day (Mld) of drinking water proposed to be treated at source?
- Has Uisce Éireann carried out a wastewater treatment capacity exercise along the route? Provision of drinking water to increase development will not have the desired effect without the associated wastewater infrastructure and further significant investment.
- Can Uisce Éireann provide details of the water supply connectivity it already has in the Greater Dublin Area?
- If the Proposed Project goes ahead, can Uisce Éireann confirm how long it will be before it needs to supply Limerick and parts of Cork (Mallow) from the same source?

Ballymore Eustace CDA further requested:

- The level of proposed supply to each town identified in the Proposed Project needs to be calculated along with the current supply capacity, source of that supply, and what happens to that supply, once the Shannon supply is available.
- What happens to each supply catchment as they are supplemented or dropped in favour of the Shannon water and whether certain water treatment plants are rationalised or decommissioned?
- What will be the associated impact on the assimilative capacity of source rivers be?
- Will reduced abstraction mean increased potential to discharge?

As part of long-term planning, Uisce Éireann has identified several locations along the proposed pipeline where future connections could be made. These would allow water to be supplied to other areas if needed in the future. These connections are not part of the current project and would go through their own planning and approval process before being developed.

The NWRP and the RWRP-EM help Uisce Éireann to understand where water is needed most, both now and in the future. These plans take into account things like population growth, climate change, and environmental protection to ensure there is a reliable and sustainable water supply.

The RWRP-EM also outlines how water systems in the Greater Dublin Area are already connected and how this interconnectivity will be expanded once the Proposed Project is delivered. This will help improve the resilience of the water supply across the region.

The Proposed Project is designed to deliver up to 300 million litres of water per day. This isn't just to meet future demand — it is to also reduce pressure on the environment by phasing out older, less sustainable water sources. For example, it will allow Uisce Éireann to stop taking water from Lough Owel, which currently supplies Mullingar. This change will help improve the health of local rivers and lakes and support Ireland's commitments under the WFD.

Uisce Éireann is also developing a national Wastewater Strategy Framework to guide the upgrade of wastewater systems and reduce the amount of stormwater entering the network — a key requirement under new EU rules. Any new discharge locations will be carefully assessed through a transparent process that considers environmental, technical, and community factors.

Mallow, in County Cork, is not expected to be connected to the Proposed Project. Instead, it is included in the Regional Water Resources Plan for the South West, which looks at water needs across 174 areas. That plan proposes merging supply systems, upgrading treatment plants, and developing new water sources to ensure safe, reliable water for the entire region.

4.1.7 Water Demand

Shannon Chamber commented "*it is essential that the Project aligns with long-term national water security objectives. While the east coast may face increasing water demand, ensuring the resilience and security of water supplies in the Shannon region is equally important*".

Enterprise Ireland called on Uisce Éireann to ensure consistent water supply and quality wastewater infrastructure facilities. Enterprise Ireland noted that companies frequently highlight the need for consistent water supply and quality, and express concerns about capacity constraints with water treatment plants.

The Proposed Project is designed to deliver up to 300 million litres of water per day. This isn't just to meet future demand — it is to also reduce pressure on the environment by phasing out older, less sustainable water sources.

Uisce Éireann is implementing a wide-ranging programme of wastewater infrastructure upgrades across Ireland to support population and economic growth, eliminate the discharge of raw sewage, and enhance environmental protection. These efforts align with the long-term goals outlined in the Water Services Strategic Plan 2050 (Uisce Éireann 2025b).

An Fóram Uisce recommended recalculating the Supply Demand Balance for the Eastern and Midlands Region using updated 2022 Census data and 2024 National Planning Framework projections to better reflect growing water demand. They emphasised the need for transparency by making this data public

and suggested comparing actual vs. projected water usage (both domestic and non-domestic) to identify discrepancies.

An Fóram Uisce also advised of the following steps to ensure sustainable water management and build public trust in the Proposed Project:

- Updating demand projections with the latest data and new connection agreements
- Extending the planning horizon to 2070, despite uncertainties, to support long-term planning
- Clarifying assumptions about unplanned events in supply planning
- Conducting and publishing scenario planning to identify where additional measures may be needed.

Uisce Éireann welcomes the feedback from An Fóram Uisce on how it calculates future water needs. The approach used in this consultation is based on the NWRP Framework Plan (Irish Water 2021a), which applies a consistent method to assess water supply and demand across all 539 public Water Supply Zones in Ireland.

When Uisce Éireann plans for the future, it uses population growth figures from trusted national sources — including the National Planning Framework, Regional Spatial and Economic Strategies, and Local Authority Development Plans. As these local plans are finalised, Uisce Éireann updates its forecasts to reflect the most accurate and up-to-date information available.

Uisce Éireann also regularly reviews new data through a formal monitoring process, as outlined in Chapter 8 of the NWRP Framework Plan (Irish Water 2021a). So far, early analysis of the 2022 Census data shows no major change to the overall balance between supply and demand. Uisce Éireann has also tested different growth scenarios to make sure its plans are robust.

There is already a serious shortfall in the water supply for the Greater Dublin Area and surrounding regions. This puts 1.7 million people at risk of water shortages, especially during dry periods or emergencies. Without action, there could be real consequences for public health and the national economy.

The NWRP includes allowances for uncertainty, but the evidence is clear: we cannot afford to wait for more data before moving forward. The region has no spare capacity, and Uisce Éireann must manage both today's challenges and tomorrow's needs.

Kennedy Analysis raised concerns on Uisce Éireann's Water Demand Projections and the Proposed Project route. Kennedy Analysis commented that Uisce Éireann's has overestimated the future water deficit for the Greater Dublin Area.

Ballymore Eustace CDA noted that Uisce Éireann has projected the deficit in the Water Supply Area up to 2050 and calculated the Supply Demand Balance using the methodology in the adopted NWRP. They commented "*given the current pressure on virtually all 35 Water Resource Zones and significant pressures outside of the area such as in Limerick and Cork, 83Mld is considered extremely underestimated as regards the 2050 requirement*".

This Project has followed the consistent methodology set out in the NWRP. The NWRP provides a consistent methodology for establishing Supply Demand Balance deficits in every Water Resource Zone in the State and for identifying Preferred Approaches to address those deficits. This methodology has been applied in the Eastern and Midlands Plan and formed part of the assessment process for identifying appropriate solutions to address deficits where they arise in each Water Resource Zone in the region. The Regional Water Resources Plan for the Eastern and Midlands Region (RWRP-EM) (Irish

Water 2022) was progressed first (out of four Regional Plans) given the region's ageing infrastructure, dense population and criticality of need. The Greater Dublin Area was the first Water Resource Zone (and study area) in the RWRP-EM to have its Preferred Approach identified because it had the highest population and the greatest Supply Demand Balance deficit.

It should be noted that Cork is within the Southern Regional Plan so would not form part of the Eastern and Midlands deficit calculations, and it is not proposed to provide supply to Limerick from the Proposed Project. The NWRP has considered that predicted growth of 61% in Limerick City and suburbs will be met by expansion of the existing sustainable abstraction at Clareville Water Treatment Plant.

An Taisce called for greater transparency regarding non-domestic water users, particularly Large Energy Users (LEUs), in the Proposed Project. They highlighted a projected 63% increase in non-domestic water demand by 2050 and raised concerns about the significant water consumption of LEUs, such as data centres, which can use up to 5Mld, especially during droughts.

To ensure public understanding, participation, and ensuring accountability in how public resources are allocated, they requested the following:

- A clear breakdown of non-domestic user categories, especially LEUs
- Disclosure of how much water LEUs are expected to consume
- Inclusion of accurate, up-to-date demand estimates for non-domestic users in the Greater Dublin Area and Eastern and Midlands Region.

The objective of the NWRP is to safeguard supply for domestic and non-domestic users and ensure a safe and reliable supply for all customers. It is imperative that Uisce Éireann allows for growth in non-domestic demand in its further projects to ensure domestic growth is not limited by non-domestic growth, while ensuring economic growth can be facilitated as population increases. Appendix 9 of the RWRP-EM (Irish Water 2022) provides a detailed overview of the non-domestic demand forecast for the Greater Dublin Area.

Water usage nationally for data centres is less than 0.2% of overall total demand and, due to the use of advanced technology in this area, Uisce Éireann does not envisage this level of demand significantly increasing. In addition, Uisce Éireann already has strategies in place to mitigate demand from data centres, such as limiting peak flows to the development and ensuring the developer provides adequate private storage to manage needs during periods of peak demand.

In addition, as part of its ongoing Water Stewardship Programme, Uisce Éireann works with large non-domestic users in order to promote water efficiency, based on the best possible technologies that are suitable for use by their business.

4.1.8 Water Conservation

Several stakeholders suggested harvesting rainwater, using grey water and other conservation measures in conjunction with the Proposed Project to the meet current water demands.

A stakeholder commented there is a lack of incentives for households to conserve water such as installing water-saving showers, collect rainwater, or reuse greywater. This leads to wasteful practices such as unrepaired leaks and unnecessary flushing. The stakeholder further noted that reducing water waste helps conserve river ecosystems from which water is abstracted and reduce chemical pollution of treated water being released into the sea.

An Taisce highlighted that water availability could be increased by the use of rainwater harvesting measures, which would diversify supply and embed a greater degree of resilience into overall water supply infrastructure.

An Taisce also emphasised "*the importance of seriously considering demand management measures in long-term strategic planning within this project, to ensure that the long-term balance between water supply and demand is maintained. Examples of demand-side measures are leakage reduction in existing and planned infrastructure, water-efficient equipment, incentivising conservation efforts among water users, use of tariffs to promote conservation, water recycling and the aforementioned rainwater harvesting measures*".

Uisce Éireann fully agrees with An Taisce on the importance of integrating demand management measures into long-term strategic planning. Demand-side interventions are a core component of Uisce Éireann's approach to ensuring a sustainable balance between water supply and demand.

Uisce Éireann's strategy is structured around three pillars: Use Less, Supply Smarter, and Own Use. Under the Use Less pillar, Uisce Éireann is actively progressing conservation initiatives that support both domestic and non-domestic customers in reducing water usage. These include:

- ***Leakage Reduction**: Uisce Éireann continues to invest significantly in leakage detection and repair across the network. This includes enhanced pressure management and targeted infrastructure upgrades to reduce water loss.*
- ***Water-Efficient Technologies**: Uisce Éireann works with developers of large non-domestic projects to incorporate water-efficient equipment and practices, helping to reduce demand at the source.*
- ***Rainwater Harvesting and Greywater Reuse**: Sustainability features such as rainwater harvesting systems and green roofs have been incorporated into infrastructure designs where feasible. These measures help reduce stormwater runoff and contribute to treated water processes. While greywater and rainwater harvesting are private-side solutions, Uisce Éireann supports their adoption and is progressing pilot studies to assess their viability and benefits. However, due to Ireland's seasonal rainfall patterns, significant storage capacity would be required to make these solutions effective during dry periods, which may not be feasible for typical domestic properties. It would also not provide enough water in the timeframe within which it is required.*
- ***Tariffs and Incentives**: While Uisce Éireann does not have a direct role in enforcing conservation practices within households, it actively promotes water-saving behaviours and supports policy development that enables conservation incentives. Regulatory and enforcement responsibilities lie with local authorities and national government departments.*
- ***Public Engagement and Education**: Uisce Éireann has launched public campaigns and tools such as the water conservation calculator to help customers understand and reduce their water usage.*

Uisce Éireann remains committed to progressing water conservation measures and engaging with stakeholders to support the development of policies that promote sustainable water use. Uisce Éireann's demand management strategy is aligned with the NWRP and is continuously reviewed to ensure effectiveness and adaptability to emerging challenges.

4.2 Alternatives

4.2.1 Alternatives General

Several stakeholders shared the opinion that Uisce Éireann should adopt an alternative approach to providing water to the Eastern and Midlands Region. Some comments mentioned better management of current water infrastructure or more sustainable solutions in general.

Stakeholders mentioned the need for diversification as an argument for seeking alternatives in water sources. An Taisce raised concerns about the lack of diversity in water source options considered for the Proposed Project. They questioned the resilience of relying on a single pipeline, especially in the face of potential failures such as pumping issues, electrical faults, leaks, or damage. An Taisce emphasised the need for a comprehensive assessment of pipeline resilience and a clear explanation for not exploring alternative or supplementary water sources, arguing that diversification is key to a robust and secure water supply system.

Uisce Éireann agrees with An Taisce that there needs to be a diversified water supply and would emphasise that the Proposed Project is being brought forward precisely in order to do this. The Proposed Project will not provide all of the water needed in the Eastern and Midlands Region. What it will do is provide a new source of water to reduce reliance on existing supplies, specifically reliance on the River Liffey for supplying the Greater Dublin Area Water Resource Zone. This will diversify the supply and increase resilience.

Comments were made about the need for an independent review aimed at alternative water sources, alternative solutions and the feasibility of alternatives, including costs. This included Councillor Seamie Morris from Nenagh Municipal District who requested an independent review and for Uisce Éireann to consider a development levy for the benefit of Tipperary County Council.

The Commission for Regulation of Utilities, who is appointed as the external assurance body for water services, conducted an independent review of the Proposed Project in accordance with the Public Spending Code External Assurance Process and the sectoral guidelines issued by the Department of Housing, Local Government and Heritage. This review, undertaken during 2023/24, concluded with a recommendation that the Proposed Project proceed to the next stage of development. The MPAG provided strategic oversight during the review of the Proposed Project. As part of the Public Spending Code External Assurance Process, MPAG reviewed the Preliminary Business Case (Uisce Éireann 2024a) and the independent assessment by the Commission for Regulation of Utilities. Its role was to evaluate the Proposed Project's value for money, risk, and alignment with national priorities, and to advise the government on whether the Proposed Project should proceed to the next development stage[9].

Councillor Morris stated "*We adamantly oppose the Shannon Pipeline (Eastern and Midlands Water Supply Project) due to its flawed justification, environmental risks, massive waste of taxpayers' money, and negative regional impact. There are better, more sustainable alternatives, such as upgrading Dublin's water infrastructure, that would provide long-term solutions. We urge to prioritise a fair and efficient use of Irelands water resources*".

The potential solutions to the water supply need in the Eastern and Midlands Region have been under review for over 25 years. Uisce Éireann has identified and intensely examined every reasonable option for meeting the future water supply needs of the Eastern and Midlands Region. All of these solutions have been consulted on throughout the life of previous iterations of the project. All the research and studies have been undertaken in line with best international practice for the identification of need and determination of options. The evidence shows that abstraction from the River Shannon at Parteen

[9] Preliminary Business Case https://www.water.ie/projects/national-projects/water-supply-project-east-1/publications#documents

Basin is the option which delivers the widest benefit to the greatest number of people with the least environmental impact and in the most cost-effective manner.

More than 25 years of analysis and appraisal of the need and of potential solutions and alternatives have been completed in order to select the preferred option to provide a new source of water supply for the Greater Dublin Area comprising Dublin and parts of Kildare, Wicklow and Meath and wider region. This process began with Dublin City Council in 1996 and was continued by Uisce Éireann when it assumed responsibility for managing Ireland's water and wastewater services in 2014.

Between 2014 and 2018, Uisce Éireann completed an extensive options appraisal process for the project. This comprised multi-criteria analysis of all available options (including technical and engineering, environmental, risk, economic and cost criteria), in addition to extensive stakeholder consultation. Most recently, the options for the region were examined once again under the auspices of Ireland's first NWRP.

- *Phase 1, the NWRP, set out the approach to identifying water supply needs and quantifying those needs up to year 2044 which, following public consultation, was finalised and adopted in Spring 2021.*
- *Phase 2, comprising the development of four Regional Water Resource Plans to identify the optimal technical solutions (the "Preferred Approaches") required to address the needs outlined in the NWRP Framework Plan (Irish Water 2021a). The Regional Water Resource Plan – Eastern and Midlands Region (RWRP-EM) was adopted in Autumn 2022. The RWRP-EM reviewed 1,128 unconstrained options and developed 591 feasible options to address the needs identified in the region. A detailed assessment process was used to determine the best solutions across a range of criteria including whole-life cost, carbon costs, resilience and environmental impacts. The Plan identified that the Preferred Approach to address water supply need 36 Water Resource Zones in the region, including the Greater Dublin Area, is a New Shannon Source comprising of a raw water abstraction from the Lower Shannon at Parteen Basin and a treated water pipeline to a termination point at Peamount, County Dublin.*

The Proposed Project aligns with the RWRP-EM and is a significant step towards delivering that Preferred Approach.

An independent review by the Commission for Regulation of Utilities assessed various water supply options for the Greater Dublin Area. It concluded that abstraction from the Parteen Basin is the preferred option due to its cost-effectiveness, environmental sustainability, and ability to meet long-term water demand.

There were several comments about the need for integration between the Proposed Project with the Shannon Connectivity Project from several angler groups, including Killaloe-Ballina District Anglers Association, Portumna & District Angling Association and Castleconnell River Association. Stakeholders mentioned the Proposed Project should incorporate a revised and improved Eflow regime proposed by Shannon Connectivity Project and integrate design improvements for migrating fish and fish protection.

The Killaloe-Ballina District Anglers Association emphasised that since the Proposed Project was first proposed, local angling and water sports groups were assured that any negative impacts would be offset by the long-promised Shannon Connectivity Project, aimed at addressing the long-standing ecological damage caused by the Ardnacrusha barrier system. They stressed that key elements of this rehabilitation program must be fully implemented before the Proposed Project can proceed in the region.

Uisce Éireann is aware of the report prepared for the Department of Housing, Local Government and Heritage in 2021, titled "Provision of Expert Advisory Services regarding Fish Migration in the Lower River Shannon Catchment" on occasion referred to as the "Shannon Connectivity Project" and/or "Shannon Fish Pass". This report recommends the development and implementation of an a new Eflow regime including the use of freshets. The report and its associated roadmap are currently with the Department for Housing, Local Government and Heritage for further progression, and Uisce Éireann will be monitoring its progress for opportunities for integrating the Proposed Project and the Shannon Connectivity Project. The Proposed Project would not prevent the implementation of a new Eflow regime or freshets.

Ormond Anglers' Association Nenagh suggested an additional reservoir be built as part of the Proposed Project so that it could hold enough water to supply the customers in the Shannon region for a period of at least eight weeks, without having to extract any further water from Lough Derg, during a period of drought: "*There are times of the year when there is an abundance of water in Lough Derg, when that reservoir can be filled, without any consequence*".

One of the key strengths of the Proposed Project is that it does not involve building a new reservoir or dam. This means avoiding the environmental impacts that would come with altering the natural landscape or water flow near the Parteen Basin.

Instead, the Proposed Project uses existing infrastructure that's already managed by the ESB for hydroelectric power. This allows water to be taken in a way that's both efficient and environmentally responsible.

Extensive studies and modelling have shown that even during extreme droughts—like the one in 2018, the worst ever recorded in the Shannon region—it will still be safe to take water for public use. The ESB will continue to manage water levels within its current Normal Operating Band. In short: Uisce Éireann is not taking water in a way that will harm the lake, and even in the driest conditions, the system is designed to keep working safely and sustainably.

4.2.2 Leakage

Several stakeholders suggested addressing water loss in Dublin's supply network as an alternative to meet water demand in the Greater Dublin Area.

Stakeholders commented on the extensive leakage issues in Dublin's water network. Many cited up to 50% of water is lost because of leakage. They further remarked that by failing to prioritise leak detection, mapping, and repair, Uisce Éireann is proposing an inefficient project and any water abstracted from the River Shannon will largely be wasted through the outdated infrastructure.

Elected Members of Nenagh Municipal District in Tipperary County Council emphasised the need to replace the water network in Dublin before abstracting water from other sources. They cited a report by the Commission for the Regulation of Utilities revealing that up to 50% of water in the Dublin supply is leaking into the ground. They highlighted that 626 million litres of water are lost daily due to public side leakage, representing approximately 37% of all water supplies provided by Uisce Éireann in 2022. The members suggested that Uisce Éireann is not on track to achieve its target of reducing public side leakage by 161Mld by the end of 2024.

Councillor Seamie Morris from Nenagh Municipal District commented that Dublin's water crises stem from management issues, not a lack of supply and cited evidence from the past five years (March 2019 to January 2024) showing:

- Eight incidents of burst water pipes

- Five water treatment plant failures.

Councillor Morris highlighted the urgent need to replace Dublin's water mains, suggesting a large-scale pipe replacement program covering at least 2% of the network as a more effective solution.

Several individuals and organisational stakeholders, including River Shannon Protection Alliance, St. Flannan's Fishing Club, public representative Mattie McGrath, Lough Derg Anglers Association and Garrykennedy Boat Club, shared the same opinion that leakage reduction is the more important challenge to address than seeking to provide a new source of water.

Chambers Ireland supported the Proposed Project for Dublin and the Midlands but stressed the need to address water leakage, citing a history of underinvestment. They noted that while the National Leakage Reduction Programme conducts over 2,000 monthly repairs, most are reactive, and called for proactive leak prevention to reduce environmental impact and protect water resources.

Other stakeholders, including Dublin Chambers, shared similar views—supporting the Proposed Project but urging stronger action on leakage.

An Taisce requested:

- Detailed plans for leakage reduction
- Clarification on how leakage is factored into demand forecasts
- Estimates of water savings from leakage reduction
- A comparison between the Proposed Project and leakage reduction efforts to assess necessity.

Garrykennedy Boat Club called for an independent review to evaluate the Proposed Project's impacts and the feasibility of alternatives, including enhanced leakage control.

Uisce Éireann is investing heavily in fixing leaks—€250 million every year until 2030. Thanks to this work, national leakage has already dropped from 46% in 2018 to 37% in 2022.

Despite significant progress in leakage reduction—saving approximately 200 million litres of treated drinking water daily, equivalent to the needs of over 1.5 million people—leakage reduction alone cannot meet future demand. Even in an ideal scenario where leakage is reduced to 10%, which is beyond realistic expectations for a city like Dublin, the system would still fall short.

Leakage percentages are at the lowest they've ever been. The amount of water lost from Uisce Éireann's networks has reduced from 37% to 30% in Dublin and from 48% to 36% nationally. Finding and fixing leaks is difficult and resource intensive work but Uisce Éireann's investment of €2 billion over the last 10 years has meant that significant progress has been made. Sustaining this progress, however, is challenging in the face of a significant increase in demand for water and a range of operational constraints and challenges. Population and economic growth have driven a 15% increase in demand for water. As a result, any water saved from leakage repairs has been consumed by this growth. This coupled with more frequent extreme weather events due to climate change combined with an ageing network has put huge pressure on the network, exacerbating the challenges Uisce Éireann faces on a daily basis. The average age of the water mains infrastructure in Ireland is estimated at 75 to 95 years. This compares to an EU average of 36 years (source: European Benchmarking Cooperation 2013)[10]

[10] European Benchmarking Cooperation 2013 Public report of the international water benchmark https://www.waterbenchmark.org/document/IB2013-Public-Report/38

Uisce Éireann currently carries out over 500 network repairs every week across the country and has plans to increase this in the years ahead. Uisce Éireann is committed to reaching a sustainable economic level of leakage by focusing resources on areas experiencing water shortages and higher demand. Uisce Éireann's long-term goal continues to be the achievement of 20% leakage levels, and it is committed to achieving this through appropriate and targeted investment in its water network.

Dublin's water infrastructure is operating at full capacity, with minimal headroom to accommodate growth. Demand is projected to increase by 34% by 2044, driven by population growth, housing development, and climate change, even after accounting for planned conservation and leakage reduction measures.

Moreover, the system lacks resilience, relying heavily on a single source—the River Liffey—which is already under pressure. A disruption to this source could result in widespread service outages affecting hundreds of thousands of people.

Therefore, a new, sustainable water source is essential to complement ongoing leakage reduction efforts. While fixing leaks remains a critical component of water management, it is not sufficient on its own to ensure long-term supply security and system resilience.

Kennedy Analysis requested confirmation on the following:

- Average daily supply-side leakage
- Average daily customer side leakage for the Greater Dublin Area and nationally for 2023 and 2024
- Average daily distribution input for the Greater Dublin Area and nationality for 2023 and 2024.

Uisce Éireann is making significant progress in reducing water leakage, but it's important to understand the scale of the challenge—and why leakage reduction alone won't meet future demand.

Key Figures (2023–2024):

Metric	*National*	*Greater Dublin Area*
Average Daily Distribution Input	*Approximately 1,600–1,650 million litres/day*	*Approximately 580–620 million litres/day*
Average Daily Leakage (Total)	*Approximately 580–600 million litres/day*	*Approximately 190–220 million litres/day*

- *Distribution Input is the total volume of treated water entering the public supply each day.*
- *Leakage includes both supply-side (network losses) and customer-side (e.g. plumbing) losses.*

What This Means

- *Uisce Éireann is saving hundreds of millions of litres daily through leakage reduction.*
- *But even with ambitious targets, reducing leakage to 25% nationally and below 20% in the Greater Dublin Area by 2030—demand will still outpace supply.*
- *By 2044, the Greater Dublin Area will need 34% more treated water than it has today, even after all planned leakage and conservation measures are delivered*

Our Commitment

- *Uisce Éireann is investing €250 million annually in leakage reduction.*

- *Uisce Éireann is also planning for long-term resilience by developing new, sustainable water sources to complement these efforts.*

4.2.3 Alternative Solutions

Several stakeholders suggested various alternative methods for securing provision of water. Most often suggestions were made about desalination, harvesting rainwater, storm and floodwater reservoirs, using water sources more local to Dublin, using groundwater sources, alternative method of water treatment (reed bed), reversing flow on the canals to provide supply to the city, wastewater reuse and circular system, and improved abstraction from existing sources.

Shannon Chamber raised questions regarding Uisce Éireann's exploration and consideration of alternative water sources for the east coast. They suggested alternatives such as desalination, water recycling, and more efficient management of existing water resources. They also inquired about more sustainable ways to meet the east coast's water demand without drawing from the River Shannon, including investing in water conservation, desalination, and improving infrastructure for water storage and distribution to reduce dependency on shared water sources.

Desalination was further suggested as an alternative method by the River Shannon Protection Alliance and Lough Derg Anglers Association.

Why Desalination Is Not the Right Solution for Ireland's Water Needs

Desalination—the process of removing salt and minerals from seawater to make it drinkable—has been thoroughly assessed by Uisce Éireann including as part of the identification of the Preferred Approach for the Eastern and Midlands Region in the Regional Water Resources Plan.

While it may seem like a straightforward solution, desalination is not the preferred approach for Ireland's long-term water supply needs. Here's why:

It Doesn't Solve the Full Problem

Desalination alone cannot meet the volume or quality of water required. It would need to be combined with other sources—such as treated wastewater—to meet demand, and even then, it wouldn't address the lack of resilience in the current system.

It's a Dublin-Only Fix

Desalination would only serve the Greater Dublin Area. It does nothing to support the 36 other Water Resource Zones across the Eastern and Midlands Region that also face supply deficits.

It's Energy and Carbon Intensive

Desalination uses 5 to 25 times more energy than conventional water treatment. This leads to significantly higher carbon emissions and operating costs—at odds with Ireland's climate goals.

It Has Environmental Risks

The process involves heavy chemical use and produces concentrated brine that must be discharged back into the sea. This raises serious concerns for marine ecosystems, especially near designated Special Areas of Conservation (SACs).

It's Costlier Over Its Lifetime

The whole-life cost of desalination is significantly higher than the Parteen Basin option. The cost-benefit analysis clearly shows that the Shannon-based solution is the better long-term investment.

It's Harder to Deliver
Desalination would require extensive planning, permitting, and infrastructure—including blending facilities to make the water palatable. This adds complexity, time, and risk to delivery.

The Preferred Approach offers a more sustainable, region-wide answer. It:

- *Supports 37 Water Resource Zones, not just Dublin*
- *Enhances resilience by diversifying supply*
- *Has lower environmental and carbon impacts*
- *Is more cost-effective over the long term.*

Following the adoption of the NWRP and the RWRP-EM, the Proposed Project was assessed against the identified Preferred Approaches. The outcome confirmed that the New Shannon Source, involving water abstraction from the Parteen Basin and transfer of treated water to a termination reservoir in Dublin, is the Preferred Approach to address supply-demand deficits across 36 Water Resource Zones in the region.

An individual stakeholder mentioned a circular system which preserves water and secures the provision: "*a more sustainable approach would be to focus on maximising the water we have in the area, nature's water cycle and re-use of wastewater, reducing unnecessary extraction, and improving water conservation.* [...] *This circular approach would make treated water available for reuse as drinking water, rather than simply discarding it into the sea*."

Ballymore Eustace CDA suggested a raw water reservoir alternative citing Colden Falls or County Kildare as an example. They commented it could also promote community gain as well as provide water storage.

Several stakeholders, including Deputy Mattie McGrath, Shannon Chamber, River Shannon Protection Alliance and Councillor Tony O'Brien, commented about water sources available in the Dublin area that should be utilised more but did not provide any further details. Other stakeholders mentioned "*alternative River resources in the East*", and a new location of water extraction point "*from the southern end of Lough Ree*".

Ormond Anglers' Association Nenagh commented that a better way to secure water supply for Dublin would be to "*include a major reservoir, with the capacity to hold enough water to supply the customers in this region for a period of at least eight weeks, without having to extract any water from Lough Derg, during that period of drought. There are times of the year when there is an abundance of water in Lough Derg, when that reservoir can be filled, without any consequence*".

Some stakeholders have suggested that building more reservoirs could solve the region's water supply challenges. While this idea may seem straightforward, the reality is far more complex.

Most Suitable Sites Are Already Developed
The Eastern Region's most viable reservoir sites—such as Vartry, Poulaphouca, and Bohernabreena—were developed over the past 150 years. These locations had the right combination of steep-sided valleys, stable geology, and sufficient river flow. Today, very few suitable sites remain, and those that do are often environmentally sensitive or heavily constrained.

Environmental and Social Impacts Are Significant
Building a new reservoir involves major disruption:

- *Large areas of land must be permanently flooded*
- *Communities may need to be relocated*

- *Downstream river ecosystems are altered, affecting biodiversity and fisheries.*

For example, the construction of Poulaphouca Reservoir in the 1930s displaced 70 families and flooded over 5,000 acres of farmland.

Modern Environmental Law Makes It Unlikely
Under current EU and Irish environmental legislation, the creation of new impoundments is extremely difficult to justify. The scale of construction, environmental impact, and long-term maintenance requirements make new reservoirs rare and often unviable in modern water planning.

It Doesn't Solve the Core Problem
The issue in the Eastern and Midlands Region isn't just about storage—it's about source availability and resilience. The region is already over-reliant on the River Liffey, and there is no spare capacity in the system. Even with more storage, a new, sustainable source of water is still needed to meet future demand and reduce risk.

A stakeholder commented rather than relying on Shannon abstraction, Uisce Éireann must also present an evidence-based comparison of:

- Leak reduction and network optimisation as a primary water conservation strategy
- Collection/diversion of surface water/stormwater/floodwaters to Dublin reservoirs
- Desalination and water reuse as alternative long-term supply options
- Localised water source optimisation, including improved abstraction from existing sources
- Wastewater reuse as required under recast Urban Wastewater Treatment Directive.

They concluded that "*without these comparative studies, the Water Supply Project fails to meet the requirements of the Environmental Impact Assesment (EIA) Directive (2011/92/EU, amended by 2014/52/EU).*"

Uisce Éireann acknowledges the stakeholder's request for an evidence-based comparison of alternative water supply and conservation strategies. Uisce Éireann confirms that each of the options listed was rigorously assessed during the development of the RWRP-EM (Irish Water 2022).

Leakage Reduction and Network Optimisation
Leakage reduction is a cornerstone of Uisce Éireann's strategy. The RWRP-EM Preferred Approach includes ambitious targets to reduce leakage in the Greater Dublin Area from 215Mld to 122Mld by 2030. These targets were factored into the Supply Demand Balance and cost-benefit analysis for the Proposed Project. However, even with maximum feasible reductions, leakage alone cannot meet long-term demand. As detailed in Section 4.2.2, Uisce Éireann is investing heavily in fixing leaks—€250 million every year until 2030. Thanks to this work, national leakage has already dropped from 46% in 2018 to 37% in 2022.

Surface Water/Stormwater Diversion
Stormwater and floodwater diversion were considered but found unsuitable due to water quality, seasonal variability, and the lack of reliable yield. These sources are not suitable for direct potable use without extensive treatment and blending, which would not meet resilience or quality standards.

Desalination and Water Reuse
Desalination was assessed and ruled out due to high energy use, environmental impact, and cost. It would require blending with other sources and still not meet resilience needs. Water reuse (including effluent reuse) was also considered but is constrained by regulatory, infrastructure, and public acceptance challenges.

Localised Source Optimisation
Existing sources in the Eastern and Midlands Region are already operating near capacity. Many are vulnerable to drought and environmental constraints. Optimising these sources was included in the analysis but does not provide sufficient yield or resilience.

Wastewater Reuse (Urban Wastewater Treatment Directive)
Uisce Éireann is actively reviewing opportunities for wastewater reuse in line with the recast Urban Wastewater Treatment Directive. However, current infrastructure and regulatory frameworks limit its viability as a primary supply source. It remains part of Uisce Éireann's long-term innovation and pilot programme strategy.

The options appraisal process included over 1,100 unconstrained options and narrowed these to 591 feasible ones. Each was assessed against criteria including cost, carbon, resilience, environmental impact, and regulatory compliance. The preferred option—abstraction from the River Shannon at Parteen Basin—was selected because it best meets the region's long-term needs across all criteria.

This comprehensive evaluation aligns with the requirements of the Environmental Impact Assessment (EIA) Directive (2011/92/EU, amended by 2014/52/EU), and the findings are documented in the NWRP and Water Supply Project technical reports.

4.2.4 Alternative Route

There were some suggestions for Uisce Éireann to consider an alternative route for the proposed pipeline.

One stakeholder suggested using the Royal Canal as a bed for pipelines, and two stakeholders commented that this location will also benefit from not having legal challenges as it is state owned land. They also highlighted that this location will also minimise the challenge in locating any additional infrastructure and possible archaeological findings.

Uisce Éireann chose a route for the pipeline that avoids environmentally sensitive areas, as far as reasonably practicable, and selected Infrastructure Site locations that, as far as reasonably practicable, reduce environmental impacts, while considering technical and cost factors. Another factor in route selection was to locate the pipeline, as far as reasonably practicable, away from populated areas to minimise the impact on communities. The route of the canals, which are located in heavily populated areas, would make them an unsuitable route for the proposed pipeline for this reason. Other factors, such as the potential impact of the construction works on the canals and their associated embankments, would also have posed difficulties if such a routing had been considered in detail.

4.3 Pipeline and Infrastructure Sites

4.3.1 Route of the Pipeline

In response to the consultation, a number of landowners raised specific requests to change the proposed alignment of the pipeline.

Where requests have been received from affected landowners to have the pipeline route amended, these have been accepted where they are technically feasible and have no adverse environmental impacts and are acceptable to any other impacted landowners. Further information on requests from landowners received during the consultation is provided in Section 3.3.

4.3.2 Operation of the Pipeline

Tipperary County Council noted that the system will be powered by ESB Networks. They highlighted that energy use is a significant consideration of the Proposed Project noting its scale and breath and that the pipeline will traverse the administrative area of six local authorities. The commented: "*clarity on energy consumption and how power will be provided using renewable sources should be provided and how energy consumption can be minimised*".

Renewable energy supplies in the form of solar power have proposed at five of the Infrastructure Sites. It has not been proposed at the Raw Water Intake & Pumping Station as it is not considered compatible with the architectural design of the buildings at that site.

The solar energy will be used to meet the continuous demand for power from elements such as telemetry, monitoring equipment, chlorine dosing and communications. The demand for power from pumping of the water and the treatment of the water at the Water Treatment Plant, Break Pressure Tank, Booster Pumping Station and the Termination Point Reservoir will exceed the power that can be provided by solar, and therefore permanent connections to the mains network will still be required to these sites and the Raw Water Intake & Pumping Station. Consequently, a permanent power connection from the existing main network to each of the Infrastructure Sites is proposed as part of the Proposed Project and this includes the Proposed 38 kV Uprate Works to the existing network to provide power to the Raw Water Intake and Pumping Station and Water Treatment Plant.

In addition, a permanent supply will be required for each of the Line Valves, so a connection to the existing network is also offered at each of these locations.

In accordance with its Sustainability Strategy, Uisce Éireann is pursuing a power purchase agreement, and this will specify that the power supplied from the mains network will be from a green/renewable supply. Therefore, even the electricity supplied from the mains network will be from a renewable source. The design of the Proposed Project has been carefully developed in accordance with the principles of energy-efficient design, with the objective of minimising energy consumption throughout both the Construction and Operational Phases of the Proposed Project.

An Taisce requested clarity on the energy use for pumping water. They sought further clarification of the proportion of renewable energy which is planned for pumping water throughout the pipeline, and the extent to which energy generation resilience has been considered in anticipation of potential electrical failure events: "*Short, medium and long-duration energy storage solutions require full consideration as part of the proposal to effectively plan for this*".

In accordance with its Sustainability Strategy, Uisce Éireann has designed the Proposed Project to reduce the amount of power needed to pump water through the pipeline. Specifically, the Break Pressure Tank has been situated at the highest point on the route in order to allow flows up to

approximately 165Mld to be moved from the Break Pressure Tank to the Termination Point Reservoir, a distance of approximately 133km, under gravity pressure, without further intervention.

In addition, renewable energy will be generated on-site at five of the Infrastructure Sites from solar panels. These were shown on the figures included in the Project Summary Report 2025 (Uisce Éireann 2025a) that was published as part of the Non-Statutory Consultation.

However, even with extensive solar generation at, for example, the Water Treatment Plant, the power generation will not be sufficient to meet the peak demand from pumping the water through the pipe, where pumping is required. Therefore, a permanent supply to the existing mains network is proposed. To address the consequences of this Uisce Éireann is pursuing a power purchase agreement, and this will specify that the power supplied from the mains network by ESB Networks will be from a green/renewable supply. Therefore, even the electricity supplied from the mains network will be from a renewable source.

Table 4.1 sets out a summary of the energy demand requirements.

Site	Energy Demand per Day Based on Annual Average Demand for Water	Peak Energy Provided from Solar Panels
Raw Water Intake &Pumping Station	26,946 kWh/d	None
Water Treatment Plant	132,975 kWh/d	4,200 kWh
Break Pressure Tank	1,496 kWh/d	200 kWh
Booster Pumping Station	463 kWh/d	20 kWh
Flow Control Valve	188 kWh/d	20 kWh
Termination Point Reservoir	1,232 kWh/d	300 kWh

Table 4.1: Energy Demand Requirements

Each Infrastructure Site will have a connection to the ESB. Where required, provision has been made to allow for use of generators on a temporary basis. While the current design does not include the provision of backup generators, all critical Infrastructure Sites with significant power demand—namely the Raw Water Intake and Pumping Station and Water Treatment Plant—would be directly connected to the ESB Networks 38 kV transmission network. This ensures a robust and reliable primary power supply, capable of supporting continuous operation under normal conditions. The 38 kV network is part of Ireland's high-voltage distribution infrastructure, offering enhanced reliability and reduced risk of power interruptions compared to lower-voltage connections. By connecting directly to this network, these key facilities would benefit from greater grid stability and resilience, which is critical for maintaining uninterrupted water supply services.

EirGrid has highlighted an opportunity for pre-ducting adjacent to and along the pipeline to facilitate future 400 kV transmission networks. They included a brief high-level narrative highlighting the key benefits of their future transmission networks.

Ballymore Eustace CDA commented on the proposed 50m width buffer zone and suggested it should be assessed for the possibility of a greenway, power route or new fibre route.

Uisce Éireann has carefully considered the idea of incorporating a greenway along the pipeline route, particularly in areas like peatlands. While understanding the appeal of creating public access routes, Uisce Éireann's priority is to restore the land to its original condition once construction is complete. This approach helps protect sensitive environments and respects existing land uses.

Uisce Éireann has also been asked whether the pipeline corridor could accommodate other infrastructure—such as power or telecoms ducts. While the interest in multi-use infrastructure is appreciated, Uisce Éireann's legal remit is strictly limited to water services. Uisce Éireann does not have the statutory authority to acquire land or wayleaves for non-water purposes, which means it cannot legally facilitate third-party services along the route.

In addition, the proposed pipeline is a piece of critical national infrastructure. To ensure it remains safe, reliable, and accessible for maintenance or emergency repairs, it's essential that the corridor remains clear of other services. Adding additional infrastructure could make it harder to access the pipeline when needed and increase the risk of delays or complications.

4.3.3 Raw Water Intake and Pumping Station

Several angler and fishing groups, St. Flannan's Fishing Club, Castleconnell River Association, Lough Derg Anglers Association, Killaloe Ballina District Anglers Association and Portumna & District Anglers Association, requested further details of the intake system, including:

- Dimensions of the intake aperture, and height in Malin O.D. at Parteen Basin Operating Band
- Type of grating/grid specified to exclude floating debris
- Expected speed of water inflow through this grid, with regard to safety of fish that may evade the "fish fence"
- The process for dealing with the "microfiltration" residue, and "invasive species" that are extracted at the intake
- In times of algal bloom, what will the effect be on the Raw Water Intake and Pumping Station; will this affect "microfiltration"
- The intake point is at a part of the lake known for holding juvenile trout. What effort will be made to remediate this area during and after construction?

Uisce Éireann understands the importance of protecting the environment and local fisheries while delivering a secure water supply. Here's how the Raw Water Intake and Pumping Station at Parteen Basin have been carefully designed with those priorities in mind.

A specially designed wall—called a baffle wall—will be built along the shoreline. This wall will have seven openings that allow water to gently flow into the Intake Chamber. These openings are positioned below the normal water level of the basin, ensuring that water can still be drawn even during dry periods.

Each opening is fitted with a penstock, which acts like a gate that can be closed if needed, for example during maintenance or to protect the system.

Inside the Intake Chamber, passive intake screens will be installed. These screens:

- *Are made from a copper-nickel alloy that discourages zebra mussels from attaching*
- *Have fine slots (just 3mm wide) to prevent fish and debris from entering*
- *Limit water flow speed to protect aquatic life.*

No screens are needed on the outer baffle wall because the internal screens already provide strong protection.

To prevent the spread of invasive species like zebra mussels:

- *Water passes through microfiltration units with filters fine enough (40 microns) to trap juvenile mussels*
- *These filters clean themselves automatically, flushing out waste into a special tank*
- *The wastewater is treated with ultraviolet (UV) light to kill any remaining organisms before being safely managed.*

This process ensures that no invasive species are carried into the treated water system.

While algal blooms have occurred in nearby Lough Derg, long-term monitoring shows that Parteen Basin has low nutrient levels and a low risk of algal blooms. The intake system is designed to handle these conditions without affecting performance.

Surveys found no suitable spawning grounds near the intake site. To support natural recovery, gravel will be placed over protective mats at the bottom of the intake within the Parteen Basin, allowing the area to recolonise naturally.

ESB highlighted their primary responsibility is the safety and integrity of Category A Embankment Dams, Parteen Weir and the Canal Intake Dam which form Parteen Basin. This infrastructure is adjacent to the location proposed for the construction of the Raw Water Intake and Pumping Station. ESB noted and welcomed Uisce Éireann's engagement to date to ensure that ESB's requirements are incorporated in the design and construction of the Raw Water Intake and Pumping Station to ensure that there is no dam safety risk.

Uisce Éireann welcomes the comments from ESB and remains committed to working with them to ensure that the Proposed Project does not affect the Fort Henry Embankment. ESB will continue to operate within its Normal Operating Band as it does today, there will be no significant risk to the integrity of the Fort Henry Embankment due to any changes in water level.

4.3.4 Water Treatment Plant

A stakeholder suggested the Water Treatment Plant should be located further away from the extraction point at Parteen Basin and any watercourses connected to the River Shannon.

In order to make the Proposed Project's operation economically viable, the Water Treatment Plant must be located within approximately 3km of the raw water intake. This maximises the operational efficiency of the raw water pumping. Alternative options for the location of the Water Treatment Plant were previously considered (within this overall search area of approximately 3km) and the proposed site was the preferred location considering technical, environmental and economic considerations. The proposed location of the Water Treatment Plant does not result in a permanent effect on any watercourse connected to the River Shannon.

This information was included in the Final Options Appraisal Report (Irish Water 2016a) and a summary will be included in the EIAR to be submitted as part of the Planning Application for the Proposed Project.

One of the other main benefits of locating the Water Treatment Plant close to the abstract point is that a single pipe can be used from that point onwards. Between the Raw Water Intake & Pumping Station and the Water Treatment Plant there needs to be two pipes. This is because they will be transporting raw (dirty) water and so it is necessary to be able to take one of the pipes out of operation in order to

clean it, while the other continues to provide water for the Water Treatment Plant. However, once the water is treated, a single pipe can be used because it is transporting clean water and there is no requirement to take the pipe 'offline' to clean it. Consequently, the further the Water Treatment Plant is away from the abstraction point, the longer the length of the route that would need two pipes, which would increase the impact on landowners, the environmental effects and the cost of the Proposed Project.

They further suggested that a Water Treatment Plant located at each of the supply areas along the route would be more appropriate.

In order to ensure economies of scale and to optimise operational control and efficiency, it is important to centralise the water treatment process as a single Water Treatment Plant and locate it close to the intake point. The Proposed Project has been designed with a strong emphasis on environmental sustainability and regional supply resilience. A key feature of the system is that there will be no discharge into the Shannon River system. Instead, any surplus or unused water will be recycled back into the network, ensuring efficient use of resources and protecting the ecological integrity of the river system.

In addition to serving its primary destination, the pipeline has been strategically designed to facilitate future potential future connection pointsalong its route. These potential future connection points will enable the supply of treated water to communities and developments across the Midlands, supporting regional growth, improving water security, and enhancing the resilience of local water supply systems.

A stakeholder critiqued the location of the Water Treatment Plant: "*the pipeline will be located 100m uphill from my house. What are my assurances that in the event of the pipe rupturing that 2 m^3/s of water will not flow downhill into my property*".

Safety is Uisce Éireann's absolute priority. The integrity of the pipeline will be managed through the use of steel as the pipeline material and the specifications for construction, as well as the high degree of quality control and testing that will be undertaken during the Construction Phase. This will ensure that the likelihood of a leak or burst occurring will be extremely remote. The pipeline route has been chosen to allow for a buffer to dwellings, meaning that the impact of such incidents, should they occur, would be minimised.

In the unlikely event that an incident should occur, remotely operated automated Line Valves will be closed in order to limit the amount of water that can discharge from the affected section of pipe. If required, the section of pipe can then be drained down, water will be de-chlorinated and there will be a controlled discharge to nearby watercourses, at flow rates appropriate to their capacity.

Sensors will be installed to constantly monitor the pressure within the pipe, immediately alerting operations staff of an incident should one occur.

Should a leak occur, it will be assessed by operations staff and a repair will be carried out quickly, ensuring that the impact on landowners is minimised.

Pre-emptive monitoring and inspections will be carried out routinely to allow Uisce Éireann to identify and address any potential issues before they arise.

Tipperary County Council commented on the construction, operation and management of the Water Treatment Plant. Tipperary County Council requested Uisce Éireann consider the following:

- Environmental Impact Assessment: The potential impact of the plant and its management, including any discharges to the local environment, must be thoroughly assessed. Appropriate control measures should be incorporated to ensure no negative impact on the environment and local ecology.

The environmental impact of the Water Treatment Plant will be comprehensively covered in the EIAR. This includes the management of all potential discharges from the site. These discharges will be limited to surface water runoff which will have been through on-site management via settlement ponds.

There will be no discharge of wastewater from the drinking water treatment process. The Water Treatment Plant has been designed specifically to avoid a discharge of wastewater, and instead this will be recycled through the treatment process itself and is a closed system with no discharge.

The EIAR will be submitted with the Planning Application and the NIS.

- Drinking Water Quality: It is essential that the drinking water quality produced at the Birdhill Water Treatment Plant meets specified standards throughout the distribution network to the Termination Point Reservoir at Peamount. Particular controls should be in place to avoid the formation of excessive trihalomethanes (THMs).

The Water Treatment Plant has been designed to Uisce Éireann's engineering standards, ensuring compliance with EU drinking water regulations. The Water Treatment Plant will produce water that meets the requirements of the Drinking Water Regulations at the point of use. The control of THMs is a central consideration, and the primary disinfection process has been chosen as UV treatment for this reason, because using chlorine as the primary disinfectant would have the potential to result in excessive THM formation. The treatment process will include Granular Activated Carbon filters, which help remove organic compounds, improve taste and odour, and enhance water quality. This reflects a modern, resilient treatment approach. Chlorine will also be dosed at the Water Treatment Plant, but only at a level that is designed to prevent a biofilm from developing on the Treated Water Pipeline.

- Construction Mitigation Measures: Adequate mitigation measures are required throughout construction, especially along the pipeline route, to avoid subsidence concerns (particularly in peat substrate) and negative impacts on surrounding ecology and water bodies.

Section 4.6 of this report sets out further detail on environmental matters. There will be a Construction Environmental Management Plan, including a Surface Water Management Plan, setting out measures to be adopted during the construction of the Proposed Project to protect the environment.

There will be specific techniques adopted to support the pipe through sections of poor ground including specifically peat and these will be set out in the Planning Application and assessed in the EIAR.

- Backup Generators and Electricity Storage: The installation of backup generators and adequate electricity storage at the treatment plant site and various pumping stations along the pipeline is critical to avoid potential supply issues and build climate change resilience.

An automatic back up system for the power supply is not included in the design. Rather, a mains power supply has been selected in order to maximise the resilience of supply. To achieve this, the Proposed 38 kV Uprate Works are proposed in order to upgrade the existing network. This ensures a robust and reliable primary power supply, capable of supporting continuous operation under normal conditions. The 38 kV network is part of Ireland's high-voltage distribution infrastructure, offering enhanced reliability and reduced risk of power interruptions compared to lower-voltage connections. By

connecting directly to this network, the Water Treatment Plant benefits from greater grid stability and resilience, which is critical for maintaining uninterrupted water supply services.

The Water Treatment Plant has been designed to facilitate the connection of a generator in the unlikely event of an outage in mains supply. However, the level of power required to operate the plant is so high that a generator could only provide sufficient power for a limited supply volume for a short period of time.

- Contingency Arrangements: Contingency arrangements and procedures are necessary to mitigate against potentially large water losses in the event of major leaks along the pipeline, given the significant length of pressurised mains proposed.

Steel has been selected as the preferred material for the pipeline partly to avoid this and a monitoring system will be in place, using an electricity current to monitor the integrity of the pipeline. As soon as there is a change in the condition of the pipe detected, this identifies that a maintenance intervention is required before the pipe fails.

In the event of a burst on the pipeline, there would be a loss of pressure that would immediately trigger an alarm, and a signal would be sent to the pump controls which would shut down the abstraction and cause the Line Valves to close, isolating the sections of the pipe from one another thereby minimising the amount of water lost.

Several angler groups and fishing clubs, including Portumna & District Angling Association, Killaloe-Ballina District, Lough Derg Anglers Association, St. Flannan's Fishing Club, and Castleconnell River Association, raised concerns about pollution from the Clareville Water Treatment Plant, which they say has severely impacted salmonid spawning at a site known as The Gravels.

They requested assurances that the proposed Birdhill Water Treatment Plant will not pose a similar threat to the Kilmastulla catchment. While they acknowledged that Birdhill's design includes recirculation of process water and removal of residue, they questioned whether the system could still operate safely during events like algal blooms in Lough Derg/Parteen Basin, without discharging pollutants into the Kilmastulla River.

All processed water at the Water Treatment Plant will be recirculated back to the head of the works, so there will be no discharge of any process water to the Kilmastulla catchment. The Water Treatment Plant has been designed to continue operation in the event of an algal bloom in Lough Derg/Parteen Basin, and in the event of an algal bloom in the source, there will be no change to the recirculation of process water.

Inland Fisheries Ireland (IFI) raised concerns about the disposal of the substantial amounts of waste such as sludge produced by the Water Treatment Plant and the associated risks of pollution both during construction and operation of the plant.

The Water Treatment Plant has been designed as a 'closed loop' and there will be no discharge of process wastes to the aquatic environment. All liquid residuals from the treatment process will be recirculated back to the head of the works.

The dewatering sludge cake produced at the Water Treatment Plant will be stored for up to six months before being removed off site.

4.3.5 Termination Point Reservoir

The Limerick Kayak Club suggested the Termination Point Reservoir should be large enough to store additional water for drought periods or extract the maximum capacity during floods on the River Shannon: "*This would help to maximise water extraction while at the same time reducing water levels during flooding*".

The Termination Point Reservoir is a relatively small structure to provide additional potable water storage to meet daily variations in demand in the Greater Dublin Area and holds only a few hours of storage. A reservoir capable of providing sufficient storage to balance peak rainfall with peak drought demand over many months would be hundreds of times larger. The Proposed Project is for treated drinking water purposes only and is not intended to be capable of mitigating flooding or drought other than providing an additional source of potable water for the East and Midlands Region.

Even at peak demand, the volume of water abstracted from the Parteen Basin will represent no more than 2% of the average flow in the Lower Shannon. This relatively small proportion ensures that the abstraction will have a minimal impact on the overall hydrological regime of the river system. Furthermore, during flood events, when river flows are significantly higher than average, the effect of the abstraction becomes negligible. The volume removed in such conditions is proportionally even smaller, and does not materially alter flood dynamics, flow velocities, or downstream water availability.

4.4 Construction

4.4.1 Construction Management (Including Noise and Traffic Management)

Stakeholders raised concerns about general disruption, noise, dust and light pollution for those living near the construction areas.

Uisce Éireann understands that large infrastructure projects can cause concern for people living and working near construction areas. Uisce Éireann wants to reassure communities that it is taking these concerns seriously and has put strong plans in place to minimise disruption wherever possible.

Like any major project, there will be some temporary impacts, including:

- *Increased traffic in certain areas*
- *Construction noise and vibration*
- *Dust and air quality concerns*
- *Temporary changes to views or lighting.*

Uisce Éireann also recognises that these changes can cause stress or anxiety for those nearby and has worked hard to reduce these effects through careful planning and design.

How Uisce Éireann is Reducing the Impact

Careful Route Selection

The pipeline route was chosen to avoid towns, villages, and densely populated areas wherever possible. Most of the route passes through rural land, meaning fewer communities will be directly affected.

Smart Construction Planning

Uisce Éireann has developed a range of measures to reduce disruption during construction, including:

- *Choosing temporary haul roads that avoid schools, hospitals, and busy residential areas*
- *Using trenchless technology to cross major roads without digging them up*
- *Providing safe alternative routes for traffic, pedestrians, and cyclists*
- *Ensuring construction vehicles don't block local roads or park inappropriately*
- *Scheduling deliveries outside of peak traffic times*
- *Using quieter machinery and limiting noisy work to daytime hours*
- *Installing temporary noise barriers where needed*
- *Controlling dust with water sprays and protective screens.*

Keeping You Informed

We'll provide regular updates to local residents, landowners, and businesses about what's happening, when, and how it might affect them—especially if any work is planned outside normal hours.

All of these commitments will be set out in a detailed Construction Environmental Management Plan, which contractors will be required to follow as part of the planning process.

One stakeholder mentioned that they have animal pastures in the area where the pipeline route is planned and are concerned about the impact of construction on livestock as well as finding suitable alternative land for grazing during the Construction Phase.

Extensive engagement is being undertaken by Uisce Éireann with landowners affected by the Proposed Project. Loss of land for grazing during construction has been considered as part of the compensation package, and Uisce Éireann will work with landowners to try and accommodate grazing

requirements/movement of livestock. This will have to be considered on a case-by-case basis and the options available will depend on the nature and extent of the impact on a particular grazing activity.

One stakeholder asked about potential for construction during 'antisocial hours', and another asked if they will be informed about construction duration on their road, where the pipeline route crosses.

The Project Summary Report 2025 (Uisce Éireann 2025a) sets out the proposed typical working hours during the Construction Phase, and these are repeated in Table 4.2.

Start	Finish	Day
07:00	19:00	Monday to Friday
08:00	16:30	Saturday

Table 4.2: Typical Construction Working Hours

There will be a need to undertake certain construction activities outside of normal working hours such as trenchless crossings which would require 24-hour working, although this would be for a relatively short period of time.

Land Liaison Officers will keep landowners fully informed of developments, and a Community Liaison Officer will be on hand to provide updates to the local community and answer any questions throughout the Construction Phase.

Ibec requested minimal disruption and emphasised the importance of minimising disruption to transport routes and logistics, crucial for supply chains and Irish industry.

They highlighted the need for road safety for all users and requested clear communication about road closures and potential restrictions. They further stressed that existing roads and infrastructure must be maintained to their original condition and repaired or reinstated if used and sought clarity on any road closures or restrictions that may impact business operations.

The HSE Environmental Health Service (HSE) stated that any "*impact from construction works on public transport should be assessed during the construction phase, particularly the access to community facilities and healthcare premises and services*".

Medtronic noted it was critical that the use of existing roads by the Proposed Project must be done safely, with no risk to the public, or any other users.

An individual stakeholder raised concerns about the parking of construction machinery and vehicles outside private property.

Uisce Éireann understands that construction can cause temporary disruption, especially when it comes to local roads, access routes, and community services. Uisce Éireann is committed to minimising these impacts and keeping people moving safely and efficiently throughout the Proposed Project.

Uisce Éireann knows that increased construction traffic and temporary road closures can affect:

- *Access to homes, businesses, and farms*
- *Local roads and rights of way*
- *Community services and daily routines.*

Before any construction begins, we'll work closely with local councils to agree on the best routes for construction traffic (known as "haul roads"). These routes are chosen to avoid sensitive areas like schools, hospitals, and residential neighbourhoods wherever possible.

Uisce Éireann is putting in place a range of measures to reduce the impact on local communities:

- *Using trenchless technology to cross major roads without digging them up*
- *Providing safe alternative routes for vehicles, pedestrians, and cyclists*
- *Ensuring there's enough space for construction vehicles to park and operate safely, without blocking local roads*
- *Timing deliveries to avoid rush hours and using minibuses to reduce the number of vehicles on the road*
- *Monitoring heavy goods vehicles to ensure they stick to approved routes.*

We'll give advance notice of any roadworks or diversions through:

- *Roadside signage*
- *Updates from Community Liaison Officers*
- *Direct communication with residents and businesses.*

All roadworks will follow strict safety procedures, including:

- *Approved traffic management plans*
- *Temporary traffic lights or signage where needed*
- *On-site supervision to keep everyone safe.*

All of these commitments will be detailed in the EIAR, which will be submitted as part of the planning application for the Proposed Project.

As outlined in Section 4.4.2, where necessary, reinstatement works will be undertaken to restore the haul roads to a condition that is equal to or better than their original state, as documented in the pre-condition survey. All reinstatement activities will be carried out in accordance with the standards and specifications agreed upon with the local authorities, ensuring that the infrastructure is returned to a safe and serviceable condition for public use.

4.4.2 Reinstatement

Several stakeholders commented about reinstatement after construction ends.

IFI shared their appreciation for planned future enhancements and rehabilitation works at crossing locations after the construction is developed. "*IFI believe that the project should maximise all opportunities for environmental gain during the planning and construction of the project*".

Uisce Éireann is liaising with IFI regarding the opportunities for future enhancements and rehabilitation works at the crossing locations including use of gravel in river restoration, where feasible.

Other stakeholders shared their requests for land restoration after work is completed, including trees and hedgerows along the route. Medtronic requested that all roads and infrastructure be repaired, or reinstated fully, to their original condition.

On completion of the Proposed Project, land directly affected by the construction works will generally be reinstated to its pre-existing condition and use.

This means the reinstatement of vegetation post-construction on a like-for-like basis wherever reasonably practicable. Linear features will also be reinstated, including hedgerows and fence lines. Some planting will be restricted over the Permanent Wayleave, as roots of large trees (over 4m) could damage the pipe. Therefore, species which grow larger than this will not be reinstated above the pipeline.

Uisce Éireann will endeavour to protect existing habitats where these are to be retained and will ensure the reinstatement of habitats and new planting following construction, subject to planting restrictions within the Permanent Wayleave.

Prior to the commencement of construction activities, a comprehensive pre-condition survey of all designated haul roads will be undertaken. This survey will document the existing condition of the road infrastructure, including surface integrity, drainage features, signage, and any pre-existing damage or wear. The survey will be conducted in coordination with the relevant local authorities to ensure transparency and agreement on the baseline condition.

Upon completion of the works, a corresponding post-works condition survey will be carried out. This will assess any deterioration or damage that may have occurred as a result of construction traffic or related activities. The findings of this survey will be compared against the pre-condition records to identify any areas requiring attention.

Where necessary, reinstatement works will be undertaken to restore the haul roads to a condition that is equal to or better than their original state, as documented in the pre-condition survey. All reinstatement activities will be carried out in accordance with the standards and specifications agreed upon with the local authorities, ensuring that the infrastructure is returned to a safe and serviceable condition for public use.

4.5 Operation

4.5.1 River Shannon Water Levels

Castleconnell Boat Club, located on the Lower River Shannon, raised concerns about their facilities should there be an impact to the water levels. They commented: "*any change to the water levels no matter how small will negatively impact our ability to launch our boats from our Slip which in turn could cost us dearly from a financial perspective if we had to drop the level of our slips to allow for any drop in water levels*."

St. Flannan's Fishing Club, located on the lower Lough Derg Lake, highlighted the impact on water levels during recent drought periods. The club proposed the installation of several navigation rulers, including one adjacent to the old canal entrance on the lower lake. They further suggested definitive water level cut-offs must be established between ESB, IFI, Uisce Éireann, and local organisations using the lake: "*There must be accountability when water levels drop below a certain cut-off*".

Several angler groups commented on access to the lake. They requested assurance that boathouses, slips and moorings will remain usable and effective, with access to the lake, and that water-level shutters and doors will remain usable and effective at all times, in particular during times of drought.

Uisce Éireann has heard the concerns raised by local clubs and angling groups about the potential impact of the Proposed Project on water levels in Parteen Basin and Lough Derg.

The Proposed Project will not change how water levels are managed. That remains the responsibility of the ESB.

No Change to Water Level Management

- *The water levels in Parteen Basin and Lough Derg are already managed by the ESB for hydroelectric power.*
- *The proposed water abstraction will use water that would otherwise be released through the hydro station.*
- *The normal operating range for water levels in Lough Derg will stay exactly the same as it is today.*
- *Levels downstream of Parteen Weir are affected by the rainfall in the catchment, the flows in a number of tributaries which are uncontrolled, in addition to the controlled discharge from Parteen Basin.*

What Happens During a Drought?

- *Even during a severe drought—like the one in 2018—modelling shows that water levels can still be kept within the existing Normal Operating Band (this is an upper and lower level that the ESB currently keep water levels within).*

What About Boathouses, Slips, and Moorings?

- *If your facilities (like slips, shutters, or moorings) are usable today throughout the normal water level range, they will remain usable once the Proposed Project is in place.*
- *Navigation levels will not change, and tourism and recreational access will continue as normal.*

Who's Responsible?

- *The ESB will continue to manage water levels within its current Normal Operating Band.*
- *Uisce Éireann will work closely with the ESB to ensure that abstraction only happens when levels are above the bottom of the Normal Operating Band.*
- *The statutory compensation flow of 10m³/s through Parteen Weir into the Old Shannon River will remain unchanged.*

Limerick Kayak Club and Shannon Rowing Club had concerns in relation to the volume of water in the Lower River Shannon. They commented it is essential the statutory minimum of 10 cumecs into the natural course of the Lower River Shannon is observed. "*This volume of water also needs to be calibrated and independently validated*". They further commented that those who use the Lower River Shannon regularly have observed that water levels for much of the year have reduced in the past 10 years. They concluded the Lower River Shannon "*needs to be controlled better in flood periods with releases related to the natural flow as opposed to holding back water and then releasing in very large quantities*".

Uisce Éireann has listened carefully to the concerns raised by local clubs and community groups about water levels in the Lower River Shannon, especially around flow consistency, drought conditions, and flood management.

Uisce Éireann will not manage or control water levels on the Lower River Shannon. The release of the statutory minimum flow and the management of discharges when Lough Derg is in flood remains the responsibility of the ESB.

Statutory Flow Will Remain Unchanged

- *The compensation flow of 10 cubic metres per second (cumecs) into the Old River Shannon will continue as it does today.*
- *This flow is a statutory minimum flow and is protected and will not be reduced by the Proposed Project.*

No Change to How Water Levels Are Managed

- *The proposed abstraction will use water that would otherwise be released for hydroelectric generation, not additional water from the lake.*
- *The ESB will continue to manage water levels within its Normal Operating Band as it does today in Parteen Basin and Lough Derg using its existing systems and practices.*

Flood and Drought Management

- *During flood seasons, ESB already aims to lower water levels in late autumn to create storage capacity for winter inflows—just as local clubs have suggested.*
- *In late spring and summer, ESB typically holds water at the higher end of the Normal Operating Band to ensure enough water supply for the statutory compensation flow during dry periods.*
- *These practices will continue unchanged.*

Monitoring and Accountability

- *ESB publishes on its website the daily level on Lough Derg and the discharge from both Ardnacrusha and Parteen Weir. The ESB information is at the following link:* Hydrometric Information
- *The Proposed Project will not change how water levels are managed, nor will it reduce the flow into the Lower River Shannon. If you currently rely on the river for recreation, sport, or tourism, you can expect the same water level range and flow conditions to continue.*

4.6 Environmental Issues

4.6.1 Environmental Impact Assessment Report (EIAR)

Several respondents referred to the Environmental Impact Assessment process or the EIAR document itself. The Eastern and Midlands Regional Assembly commented that the EIAR should follow the EPA (2022) Guidelines and relevant European, national, and topic-specific legislation, guidance, and policy. The Project Summary Report 2025, published to support the Non-Statutory Consultation, noted that environmental reports, including the EIAR, a NIS, and a WFD Compliance Assessment report, will be submitted with the planning application. This was welcomed by the Assembly.

The Project Summary Report 2025 (Uisce Éireann 2025a) set out that the EIAR is being prepared in accordance with the EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022), as well as applicable European, national, and topic-specific legislation, guidance and policy and Uisce Éireann can confirm that this remains the case.

The NIS is being prepared to assess whether the Proposed Project, alone and in combination with other plans and projects, will have an adverse effect on the integrity of European sites in view of their conservation objectives.

A WFD Compliance Assessment is being undertaken and will be presented in a Water Status Impact Assessment Report that will be submitted with the planning application. This considers the potential changes to water bodies such as lakes and rivers potentially affected by the Proposed Project.

A stakeholder requested a full cumulative impact assessment, considering climate change, future drought conditions, seasonal river levels, and planning applications like increased abstraction for data centres and industry. It also referred to the need for a legally compliant NIS and EIAR to assess impacts on protected sites, species, and human health.

In addition to the response on the NIS and EIAR, set out above, Uisce Éireann can confirm that the assessments being undertaken include cumulative impact assessments taking into account the future

baseline as a result of climate change and the incremental impact of the Proposed Project in combination with other development.

An Taisce suggested a Biodiversity chapter in the EIAR should guide the Proposed Project in environmentally sensitive areas.

Shannon Chamber set out that it expected that a comprehensive EIAR needed to be undertaken to assess how the Proposed Project might affect aquatic habitats and the fish population, especially given the importance of the Shannon River as a key waterway and a contributor to the future development of the tourism sector in the Shannon region. They further welcomed Uisce Éireann's commitment to regular environmental monitoring during and after the implementation of the Proposed Project. This would ensure that the impact on the Shannon Parteen Basin, its tributaries, and the surrounding areas is continually assessed.

Uisce Éireann recognises the importance of protecting biodiversity and aquatic ecosystems, especially in environmentally sensitive areas like the Shannon River and Parteen Basin.

From the earliest stages of design, biodiversity has been a key consideration. The Proposed Project follows a mitigation hierarchy, which aims to:

1. *Avoid environmental impacts where possible*
2. *Minimise them where they can't be avoided*
3. *Mitigate any remaining effects through targeted measures.*

This approach has shaped decisions such as:

- *Undertaking a detailed site-selection process in relation to the location of the intake site, and as part of that process the biodiversity sensitivities were considered*
- *Designing the Raw Water Intake features like a bubble curtain and limiting water intake speed to protect fish and aquatic life*
- *Recirculating wastewater at the Water Treatment Plant to reduce environmental discharge.*

Uisce Éireann has carefully assessed how the Proposed Project could affect aquatic habitats and fish populations. As a result, Uisce Éireann will comply with the required seasonal restrictions in consultation with the relevant authority.

All protections will be detailed in the EIAR and will be legally binding during construction.

Uisce Éireann welcomes Shannon Chamber's support for regular environmental monitoring. Uisce Éireann is committed to:

- *Monitoring environmental conditions during and after construction*
- *Updating mitigation measures based on feedback and new data*
- *Working with local stakeholders to ensure transparency and accountability.*

4.6.2 Impact on Water Levels and Abstraction

There were several stakeholders that raised concerns over the negative impact abstraction would have on water levels in the Shannon and Lough Derg, with many noting the critical period of abstraction is in summer when water levels of the Lough Derg are lowest.

A stakeholder highlighted in May and June 2020, and in August and September 2022, there was no water available to generate electricity at Ardnacrusha power station for several days. This happens often during summer months. They commented that using the Parteen Basin as a reservoir would

lower water levels and affect the stability of the Fort Henry Embankment, which have already had issues in the past.

The stakeholder went on to note that a major breach in the Fort Henry Embankment would be devastating to nearby villages and could cause significant flooding. The embankments will need to be reinforced or renewed in the future to manage water levels and mitigate flooding, especially with climate change.

They further advised Uisce Éireann consider the following: The statutory upper limit for water levels in Lough Derg is 33.56m Above Ordnance Datum (AOD). (This is 33.56m AOD Poolbeg which is 30.86m AOD Malin Head.) Further, it rarely drops below 33.46m AOD Poolbeg except during winter flooding. Lowering the lake to navigation level in winter could help mitigate downstream flooding.

IFI sought clarification on the abstraction scenario if flows into the Parteen Basin reduce to 10 cumecs during drought conditions, questioning whether abstraction will cease in such cases. Concerns include potential downstream effects on the ecology, environment, and hydrology of the tailrace and old channel, impacting migrating and resident fish. Clarification is also needed on the process for future changes to the permitted abstraction rate if demand exceeds forecasts.

Uisce Éireann recognises that a large number of responses to the Non-Statutory Consultation raised concerns regarding the impact of the Proposed Project on water levels and the effect this would have on, for example, water quality, fish stocks and recreational activities such as sailing/swimming. The aim of Uisce Éireann is that the Proposed Project makes no change to the current water level management regime controlled by ESB. Specifically, ESB manage water levels within an upper and lower water level (which define the 'Normal Operating Band'). For the Parteen Basin, the top of the Normal Operating Band is 30.86mAOD (33.56mAOD Poolbeg) and the bottom is 30.00mAOD (32.70mAOD Poolbeg). The Proposed Project will not change this, and it will continue to be the case with the implementation of the Proposed Project. Uisce Éireann will not control where the water level is on the Parteen Basin. This will be done by ESB, and the water level will be maintained as it is today within its Normal Operating Band.

The Environment Impact Assessment Report (EIAR), which will be submitted with the planning application for the Proposed Project, will include a hydrological modelling report and a water quality modelling report describing the assessment of potential impacts on flows, water levels and water quality in Lough Derg, Parteen Basin, and the Old River Shannon due to the proposed abstraction. To model the future impact of the Proposed Project, a hydrological modelling approach was adopted using the best understanding of ESB's operational rules (based on discussions with ESB). This predicts the effect of the Proposed Project on flows to Ardnacrusha and on water levels on Parteen Basin taking account of future climate change, while meeting the required statutory compensation and fish pass flows to the Old River Shannon. This was described in the Project Summary Report 2025 (Uisce Éireann 2025a) published to support the Non-Statutory Consultation.

The modelling shows that the impacts to lake levels and forward flows to the Old River Shannon due to the Proposed Project abstraction (at a constant flow of either 154Ml/d or the peak abstraction of 300Ml/d) were found to be barely distinguishable from the baseline case. The level regimes of both Lough Derg and Parteen Basin are only simulated to be notably affected during rare extreme drought events and in the days immediately after the drought (up to a week) when inflow is needed to replenish any deficit in storage caused by the Proposed Project abstraction. Climate change simulations for the reasonable worst-case scenario indicate that simulated lake levels would still remain within the Normal Operating Band with the Proposed Project abstraction included. The simulated lake levels only drop close to the bottom of the Normal Operating Band once within the 52-year model simulation period – during the modelled 2018 drought event with climate change included.

This means that with the continuation of the current ESB management of water levels (with levels typically held higher in the summer to provide the maximum amount of water) and on a precautionary basis of a continuous abstraction of 300Mld, the Proposed Project could operate through a drought equivalent to the one in 2018 (the worst on record for the River Shannon catchment) while allowing for future climate change and the water level will remain within the Normal Operating Band that ESB currently works to. The modelling shows that there would be no change to the compensation flow and fish pass flows to the Old River Shannon, and therefore no projected impacts on downstream aquatic ecology and fish due to the Proposed Project. Therefore, the water level would remain within the upper and lower range that ESB currently operates within and so the operation of Lough Derg and the Parteen Basin, post works, will feel and look very similar to the way it currently operates, and there will not be a visible day-to-day difference.

Therefore, as ESB will continue to operate within its Normal Operating Band as it does today, there will be no risk to the integrity of the Fort Henry Embankment due to any changes in water level. The statutory compensation flow of 10m³/s passed through Parteen Weir into the 'Old Shannon River' would remain unchanged and undiminished under this proposal. Navigation and beneficial uses focused on tourism would experience the same operating water level range as normal.

IFI were particularly concerned about the impact on species like pollan, which spawn in shallow, rocky areas. The proposed abstraction could expose additional shoreline and fringing habitat, affecting pollan populations in Lough Derg.

Key issues IFI want Uisce Éireann to consider include:

- Investigating and providing alternative solutions for extended low flow dry periods
- Assessing the impact on upstream water levels, ecology, and flows within Parteen Basin and Lough Derg, including effects on aquatic flora, fauna, and fish species
- Fully investigating the effects of water level variation on trout and salmon spawning and littoral zones
- Considering economic and environmental costs, ensuring environmental considerations are equally weighted with socio-economic issues
- Clarifying the permissibility of water transfer between river catchments under the WFD
- Ensuring balanced and sustainable abstraction regimes across the scheme catchment area
- Implementing measures and education initiatives to limit water waste, reduce leakage, and improve network efficiency
- Reviewing measures such as metering and byelaws to reduce water waste
- Considering the potential reduction in assimilative capacity and its effects, especially at low flows
- Conducting consultations with IFI during the EIAR stage to discuss suitable mitigation measures and undertaking surveys and modelling for a range of conditions, particularly during extended drought periods.

As set out in the response above, the Proposed Project would not change water levels within Parteen Basin or Lough Derg under normal conditions, and even within drought conditions the water level could be maintained within the current Normal Operating Band. Therefore, there would be no significant impact on aquatic ecology, fish and the shallow spawning areas within these water bodies.

Limerick City and County Council requested clarity on the impacts on the extraction points for Clareville Water Treatment Plant and if allowance is made for this and for the security of supply of drinking water for Limerick City and its hinterland. Limerick City and County Council further requested confirmation on

how minimum compensation water flows guaranteed under the ESB scheme will be managed in the event of droughts.

Uisce Éireann note Limerick City and County Council's request. The Proposed Project would have no impact on the downstream availability of water for the Clareville Water Treatment Plant , which abstracts from both the Ardnacrusha Headrace at Clonlara, and from the Old River Shannon The extensive hydrological modelling that has been undertaken for the Proposed Project was described in the Project Summary Report 2025 (Uisce Éireann 2025a) published to support the Non-Statutory Consultation and is summarised in the responses earlier in this section. This sets out that there would be no change to the statutory compensation flow of 10m^3/s to the Old River Shannon and that it would remain ESB's responsibility to ensure the delivery of the compensation flow. The modelling carried out for the Proposed Project demonstrates that this is achievable. ESB will continue to operate the Headrace within its normal operating band.

Killaloe, Lough Derg and Portumna Angling Clubs, St. Flannan's Fishing Club and Castleconnell River Association argued that the Proposed Project risks over-relying on the Shannon River's drought resilience by transferring water eastward without including a dedicated raw water reservoir. This could drain the Shannon system, especially during droughts, when the South West also depends on it.

They further highlighted that a basic calculation shows that at the Proposed Project extraction rate of 3.82 cumecs, plus 0.7 cumecs for the Ardnacrusha fish pass, and ongoing minimum water extracted for Limerick, Lough Derg and Parteen Basin have a maximum of 19 weeks supply during drought conditions. The Old River Shannon is set permanently at a drought level of 10 cumecs, and guarantees are needed to ensure this level is not further diminished by the Proposed Project.

They commented that maintaining a constant 10 cumecs level in the Old River Shannon has been unsatisfactory in recent years, with water level gauges showing falls greater than 10cm from the 10 cumec level. This minimum level is crucial for preserving water flow through spawning gravels and nursery streams. Any decrease in this flow causes salmonids to abandon the streams for deeper water, exposing them to predation and harming the year's crop of smolts and fry. Failure to maintain adequate flow affects all river users down to Corbally.

Clare County Council queried whether the local authority should have input into controlling the compensation flow and levels in the Shannon. They acknowledged that abstraction from the Parteen Basin may have the least environmental impact compared to other options, but it does not mean there will be no ecological impacts. The Council has serious concerns about the proposed abstraction rate of approximately 3.5m^3/s. They cited there are ongoing issues with water abstraction at Parteen Weir, leading to documented ecological impacts downstream on the Old River Shannon.

Uisce Éireann recognises that a large number of responses to the Non-Statutory Consultation raised concerns regarding the impact of the Proposed Project on water levels and the effect this would have on, for example, water quality, fish stocks and recreational activities such as sailing/swimming. The aim of Uisce Éireann is that the Proposed Project makes no change to the current water level management regime controlled by ESB. Specifically, ESB manage water levels within an upper and lower water level (which define the 'Normal Operating Band'). For the Parteen Basin, the top of the Normal Operating Band is 30.86mAOD (33.56mAOD Poolbeg) and the bottom is 30.00mAOD (32.70mAOD Poolbeg). The Proposed Project will not change this, and it will continue to be the case with the implementation of the Proposed Project. Uisce Éireann will not control where the water level is on the Parteen Basin. This will be done by ESB, and the water level will be maintained as it is today within its Normal Operating Band.

It should be noted that 3.5m³/s is the peak level of abstraction allowable during peak demand periods (e.g., dry season, high population usage). The average operational abstraction rate under normal conditions is closer to 1.75m³/s.

The hydrological modelling that has been undertaken for the Proposed Project is summarised in the sections above, noting that there would be no change to the statutory compensation flow of 10m³/s to the Old River Shannon.

Clare County Council further commented that the compensation flow does not mimic natural flows, keeping it at an artificial steady rate, which impacts critical habitats like Alluvial woodland. Uisce Éireann must not leave the assessment of compensation flow to the ESB. The Proposed Project must be assessed in line with the Habitats Directive, specifically Article 6(3), considering ongoing negative effects and any further impacts.

As set out in the responses earlier in this section, the modelling undertaken for the Proposed Project has been used to confirm that, with its current management practices, ESB would be able to continue to deliver the statutory compensation flow while keeping water level within the Normal Operating Band, while allowing for climate change.

Uisce Éireann can confirm a cumulative effects assessment is being undertaken based on assessing the Proposed Project in combination with other potential projects against the existing environmental baseline.

A NIS will be submitted with the planning application describing the appropriate assessment under the Habitats Directive. While the NIS will only be finalised for the submission of the planning application it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in-combination with other plans or projects. This includes consideration of the qualifying interests and conservation objectives of the Lough Derg (Shannon) Special Protection Area and the Lower River Shannon SAC.

Shannon Chamber requested all necessary environmental assessments be undertaken to ensure that the water extraction will not negatively impact the long-term sustainability of the Shannon River or Parteen Basin or negatively impact the Shannon region – industry or residents.

A stakeholder from Killaloe and a founding member of St. Flannan's Fishing Club believes the Proposed Project will harm the local environment, especially during low water flow years, affecting water levels and wildlife. The fishing club is particularly concerned about the following issues:

- Water Levels: During winter floods and low flow years, water levels in Lower Lough Derg drop significantly, making the boathouse unusable. The proposed daily abstraction of 300Mld during low flow years will worsen this situation, impacting on the club's activities and the local ecosystem.
- Ecological Impact: The pipeline could have devastating effects on the flora and fauna in the SAC. The club fears that the Proposed Project will hinder the restoration of migratory fish passages and adequate river flows to the original River Shannon.
- Infrastructure Damage: Reduced water levels could cause ongoing damage to the club's infrastructure, angling boats, and outboard motors.

The extensive hydrological modelling that has been undertaken for the Proposed Project was described in the Project Summary Report 2025 (Uisce Éireann 2025a) published to support the Non-Statutory Consultation and is summarised in the responses provided earlier in this section. This sets out that

there would be no change to the statutory compensation flow of 10m³/s to the Old River Shannon and water levels on Lough Derg and Parteen Basin would continue to be managed within its current Normal Operating Band.

Geological Survey Ireland highlighted that the Project Summary Report states that the maximum water abstraction will be about 2% of the long-term average flow through Parteen Basin. However, this percentage will be much higher during low flow periods. GSI commented that the impact on low flows is not clearly explained in the documents or webinars.

Research by Broderick and Murphy in 2020 found that future low flows could decrease by over 30% due to climate change. The Project Summary Report mentions that in a worst-case climate scenario for the 2080s, water levels would mostly stay within normal ranges but could drop close to the lower limit during droughts like in 2018. GSI recommended that the impact on current and future low flows due to climate change should be clearly defined and published.

Councillor Seamie Morris commented that the proposed water is in a site that is one of the most ecologically sensitive locations in Ireland. Allowing water abstraction on this scale would set a dangerous precedent and contradict national and EU environmental protections.

Councillor Morris commented that Uisce Éireann's claim that only 2% of the current ESB controlled flow would be diverted is misleading. Councillor Morris cited that the ESB itself has struggled with low water levels, leading to a 14-day shut-down in electricity generation in August 2021 due to insufficient water. If the ESB cannot maintain stable water levels for energy production, there is no excess capacity for a proposed project of this magnitude.

Ballymore Eustace CDA suggested that Uisce Éireann should provide figures on all associated water treatment plants in the Proposed Project area, in relation to the expected EPA licensing of abstractions along the many rivers that are sources of drinking water to the organisation.

The River Shannon is a massive natural resource, and as proven elsewhere in Ireland it is compatible for a drinking water abstraction to operate alongside hydropower generation. Uisce Éireann appreciates that there are environmental sensitivities at this site and has done a considerable amount of work to reduce the potential environmental effects, as set out in Section 3.3.

Hydrological modelling has been undertaken for the Proposed Project to demonstrate the effect of the proposed abstraction. This was described in the Project Summary Report 2025 (Uisce Éireann 2025a) published to support the Non-Statutory Consultation and is summarised in the responses provided earlier in this section, with particular emphasis on drought periods, including an assessment of the peak abstraction in a drought/low flow period. This sets out that there would be no change to the statutory compensation flow of 10m³/s to the Old River Shannon, and water levels on Lough Derg and Parteen Basin will continue to be managed by ESB within its current Normal Operating Band. The modelling reports, including the basis for the climate change scenarios modelled, will be included within the EIAR that will be submitted with the planning application.

4.6.3 Impact on Water Quality

Tipperary County Council emphasised the drinking water quality from the Birdhill Water Treatment Plant must meet specified standards throughout the distribution network to the Termination Point Reservoir at Peamount. Special attention is needed to prevent excessive THMs. Tipperary County Council further noted that during construction, especially along the pipeline route, measures must be taken to prevent subsidence (especially in peat areas) and protect the surrounding ecology and water bodies.

Uisce Éireann acknowledges the importance of maintaining high drinking water quality throughout the distribution network, including at the Termination Point Reservoir in Peamount. The design of the new Water Treatment Plant will include safeguards to ensure compliance with all drinking water standards, including the control of THMs. These will be actively managed through treatment processes tailored to the source water and the length of the Treated Water Pipeline.

To address concerns about subsidence, especially in peatland areas, detailed ground investigations have informed the design. Where deep peat is present, the pipeline will be supported using engineered solutions such as stone columns or concrete piles, depending on the depth and ground conditions.

A Construction Environmental Management Plan, including a Surface Water Management Plan, will be part of the EIAR. These plans will set out clear measures to protect surrounding ecology and water bodies during construction, ensuring that sensitive environments are safeguarded throughout the Proposed Project.

IFI raised concerns on the impact to water quality from the following:

- Pipeline Sustainability: The 170km pipeline could cross many watercourses, leading to significant habitat loss or damage for fisheries. There is also a risk of pollution from suspended solids, concrete, and hydrocarbons during construction. IFI recommends that the timing and methods for any works near watercourses be agreed upon in advance.
- Water Treatment Plant: IFI is worried about the disposal of large amounts of waste, such as sludge, from the proposed Water Treatment Plant. This waste could pollute the environment during both construction and operation.
- Construction Timing: High-risk construction activities that could pollute watercourses with suspended solids should not be carried out between 1 October and 30 June. Protecting the ecological integrity of local surface waters, many of which are salmonid systems, is crucial.
- Pollution Risks: Ground preparation and pipe-laying can release sediments and pollutants into surrounding waters. Poor construction practices could negatively impact the fauna and flora of these waters.

Uisce Éireann is providing a robust set of mitigation measures based on good practices and industry standards to manage the impact of the Construction Phase works. A Construction Environmental Management Plan, including a Surface Water Management Plan, will be part of the EIAR and sets out mitigation measures to avoid or reduce impacts to surface water flows and impacts to water quality during construction, including specifically suspended solids. The guidance documents recommended by IFI have been considered as part of the ongoing preparation of the EIAR, along with consideration of seasonal constraints in relation to construction activities. Management measures within the Surface Water Management Plan will include:

- *Applying buffer strips around watercourses to protect marginal vegetation and reduce the risk of sediment or pollution entering the watercourse*
- *Refuelling machinery away from watercourses*
- *Programming in-channel working during times of low flow where practicable*
- *Agreement on the timing of in-channel works with IFI, taking into consideration the sensitivity of the watercourse and fish migration*
- *Using good practice measures during construction to control, treat and attenuate silt-laden runoff and water from dewatering activities*
- *Adherence to agreed EPA discharge standards in peat working areas*
- *Monitoring water quality during construction and having a management plan that sets out appropriate mitigation measures should any deterioration in water quality be detected.*

Trenchless pipeline construction techniques will be used to protect sensitive sites, including major rivers. Where open-cut construction techniques are proposed, in-stream working will be carried out in accordance with guidelines issued by IFI, or as otherwise agreed with IFI during the Construction Phase. Prior to construction, the appointed Contractors will discuss the specific requirements for any discharges with the relevant authorities. IFI have been consulted on the proposed river crossing techniques and applicable environmental mitigation. Embedded design measures and additional mitigation will avoid or reduce effects on hydrology and aquatic ecology.

There will be no wastewater or other process waste discharge from the Water Treatment Plant. The waste sludge would be stored, dried and then transported from site. Uisce Éireann is developing proposals for reuse in accordance with its corporate circular economy objectives and the Proposed Project will be adopting these.

Ballymore Eustace CDA requested more detail on designing nature-based solutions for surface water management where feasible at Infrastructure Sites.

Nature based solutions and sustainable drainage systems have been incorporated into the design of the Proposed Project and will be used to manage surface water runoff at the Infrastructure Sites. This includes, for example:

- *Use of rainwater harvesting at the Raw Water Intake and Pumping Station and Water Treatment Plant. This will reduce stormwater runoff that would otherwise have to be managed, as rainwater will be fed into the water treatment process as opposed to the drainage system*
- *Use of green roofs at the Water Treatment Plant, Break Pressure Tank, and Termination Point Reservoir. The green roofs will reduce the speed of surface water runoff, as well as contributing to biodiversity outcomes*
- *Use of drainage ditches, attenuation ponds, and infiltration basins, as appropriate, to control the rate of surface water discharge and mitigate water quality impacts.*

Lough Derg Swimming School commented that the issues and prospective consequences, of inevitably increased water pollutant concentrations resulting from any future reductions of water volume in Lough Derg has been overlooked in the planning of the Proposed Project. The Swimming School is concerned that the Proposed Project will have a detrimental effect on the lake water quality.

Several angler groups, including Lough Derg, Killaloe-Ballina and St. Flannan's Fishing Club, noted the water quality in the region is generally poor and at risk of further deterioration. Lough Derg is classified as "At Risk", and its tributaries are either at risk or under review. Algae blooms and excessive algal growth are common in Lough Derg and the Lower Shannon. Although the Wastewater Treatment Plant in Ballina was upgraded last year, many other wastewater outlets along the Shannon need improvements. They noted there is a constant influx of wastewater at Island House in Castleconnell and inadequate treatment at Bridgetown and Montpelier, which are upstream of the Clareville Water Treatment Plan extraction.

Uisce Éireann recognises the importance of protecting the ecological balance of the Shannon catchment, including Lough Derg, Parteen Basin, and the Old River Shannon. Parteen Basin has been extensively modelled in terms of both water quality and hydrology as part of the environmental reporting for the statutory consenting process. Visual inspection and sampling of other water bodies have been undertaken at key locations along the pipeline route, including each of the key Infrastructure Sites, all relevant watercourse crossings, and washout locations. A summary of the approach to water quality modelling is provided in Section 4.6.8 Human Health – Water Quality. Modelled changes in water quality across the lough were miniscule compared with the monitored baseline conditions, and less

than the natural variability in the system. The conclusion was that the Proposed Project would have a neutral effect on the water quality of Lough Derg and Parteen Basin.

An EIAR is being prepared and will include:

- *Hydrological and water quality modelling*
- *A detailed biodiversity assessment, informed by ecological surveys conducted between 2016 and 2025*
- *Mitigation measures to avoid or reduce potential impacts on habitats and species*

The NIS will assess the potential for impacts on European sites, including the Lower River Shannon SAC. While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects.

In relation to the testing and commissioning of pipes, IFI raised concerns over the filling of pipes from local watercourses and discharging of these waters following testing. This also has potential to be a cross-catchment transfer of waters. IFI noted that there are a number of proposed Washout Valves along the pipeline, IFI is concerned about the potential for pollution or leakage from these pipelines during testing and commissioning. They suggested consideration needs to be given to methodology and the dewatering of any pipes/excavations which may contain directional drilling and water treatment chemicals and the associated and risk of pollution. They outlined that consultation will be required with them.

Uisce Éireann notes the concerns raised by the IFI and can confirm that these have been considered in the development of the proposals and will be assessed in the EIAR. Use of raw water from watercourses for hydrostatic pressure testing of the pipe prior to commissioning is considered to be the only technically feasible option available, as insufficient potable water would be available in distribution networks to test the pipe using potable water. Eight watercourses have been identified where sufficient flow would be available for a short abstraction. The source water will be tested for a range of potential pollutants, prior to abstraction, and treatment provided as necessary (filtration and disinfection as a minimum), using mobile Wastewater Treatment Plants. Testing will include suspended solids, invasive species (e.g. zebra mussels, crayfish plague), and water chemistry (e.g. pH, hardness, conductivity, organics, metals, nutrients, pesticides). Sampling of pipeline water prior to discharge will also be undertaken to determine any additional treatment required prior to discharge. This would potentially include dechlorination, pH adjustment and oxygenation. Mitigation relevant to temporary abstractions includes:

- *Abstraction will be limited to no more than 10% of Q95 flow if flow during abstraction is between Q80 flow and Q95*
- *Fish – Abstraction velocities will be kept below 0.15m/s, through a fine mesh not greater than 3mm aperture*
- *No damage to habitat – abstraction pipe will not touch the river bed*
- *Siting of abstraction pipe location, subject to Ecological Clerk of Works (ECoW) and measures set out in the Surface Water Management Plan*
- *Treatment with UV to prevent transfer of invasive species.*

Following a successful completion of the hydrostatic pressure test, the water in the pipeline would, where practicable, be retained and pumped into adjacent sections when they are ready for hydrostatic testing. However, in most instances the water would be drained from the pipeline to the water catchment area from which it was originally taken. This would avoid any potential issues related to

inter-catchment transfer of waters with differing physio-chemical properties. Mitigation relevant to temporary discharge includes:

- *Suitable orientation and appropriate engineering design of the permanent outfalls to prevent scour, or location (subject to ECoW) of temporary discharge locations.*
- *Discharge will be restricted to 20% of the associated stream's median annual flood flow rate (Qmed)*
- *No discharge if flow above Q30 to avoid impact from flooding*
- *Maintain dissolved oxygen levels – re-oxygenate, if required*
- *Chlorine and suspended solids removed; pH adjusted to match receiving water pH; dissolved oxygen at or above level required for Good environmental quality standards (>80% and <120%)*
- *No spread of invasive species.*

The Project Team has consulted with IFI on the proposed testing and commissioning strategy, including temporary abstractions, discharge from Washout Valves, and applicable environmental mitigation.

A stakeholder raised concerns about the potential pollution from the Water Treatment Plant at Birdhill which could affect local rivers and streams, including the Kilmastulla River and Lough Derg. The stakeholder was sceptical about the lack of direct water links to Kilmastulla River from the Water Treatment Plant and commented, "*Water and gravity have a proven ability to work together in a manner that could enable polluted water to enter local rivers/streams or lakes with catastrophic consequences*".

During operation of the Water Treatment Plant, the only discharge would be from site drainage, as process water would be recycled within the water treatment process. Therefore, there will be no discharge of process wastewater.

Rainfall harvesting would be used to capture runoff from roofs and tank areas. The Clear Water Storage Tank would have a 'green roof' on top which would have a biodiversity benefit as well as reducing the speed of surface water runoff. General site runoff from internal roads would be collected in an attenuation pond. Runoff entering the attenuation pond would be pre-treated via a hydrocarbon interceptor to remove any build-up of pollutants on internal roadways or working surfaces. The outfall from the attenuation pond would be fitted with a penstock to isolate the attenuation pond and so contain pollutants in the event of an accidental spillage. Stormwater from the attenuation pond would be discharged to a stormwater drain along the Water Treatment Plant access road to discharge into a stream, which in turn discharges into the Kilmastulla River. The pollution control measures incorporated into the attenuation pond would mitigate any significant risk of downstream pollution.

Foul wastewater generated on the Water Treatment Plant site would be tankered to a licensed Wastewater Treatment Plant for disposal.

During construction, the attenuation pond and other site drainage measures will be put in place as early activities in the Construction Phase to mitigate any potential pollution runoff due to the temporary construction works. This would be part of the Surface Water Management Plan that would be implemented on-site through the Construction Environmental Management Plan to manage surface water and reduce the risk of a pollution incident.

4.6.4 Groundwater

GSI noted that the construction and operation of the Proposed Project could negatively impact groundwater resources and groundwater dependent terrestrial ecosystems. GSI welcomed monitoring groundwater levels and avoiding excavation and construction activities within geological heritage sites and adjacent to groundwater-dependent ecosystems and private wells. GSI stated the risk of

contamination of soil, groundwater, surface water features, and other receptors from construction and operational activities should warrant monitoring of private groundwater wells. GSI suggested a management plan should be established to set out appropriate mitigation measures if any deterioration in groundwater quality or levels is detected.

As part of the development of the proposals a desktop review has been undertaken and a comprehensive range of field surveys completed. These include ground investigations, and ongoing water level monitoring and well surveys. The ground investigations between 2018 and 2022 included over 1,200 boreholes, over 1,100 trial pits and over 1,800 peat probes. The results of the surveys have informed the design of the Proposed Project. Management measures to reduce potential impacts to groundwater include:

- *Monitoring groundwater levels and avoiding excavation and construction activities within geological heritage sites and within or adjacent to groundwater dependent terrestrial ecosystems and private groundwater wells*
- *Monitoring groundwater quality during construction and having a management plan that sets out appropriate mitigation measures should any deterioration in water quality be detected*
- *Monitoring groundwater levels and water quality in all private wells within 100m of the Planning Application Boundary*
- *Monitoring groundwater levels and water quality for the Ardcrony Group Water Scheme, the Ballinagar Group Water Scheme and the Geashill Public Water Scheme, all of which are located in close proximity to the Planning Application Boundary.*

A Construction Environmental Management Plan, including a Surface Water Management Plan, will be included as part of the EIAR and will set out mitigation measures to avoid or reduce impacts on groundwater quality during construction.

4.6.5 Water Framework Directive (WFD)

An Fóram Uisce recommended that a thorough WFD Assessment be carried out for the Proposed Project as part of the EIAR for the Proposed Project. This should assess the impact of the various parts of the Proposed Project (abstraction, pipe and treatment plant infrastructure) on the water quality and objectives of relevant water bodies in the River Shannon and across the Eastern and Midlands Region.

The outcome of the Environmental Impact Assessment should be proactively communicated with the public to build public trust that Uisce Éireann are taking every precaution to protect the environment during all stages of the Proposed Project. This was further reiterated by Councillors from Nenagh Municipal District.

The Eastern and Midlands Regional Assembly suggested in the interest of best practice, the WFD Assessment for the Proposed Project should detail any changes to the water bodies impacted by the Proposed Project.

An Taisce highlighted that approximately 80% of Ireland's public water supply is abstracted from surface waters, and half of these are in unsatisfactory water quality condition according to the EPA Water Quality Report (2023)[11]. This necessitates a robust WFD Assessment. Lough Derg is currently designated a moderate water quality status by the EPA and was determined to be at risk of not achieving good status by 2027, a key requirement of the WFD. This raises concerns about water quality and WFD compliance because of additional stressors which will arise as a result of the Proposed

[11] EPA Water Quality in 2023 https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/water-quality-in-2023.php

Project. Furthermore, An Taisce requested WFD specific assessments should be carried out for each water body within the Proposed Project footprint.

A WFD Compliance Assessment is being undertaken and will be presented in a Water Status Impact Assessment Report to be submitted with the planning application. The assessment will consider the potential impacts on all WFD designated surface water and groundwater bodies, together with undesignated waters with a hydrological connection. The assessment methodologies have been discussed with the EPA and included approaches using both Ireland and UK guidance to provide a robust assessment. For example, the assessment of impacts on Loch Derg and Parteen Basin used Ireland guidance based on lake inflows, and a more sophisticated approach based on the WFD UK Technical Advisory Group 'lake level test'.

While the WFD Compliance Assessment, EIAR and NIS will only be finalised for the submission of the planning application, it is at a very advanced stage, Uisce Éireann has determined, based on the assessment that has been undertaken to date that the Proposed Project is not likely to adversely affect the integrity of any designated site.

Tipperary County Council welcomed the inclusion of a WFD Compliance Assessment report as part of the environmental assessments. Tipperary County Council requested the methods used to evaluate environmental and ecological impacts on the Lower River Shannon and surrounding water bodies must be robust and transparent.

Tipperary County Council noted analysis relies on an agreement between the ESB and Uisce Éireann that water for abstraction will come from reserves used for electricity generation. This assumes current water level management isn't harming the ecology, which should be re-evaluated considering the Water Action Plan 2024 (Government of Ireland 2024b).

Tipperary County Council requested that the assessment analyse the impact of water abstraction during extended low flow conditions, consulting with the EPA to use appropriate hydrological models. This includes:

- Ecological impact of a reduced flow in the Ardnacrusha channel to where it re-enters the main River Shannon channel
- Potential impacts of abstraction during extended and extreme low flow conditions predicted as a result of climate change, in consideration of the extensive range in current discharge (0.70 to >400m3/s at Ardnacrusha)
- Consultation with the EPA to ensure the most up-to-date prediction data is used to inform climate models, to realistically assess the impacts of climate change, particularly during times of increased demand for drinking water
- Contingency planning if extreme and extended drought conditions occur, to avoid negative impacts to the ecology downstream
- The completion of an appropriate assessment of the impact on fish (including crayfish and other Annex II species) downstream of the abstraction point
- The incorporation of contingency planning models into the assessment process to protect downstream ecology (specifically to include aquatic habitat downstream of the extraction point and supported ecology such as European smelt (Osmerus eperlanus), slob trout (Salmo trutta sp.) and European eel (Anguilla Anguilla)).

They concluded that the mitigation measures in the Project Summary Report should better reflect the significant ecological risks associated with water abstraction, construction, and future operation.

Extensive hydrological and water modelling has been undertaken to assess the potential impacts of the Proposed Project on Lough Derg and Parteen Basin. A summary of the water quality modelling approach is provided in Section 4.6.8 Human Health – Water Quality of this report.

The hydrological modelling was run using data from the period 1 January 1972 to 31 October 2023, allowing the simulation of daily levels and daily flows across this 52-year period with and without the proposed abstraction in place. A version of the model was also run to investigate the likely impacts in the future with climate change. To model the future impact of the Proposed Project, a hydrological modelling approach was adopted using the best understanding of ESB's operational rules (based on discussions with ESB). This predicts the effect of the Proposed Project on flows to Ardnacrusha and on water levels on Parteen Basin taking account of future climate change, while meeting the required statutory compensation and fish pass flows to the Old River Shannon.

Climate change scenarios have been based on two recognised sources of information on projected changes to Irish river flows, and a 'reasonable worst case' for the 2080s epoch has been adopted for resultant lake levels for the modelling. This was summarised in the Project Summary Report 2025 (Uisce Éireann 2025a) published to support the Non-Statutory Consultation and will be set out in full in the EIAR supporting the Planning Application.

The modelling shows that the impacts to lake levels and forward flows to the Old River Shannon due to the Proposed Project abstraction (at a constant flow of either 154Ml/d or the peak abstraction of 300Ml/d) were found to be barely distinguishable from the baseline case. The level regimes of both Lough Derg and Parteen Basin are only simulated to be notably affected during rare, extreme drought events and in the days immediately after the drought (up to a week) when inflow is needed to replenish any deficit in storage caused by the Proposed Project abstraction. Climate change simulations for the reasonable worst-case scenario indicate that simulated lake levels would still remain within the normal operating band with the Proposed Project abstraction included. The simulated lake levels only drop close to the bottom of the normal operating board once within the 52-year model simulation period – during the modelled 2018 drought event with climate change included. This would mean no change to the Old River Shannon statutory compensation and fish pass flows, and therefore no projected impacts on downstream aquatic ecology and fish due to the Proposed Project.

In addition to the above modelled scenarios, a sensitivity test was run to assess the impact with the introduction of a change to the compensation flow regime from Parteen Weir to the Old River Shannon, in the form of increased flows (known as Eflows) to assist fish migration. This was undertaken in view of the roadmap of actions in the Water Action Plan 2024 (Government of Ireland 2024b) aimed at improving fish migration in the Lower River Shannon around Parteen Weir and the Ardnacrusha power station. The application of the proposed Eflow regime involves replacing the existing Old River Shannon compensation and fish pass flow with a variable compensation flow and the inclusion of seasonal 'freshets' (a high rate of flow for a short amount of time) to assist migratory fish up the Old River Shannon and into Parteen Basin. The sensitivity analysis showed similar lake water level differences during drought periods with or without the Eflow scenario in place. The Eflows and freshets would not apply during drought conditions, because this would not reflect a natural water regime, and therefore there is no difference in the modelling scenario for a drought period considering the Eflow scenario.

While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in-combination with other plans or projects. This includes consideration of qualifying interest habitats and species and conservation objectives for the Lower River Shannon SAC.

4.6.6 Ecology/Biodiversity

Many stakeholders raised concerns about the ecological consequences for the region and in particular the Shannon catchment. They commented that any water level drop in the Lough Derg would have consequences for all aquatic and bird species. They further commented that the eco-balance of the area could be affected, fish stocks depleted, and flora and wildlife disturbed.

The Eastern and Midlands Regional Assembly noted that the proposed location for the Raw Water Intake and Pumping Station is located in a SAC within the catchment of the River Shannon. The Assembly commented that any development within the Shannon River catchment, or which impacts any SAC, should ensure biodiversity protection is a core objective. Any impact on the habitats could result in biodiversity and environmental impacts along with impacts on the quality of life of residents and visitors to the region.

Garrykennedy Boat Club located on Lough Derg commented that the Proposed Project "*threatens to disrupt the delicate ecological balance of the Shannon River and its surrounding areas, which support diverse wildlife and provide important habitats for numerous species. Diverting large volumes of water from this sensitive ecosystem would not only affect aquatic life but would also have a broader impact on wildlife that depends on the river's stable environment. This would have long-term negative consequences for the region's biodiversity, which could be irreversible*."

Clare County Council and Ormond Anglers Association Nenagh, both raised concerns regarding drought periods. The council requested clarity on Uisce Éireann's plans in the event of drought. The Angler Association commented, "*with the effects of climate change now very evident, we have great concern, that a prolonged period of drought, could have a disastrous effect on fish stocks*".

Uisce Éireann recognises the importance of protecting the ecological balance of the Shannon catchment, including Lough Derg, Parteen Basin, and the Old River Shannon. Uisce Éireann has heard the concerns raised by local authorities, angling groups, and environmental organisations, and is addressing them through detailed environmental assessments.

No Change to Water Level Management

The Proposed Project will not change how water levels are managed. That responsibility remains with the ESB, who will continue to manage water levels within the existing Normal Operating Band. Uisce Éireann will not control water levels in Parteen Basin.

Hydrological modelling, summarised in Section 4.4 of the Project Summary Report 2025, shows that:

- *Compensation flows and fish pass flows will remain unchanged*
- *Even during a drought equivalent to 2018, water levels can be maintained within the normal range*
- *Therefore, no significant impact is expected on aquatic ecology or fish populations.*

An EIAR is being prepared and will include:

- *Hydrological and water quality modelling*
- *A detailed biodiversity assessment, informed by ecological surveys conducted between 2016 and 2025*
- *Mitigation measures to avoid or reduce potential impacts on habitats and species*

The NIS will assess the potential for impacts on European sites, including the Lower River Shannon SAC. While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date of the potential impacts, together with the

proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects.

Responding to Drought and Climate Change

Uisce Éireann understands concerns about drought and climate change. The Proposed Project has been designed to operate within existing water level ranges, even during prolonged dry periods. This means:

- *Fish stocks and aquatic habitats will remain protected*
- *Boating, angling, and wildlife access will continue as normal.*

The Irish Peatland Conservation Council (IPCC) emphasised the importance of restoring peatland habitats in development projects. Peatlands are crucial for biodiversity and climate regulation, but continuous development is damaging these ecosystems. The IPCC hoped the pipeline project will include peatland restoration to help combat climate change, as Ireland faces more extreme weather with drier summers and wetter winters. Bord na Móna has received extra funding to enhance peatland rehabilitation, but more efforts are needed to prevent these areas from becoming carbon sources again due to climate change.

Regarding cutover raised bogs, very little active raised bog remains in Ireland. The target is 3,600 hectares, but only 1,639 hectares are currently active. The National Parks and Wildlife Service (NPWS) needs to identify areas of cutover bog that can be restored to raised bog habitat. A study has developed a new classification scheme for these habitats, and some areas with high Sphagnum cover could become active raised bogs in the future. Infrastructure projects should consider these restoration opportunities. IPCC requested Uisce Éireann use this research into the project literature review. The Habitats of Cutover Raised Bog, George F. Smith & William Crowley, Irish Wildlife Manual 128, NPWS, 2020.

Uisce Éireann undertook site selection and sought a route for the pipeline that avoids environmentally sensitive areas, as far as reasonably practicable, and selected site locations that minimised environmental impacts while considering technical and cost factors. This included avoiding areas of previously undisturbed raised bog, and reducing the footprint within degraded raised bog, as far as practicable.

Uisce Éireann notes the potential loss of peat due to installation of the pipeline. Areas of peat along the pipeline route have undergone degradation by historical drainage and peat extraction and no high value active raised bog is present. The majority of the habitats affected by the proposed pipeline route are cutover bog, however there are three small areas of degraded raised bog at Clonad Bog, Mount Lucas Bog and Timahoe North Bog.

Uisce Éireann is working with Bord na Móna to develop a detailed understanding of their activities as the Proposed Project crosses a number of their peatland bogs.

A significant portion of the peatlands within Bord na Móna's ownership that are crossed by the Proposed Project are subject to rehabilitation plans aimed at returning the bogs to a more sustainable and ecologically stable condition. Through detailed planning and ongoing liaison with Bord na Móna, the Proposed Project has been carefully designed to ensure it does not hinder the implementation of these rehabilitation plans. Previously rehabilitated bogs or areas already subject to rehabilitation schemes will not be impacted, as the alignment and footprint of the pipeline have been fully considered and incorporated into the rehabilitation design process. A critical aspect of reinstating the land following pipeline construction will be the preservation of existing drainage and hydrological

management systems established by Bord na Móna to support the long-term success of bog rehabilitation.

The IPCC requested that all precautions are taken in regard to protecting ground nesting birds during the breeding season. It is also illegal to remove vegetation during the period from 1 March to 31 August in order to maintain biodiversity (Section 40 of the Wildlife Act 1976). Training should be given to construction workers to ensure that the laws regarding the cutting, grubbing, burning or destruction by other means to hedgerows/vegetation are adhered to throughout construction and operation of the infrastructure.

Birds surveys for those listed in the Birds of Conservation Concern in Ireland (Red List)[12] should be conducted at the right time of year to check for any disruption or damage to breeding sites from construction. All Red Listed species in the NPWS Irish Wildlife Manual Series should be investigated using the National Biodiversity Data Centre records. If any susceptible species are found, construction plans should avoid harming them and aim to improve habitat quality through restoration.

Wetland Surveys Ireland has identified several wetlands that need ecological surveys to determine their biodiversity value. Uisce Éireann should work with Wetland Surveys Ireland to gather information and ensure the Proposed Project does not harm these habitats or species. North-Western Europe has lost about 90% of its wetlands, so it's crucial to protect these areas. The pipeline route should be assessed for potential impacts on nearby wetlands, including water pollution and chemical spills. Many wetlands contain sensitive habitats that could be affected by construction.

The IPCC highlighted curlew conservation efforts. It is listed as an Annex II species under the EU Birds Directive and is on the Red List of Birds of Conservation Concern in Ireland. The Curlew Conservation Programme is working to save this species. Uisce Éireann should liaise with the programme and Birdwatch Ireland to avoid disturbing breeding curlew. Ornithological surveys should be conducted to check for curlew presence and foraging activities to prevent further decline.

Extensive ecological surveys have been undertaken between 2016 and 2025 to establish the baseline and inform the assessment, including breeding and wintering bird surveys. The Proposed Project has sought to avoid impacts to wetlands through pipeline routing; however, surveys have been undertaken for any sites potentially affected by the Proposed Project. No Ramsar sites or Nature Reserves will be impacted. Uisce Éireann has also sought a route to avoid traversing any Special Protection Areas, Natural Heritage Areas, and proposed Natural Heritage Areas.

The survey results will be included in the Biodiversity chapter of the EIAR and will include the full range of flora and fauna that could potentially be impacted by the Proposed Project. Curlew has been recorded infrequently and in low numbers during the breeding and winter bird season surveys between 2016 and 2024/2025, often as single records which were observed feeding or commuting and not recorded again in follow-up visits. Breeding was not confirmed for this species in any of the breeding bird seasons between 2016 and 2024 and it is considered that curlews are not dependent on the habitats within the Proposed Project for foraging or breeding. As a result, there is no potential for significant environmental effects on curlew.

As part of the mitigation measures, vegetation clearance (e.g. hedgerows, trees, scrub and grassland) will be avoided, where practicable, between 1 March and 31 August to avoid impacts on nesting birds. Where the construction programme or conflicting mitigation does not allow this seasonal restriction to

[12] Referring to Gilbert, G., Stanbury, A. and Lewis, L. (2020). Birds of Conservation Concern in Ireland 4: 2020–2026. https://birdwatchireland.ie/birds-of-conservation-concern-in-ireland/

be observed, these areas will be inspected by an ECoW for the presence of breeding birds prior to clearance. Where nests are present, the ECoW will mark out a suitable buffer zone around an active nest and clearance within this area will be postponed until the chicks have fledged.

In areas identified as 'important bird areas' for wader and waterbird species, where concentrations of breeding or wintering birds have been recorded, construction work will be avoided during specific times, depending on the species recorded. Generally, if waders or waterbirds have been confirmed or are probably breeding, or if areas are used by concentrations of wintering waders or waterbird key ecological receptors, these areas will be avoided during their nesting/breeding or wintering season.

Uisce Éireann will continue to engage with key stakeholders including the NPWS; EPA; IFI; Birdwatch Ireland; and local authorities to ensure minimal impact to habitats and species where reasonably practicable to do so.

The IPCC noted that peatlands are usually resistant to invasive species due to their high acidity, low nutrients, and wet conditions. However, degraded peatlands are more susceptible. The IPCC recommended the following:

- Construction activities increase the risk of introducing invasive species
- Best practice biosecurity measures should be used to minimise this risk, and contingency plans should be in place
- Sites should be investigated before any work to understand the presence of invasive species
- Engaging locals can help identify potential transmission vectors
- An invasive species management plan should be prioritised to eradicate detrimental species and prevent their introduction.

Uisce Éireann will mitigate the risk of introduction/spread of non-native invasive species during the Construction and Operational Phases. An Invasive and Non-Native Species Management Plan has been produced and will be included as part of the Construction Environmental Management Plan within the EIAR. Example mitigation measures proposed to be included within this plan are:

- *Implementing biosecurity protocols and removing or treating known invasive non-native species and damaging pathogens, such as ash dieback, prior to construction*
- *Cleaning all plant and machinery before moving to other parts of the site*
- *Incorporating intake screens at the Intake Chamber and microfilters on the rising main at the Raw Water Intake to prevent infestation of the infrastructure and prevent transfer of invasive non-native species, such as zebra mussels, via the infrastructure*
- *An appointed Contractor will comply with the Department of Agriculture, Food, and the Marine's regulations in relation to crops and livestock diseases. Biosecurity measures will be implemented to protect livestock and crops, and to prevent the spread of harmful weeds and invasive non-native species.*

A stakeholder highlighted the ecological and hydrological risks of large-scale water abstraction including:

- Water Quality and Assimilative Capacity: Reducing the Shannon's ability to absorb wastewater and industrial pollutants
- River Hydromorphology: Altering natural sediment transport and water flow dynamics
- Protected Habitats and Species: Potentially violating the Habitats and Birds Directives if fish spawning areas, wetlands, or aquatic flora are impacted
- Irrigation and Agricultural Use: Competing with local farmers who rely on Shannon water for food production
- Hydroelectric Generation at Ardnacrusha: Reducing available water for renewable energy production.

A response confirming that the water levels will remain within the current upper and lower range that ESB currently manages the Parteen Basin within is set out in Section 4.6.2. The conclusion is that the abstraction for the Proposed Project can be sustained within the existing normal operating water level range. There would be no change to the compensation flow and fish pass flows to the Old River Shannon, and therefore, no projected impacts on downstream hydromorphology, sediment transport, aquatic ecology and fish due to the Proposed Project. Downstream water availability for irrigation would also be unaffected.

A summary of the water quality modelling is provided below (see Section 4.6.8 Human Health – Water Quality). Modelled changes in water quality across the lough were miniscule compared with the monitored baseline conditions, and less than the natural variability in the system. The conclusion was that the Proposed Project would have a neutral effect on the water quality of Lough Derg and Parteen Basin.

The NIS will assess the potential for impacts on European sites, including the Lower River Shannon SAC. While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in-combination with other plans or projects. This includes consideration of qualifying interest habitats and species, and conservation objectives, for the Lower River Shannon SAC.

The WFD Compliance Assessment is at a similar stage of development to the NIS and will also only be finalised for the submission of the planning application.

An Taisce commented it's important to follow a mitigation hierarchy to avoid harming established biodiversity features along the pipeline route. This includes mature native woodlands, peatlands, hedgerows, wetlands, and areas with regenerating vegetation. These habitats support many species and provide essential ecosystem services like flood regulation and carbon sequestration. An Taisce made the following observations:

- Replacement Planting: If removing trees or vegetation is unavoidable, replacement planting should use native Irish tree species
- River Crossings: River crossings should be carefully planned to avoid trenching techniques and preserve the aquatic ecosystem's integrity
- Ecological Impact Assessment: An Environment Impact Assessment or a Biodiversity chapter in the EIAR should guide the Proposed Project in sensitive environmental areas
- Environmental Mapping Tools: Use environmental mapping tools to plan the pipeline route, such as maps of ancient and native woodlands, Irish wetlands, semi-natural grasslands, and EPA watercourse maps.

The development of the design has been undertaken in accordance with the environmental mitigation hierarchy. The hierarchy prioritises design measures which avoid adverse environmental effects altogether and then provides a descending scale of increasingly less favourable measures to address environmental effects.

The active use of the mitigation hierarchy resulted in a number of specific design proposals being adopted within the design of the Proposed Project to avoid or reduce the likely effects on the environment, such as:

- *Avoiding designated sites for nature conservation and sensitive habitats where feasible (this included mapping environmental constraints during the options selection stage, and using this to inform the site selection of the Infrastructure Sites and preferred corridor for the pipeline)*
- *Using trenchless pipeline construction techniques to protect sensitive sites, including major rivers.*

The EIAR is being prepared in accordance with the EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022), as well as applicable European, national, and topic-specific legislation, guidance and policy. The Biodiversity chapter of the EIAR will include extensive mitigation to protect sensitive habitats and protected species. The Landscape & Visual chapter of the EIAR includes proposals for landscape planting including post-construction replanting with low-growing native woody species of local provenance in accordance with Uisce Éireann Biodiversity Guidance[13].

IFI had concerns over the sustainability of a pipeline of considerable length which will cross many watercourses which could result in significant fisheries habitat loss or damage. They also noted risk to watercourses in terms of pollution from suspended solids, concrete and hydrocarbons during construction. They commented that "*ground preparation and pipe-laying construction works have significant potential to cause the release of sediments and pollutants into surrounding waters. Pollution of the adjacent freshwater from poor on-site construction practices could have a significantly negative impact on the fauna and flora of surface waters in this area*".

The EIAR will include a Construction Environmental Management Plan (containing a Surface Water Management Plan) which will include details of the methods for surface water management. The guidance documents recommended by IFI have been considered as part of the EIAR, along with consideration of seasonal constraints in relation to construction activities. IFI have been consulted on the proposed river crossing techniques and applicable environmental mitigation. Embedded design measures and additional mitigation will avoid or reduce effects on hydrology and aquatic ecology, for example the use of trenchless crossings to go underneath main watercourses.

An Taisce highlighted that the Parteen Basin is linked to Lough Derg, which is designated as the Lough Derg (Shannon) Special Protection Area under the Birds Directive, and that the Parteen Basin is part of the Lower River Shannon SAC under the Habitats Directive. Both areas contain important and sensitive habitats for various bird and other species, requiring conservation during project construction and operations.

An Taisce requested a cumulative assessment of the impact of water abstraction by the Proposed Project and ESB, along with other major abstractions, on this water body. This assessment should evaluate the ability of the water body to reach favourable conservation status as required by the Habitats Directive and good status as required by the WFD.

Uisce Éireann acknowledges the importance of the Parteen Basin and Lough Derg as part of the Lower River Shannon SAC and the Lough Derg (Shannon) Special Protection Area. These areas support sensitive habitats and species protected under the EU Habitats and Birds Directives.

In line with the Habitats Directive, an Appropriate Assessment is required for the Proposed Project. Uisce Éireann will inform this process through the preparation of the NIS. This report will:
- *Consider the potential for direct, indirect, and cumulative impacts on European sites*
- *Include the qualifying interests and conservation objectives of the Lower River Shannon SAC and Lough Derg Special Protection Area*

[13] Uisce Éireann Biodiversity Plan 2021 https://www.water.ie/projects/strategic-plans/biodiversity-action-plan

- *Be based on extensive ecological surveys and environmental data collected between 2016 and 2025.*

While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in-combination with other plans or projects.

The EIAR and the WFD Compliance Report will include:

- *An assessment of the Proposed Project alongside existing abstractions, including those by the ESB*
- *Hydrological and ecological modelling to assess potential impacts on water levels, flow regimes, and habitat conditions*
- *Consideration of the Proposed Project in the context of the achieving and maintaining favourable conservation status and good ecological status.*

These assessments are being developed in consultation with relevant environmental authorities and will inform the final design and mitigation measures for the Proposed Project.

4.6.7 Fisheries and Aquatic Ecology

Several stakeholders raised concerns about the impact the Proposed Project would have on the aquatic ecology, fish stocks and other migratory fish species downstream of the extraction point.

Several angler groups, including Castleconnell River Association, Lough Derg Anglers Association, Killaloe-Ballina District Anglers Association, Portumna & District Angling Association, Lorrha & Dorrha Angling Club, as well as numerous Fishing and Boat Clubs highlighted a number of shortcomings unacceptable to watercourse users in this region.

It was highlighted that as presently designed, the Proposed Project presents an increased threat to Atlantic salmon and other migrating species including the European eel which are protected by the European Habitats Directive and may compromise long-standing efforts by Irish organisations to protect the ecology and environment of the Lower River Shannon SAC.

Several stakeholders including Salmon Watch Ireland and the angler groups commented that collaboration with the Shannon Connectivity Project is essential.

They remarked that without the proper provision of water management to the Old River Shannon channel and the completion of the promised Shannon Connectivity Project, Atlantic salmon will continue to suffer negatively. They suggested the two projects could be mutually beneficial and environmental concerns about water abstraction could be mitigated by demonstrating the positive environmental impact of allowing salmon to migrate more effectively and safely through the completion of the Shannon Connectivity Project as soon as possible.

They had concerns regarding the progress of the Shannon Connectivity Project and insist on the following being delivered according to the roadmap for action 2021 to 2025 before the Proposed Project can go ahead:

- Environmental Flow Study period and project communication
- New fish pass at Parteen Weir
- Tailrace Barrier Feasibility Study
- Downstream Fish Passage Feasibility Study

- Lower Shannon Management Plan
- Ardnacrusha New Fish Pass Feasibility Study.

The angler groups further requested a management plan for Lough Derg fishery be established to include maintenance of the tributary rivers on the lower lake. The groups commented that "*due to the pipeline there may be further silt build up, and this must be addressed by all organisations involved in the management of Lough Derg. Further silt inhibits spawning trout to gain access to the tributary rivers*".

Salmon Watch Ireland welcomed that the Proposed Project includes screening of intakes and modified flow management during smolt migration but noted while screening can prove effective it is imperative that IFI provide independent monitoring.

Lorrha and Rathcabbin Angling Club was concerned about the potential impact of the Proposed Project on the quality of local lake water. The club's feeder streams and rivers, which are trout spawning grounds, are susceptible to fluctuating water levels. Water extraction could exacerbate this delicate situation, potentially wiping out trout, eel, crayfish, otters, and other species.

The Club noted that Lough Derg has already suffered from commercial and industrial actions, such as Bord na Móna peat extraction and Ardnacrusha, which have negatively impacted fish stocks. They commented that the Proposed Project could further harm salmonoid species, which require clean, oxygenated water for spawning. The Club sought assurance from Uisce Éireann that feeder rivers and streams will not run dry and requested measures to protect these watercourses.

Killaloe/Ballina and Lough Derg Anglers Association requested Uisce Éireann consider the following points:

- All mooring points on Lough Derg and the Lower River Shannon basin must have sufficient water levels year-round to ensure boat users can access the navigational channel
- The installation of several navigation rulers from Portumna to Parteen Weir
- Definitive water level cutoffs must be established between ESB, IFI, Uisce Éireann, and the local organisations using the lake. There must be accountability when water levels drop below a certain point
- A Water Quality Management Plan to improve water quality on Lough Derg and its rivers as aquatic life has deteriorated due to poor water quality
- A Fishery Management Plan must be put in place for the upkeep and maintenance of the Lough Derg fishery
- Due to the poor water quality, the Mountshannon hatchery should be reopened as ranching hatchery for sustainability of trout stocks
- A Fishery Management Plan for the four rivers in the Shannon basin is of major importance, as these rivers are spawning rivers for trout and salmon and will be most affected by any water level changes.

IFI emphasised the need to consider fish and the aquatic environment at all stages of the Proposed Project to protect fisheries resources. Continuous consultation with IFI is essential for data exchange and maximising environmental benefits.

IFI cited the Living Planet Report (World Wildlife Fund 2020) which highlights a severe decline in freshwater species populations globally, estimated at 84%. The World's Forgotten Fishes report (World Wildlife Fund 2021) finds migratory fish populations have fallen by three-quarters in the last 50 years. In Ireland, Atlantic salmon numbers have declined by 90% since 1975, European eel by over 90%, and sea lamprey are near threatened. The European smelt and Irish pollan are also at risk, with significant

declines in their populations. Threats to these species include eutrophication, competition with introduced species, increased water temperatures, land drainage, and siltation. IFI commented that any activity that could threaten these populations must be assessed in detail.

Clare County Council highlighted that the Habitats Directive requires consideration of cumulative and in-combination effects in the Appropriate Assessment process. Clare County Council requested Uisce Éireann must scientifically research and analyse current abstraction rates from Ardnacrusha and their ecological impacts on European eel and other migratory fish species before proceeding with the Proposed Project. Over 90% of the Shannon's flow is diverted to Ardnacrusha Power Station daily and these flow rates negatively affect aquatic species like the European eel, with documented eel kills over the years.

Uisce Éireann acknowledges the strong concerns raised by angling groups, environmental organisations, and local authorities about the potential impact of the Proposed Project on aquatic ecology, fish stocks, and migratory species in the Shannon catchment.

As summarised in Sections 4.5.1 and 4.6.2, the Proposed Project will not alter how water levels are managed in Parteen Basin or Lough Derg. This remains the responsibility of the ESB, who will continue to manage water levels within the existing Normal Operating Band. Uisce Éireann will not control water levels but will work closely with the ESB to ensure that abstraction only happens when levels are above the bottom of the Normal Operating Band.

Hydrological modelling undertaken for the Proposed Project shows:

- *No change to the statutory compensation flow or fish pass flows to the Old River Shannon*
- *No projected impact on downstream aquatic ecology or fish populations*
- *Water levels will remain within the same range currently experienced, even during drought conditions.*

A biodiversity assessment is being carried out and will be reported in the EIAR. This includes:

- *Extensive ecological surveys including scuba, invasive species, macrophyte, and fish stock surveys*
- *Assessment of potential impacts on aquatic ecology, including migratory species such as Atlantic salmon and European eel*
- *Identification of mitigation measures to avoid or reduce environmental effects.*

The EIAR will also include:

- *A hydrological modelling report assessing flows and water levels*
- *A water quality modelling report, which to date shows only minor changes well within natural variability, with no significant impact on water quality in Lough Derg or Parteen Basin.*

The following measures are being developed and will be included in the EIAR:

- *Construction timing restrictions to avoid sensitive periods for salmon, trout, and lamprey*
- *Habitat reinstatement*
- *Pollution prevention and silt control measures, including double silt curtains and a Surface Water Management Plan*
- *Fish-friendly intake design at the Raw Water Intake & Pumping Staton, including:*
    - *Low intake velocity (≤0.15m/s)*
    - *A bubble curtain to deter fish*
    - *No pipework on the bed of Parteen Basin*
    - *Revetment mats with natural bed material to support habitat recovery.*

Uisce Éireann recognises the importance of the Shannon Connectivity Project[14] and supports its objectives. The Proposed Project will not interfere with the delivery of its roadmap actions. Hydrological modelling has also tested scenarios under a proposed Eflow regime (including seasonal freshets to support fish migration). Results show that the Proposed Project would not prevent the implementation of such a regime, nor would it have a significant impact on its effectiveness.

The EIAR and NIS will assess how the Proposed Project interacts with:

- *Existing abstractions (e.g. Ardnacrusha)*
- *Other planned projects*
- *The ability of the water body to support favourable conservation status (Habitats Directive) and good ecological status (WFD).*

The NIS that will be submitted with the planning application describes the appropriate assessment under the Habitats Directive. While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of any European site, either alone or in-combination with other plans or projects. This includes consideration of qualifying interests and conservation objectives of the Lough Derg (Shannon) Special Protection Area and the Lower River Shannon SAC.

Stakeholder Requests and Clarifications:

- *Fishery and Water Quality Management Plans: These are outside the scope of the Proposed Project but are recognised as important. Uisce Éireann will continue to engage with IFI, ESB, and other stakeholders*
- *Siltation and Tributary Access: The Proposed Project includes measures to prevent silt build-up and protect spawning grounds. Tributary flows will not be altered by the Proposed Project*
- *Monitoring and Accountability: Uisce Éireann supports independent monitoring and will continue to consult with IFI throughout the project lifecycle.*

IFI observed that all necessary preventative and mitigation measures should be taken to protect local aquatic ecological integrity, prioritising impact avoidance and mitigation.

- River crossings should use environmentally sensitive methods like tunnelling or boring, unless otherwise requested by IFI
- All works should adhere to IFI's guidelines on road construction and protection of fisheries during construction
- Habitat integrity must be maintained, and any work affecting watercourses or riparian habitats must be submitted to IFI for assessment
- In-stream works can only be carried out during the open season for salmonids (1 July to 30 September)
- A method statement for riparian/in-stream works must be submitted to IFI for approval. If stream diversions are necessary, electrofishing may be required
- Consultants must obtain a Section 14 Licence from the Inland Fisheries Section of Department of Environment Climate Change, Energy and Communication

[14] Uisce Éireann is aware of the report prepared for the Department of Housing, Local Government and Heritage in 2021, titled "Provision of Expert Advisory Services regarding Fish Migration in the Lower River Shannon Catchment" on occasion referred to as the "Shannon Connectivity Project and/or Shannon Fish Pass". This report recommends the development and implementation of a new Eflow regime including the use of freshets. The report and its associated roadmap are currently with the Department of Housing, Local Government and Heritage for further progression and Uisce Éireann will be monitoring its progress for opportunities for integrating the Proposed Project and the Shannon Connectivity Project. The Proposed Project would not prevent the implementation of a new Eflow regime or freshets.

- Comprehensive surface water management measures must be implemented during construction to prevent pollution
- On-site attenuation ponds may be needed to settle fine/particulate materials. Precautions must be taken to prevent solids from entering the existing surface water system
- The European Communities (Quality of Salmonid Waters) Regulations of 1988 can serve as a guide for acceptable water quality conditions in salmonid systems.

Uisce Éireann note IFI's recommendations. The active use of the mitigation hierarchy as outlined in Section 3.3 of this report, prioritising avoidance to manage potential environmental effects, has resulted in a number of specific design proposals being adopted for the Proposed Project, including use of trenchless pipeline construction techniques for major river crossings. A Construction Environmental Management Plan, including a Surface Water Management Plan, will be included as part of the EIAR and will set out mitigation measures to avoid or reduce impacts to surface water flows and impacts to water quality during construction. These management plans include the mitigation measures requested by IFI. The guidance documents recommended by IFI have been considered as part of the EIAR, along with consideration of seasonal constraints in relation to construction activities. IFI have been consulted on the proposed mitigation measures and construction techniques.

An individual stakeholder noted that quagga mussels, first recorded in 2021 in Lough Derg, are an invasive species with potentially more severe ecological impacts than zebra mussels. They commented it is possible quagga impacts, compounded with drought periods and lower water levels, and excess nutrient levels could cause an ecological disaster similar to Lough Neagh blue-green algae bloom. They suggested this could impact water treatment requirements and disposal of huge quantities of waste material.

The design of the Proposed Project incorporates a multi-layered strategy to prevent and manage invasive species infestations, including quagga mussels, in order to prevent invasive species impacting the treatment process. Measures such as biosecurity protocols, intake screening, and ongoing monitoring are designed to minimise ecological risks and ensure that water treatment processes remain unaffected:

Microfiltration Systems
- *Amiad Filters are installed on loops off the rising mains to trap juvenile mussels (veligers) and debris. These filters self-clean when pressure drops indicate fouling*
- *The filtration size (~40 microns) is specifically chosen to intercept mussel veligers before they can settle.*

Chemical Dosing
- *The Raw Water Pumping Station includes infrastructure for dosing BioBullets or similar approved invasive species control chemicals directly into the raw water.*
- *These chemicals are approved for potable water treatment and are used to inhibit mussel colonisation.*

Drainage and Maintenance Flexibility
- *The system allows for prolonged draining of pipework and chemical treatment without interrupting supply, which is critical for eradicating established colonies.*

UV Treatment and Debris Management
- *Filter backwash water is routed to a debris retention tank, where solids settle before the supernatant is UV-treated to deactivate any remaining veligers. The treated water is then safely returned to the system.*

Material Selection
- *Passive intake screens are proposed to be made from copper-nickel alloy, which is less conducive to mussel attachment.*

Water quality modelling has been undertaken to consider the impact of the Proposed Project on water quality in the Parteen Basin specifically during drought periods. This is described further in Section 4.6.8, but in summary, the modelling has concluded that the abstraction of water by the Proposed Project will not have an effect on water quality even in drought periods.

4.6.8 Human Health – Water Quality

A stakeholder raised public health concerns in regards water transport and storage risks. They commented that transporting raw and treated water over long distances poses public health risks. "*Scientific research suggests that water transported in dark, long pipelines may be susceptible to bacterial regrowth, chemical leaching from pipeline materials, and stagnation issues*". They requested that Uisce Éireann provides:

- A scientific assessment of water quality risks associated with long-distance water transfer
- A microbiological and chemical monitoring plan ensuring compliance with the Drinking Water Directive (EU 2020/2184)
- An analysis of potential public health risks related to water transportation and storage.

Uisce Éireann recognises the importance of protecting public health in all aspects of water supply. The Proposed Project has been designed to meet the requirements of the Drinking Water Directive (EU 2020/2184), with multiple safeguards in place:

- *Water Quality: The pipeline will carry fully treated, potable water that has undergone UV disinfection and chlorine dosing at the Water Treatment Plant. This ensures microbial safety and prevents stagnation-related deterioration during transit*
- *Materials: The pipeline will be constructed from steel, eliminating the risk of chemical leaching*
- *Monitoring: Routine chemical and microbiological testing will be conducted at the Termination Point Reservoir in Dublin before the water enters the distribution network, ensuring continued compliance with drinking water standards.*

These measures are based on scientific assessments and are aligned with best practices for long-distance water transfer and storage.

Lough Derg Outdoor Swim School highlighted the potential impact of the Proposed Project on the water quality of Lough Derg. The Proposed Project may lead to increased water pollutant concentrations due to reduced water volume, negatively affecting safety, amenity, and local ecology, which in turn impacts their business. The Swim School further highlighted Failte Ireland's Destination Lough Derg initiative which aims to promote lake activities but commented the Proposed Project could harm lake water quality, affecting open water swimming services.

They noted that Lough Derg is prone to pollution from agricultural runoff, leading to cyanobacteria outbreaks, which affect recreational use and local wildlife. Past incidents at Lough Neagh suggest similar risks for Lough Derg. Reduced water volume could escalate pollutant concentrations, triggering harmful algae blooms. The Swim School commented the Proposed Project lacks provisions for drought periods, which could exacerbate these issues and requested that these concerns be addressed with relevant risk assessments and mitigation measures.

The Lively Wimmin Swimming Group, based near Killaloe, expressed concerns about the Proposed Project's potential negative effects on Lough Derg's safety, recreational value, and ecological health. They emphasised the lake's vulnerability to pollution, particularly from agricultural runoff, which can lead to harmful cyanobacteria (blue-green algae) outbreaks. These outbreaks pose risks to human and animal health and limit recreational use. Drawing parallels with severe algae blooms in Lough Neagh in 2023 and 2024, they warned that any reduction in Lough Derg's water volume could increase pollutant

concentration and trigger similar long-term ecological damage. The group commented that the Proposed Project lacks provisions for drought periods, which could exacerbate these issues and requested that these concerns be addressed with relevant risk assessments and mitigation measures.

Uisce Éireann acknowledges the importance of Lough Derg for recreation, tourism, and local ecology, and appreciates the concerns raised by local swimming groups and businesses. To assess the potential impact of the Proposed Project, Uisce Éireann commissioned a specialist water quality modelling study by MarCon Computations International. This study involved building a three-dimensional hydrodynamic and water quality model, informed by eight years of data collection, including automatic monitoring stations, weather data, and bathymetric surveys, to validate the model predictions.

The modelling focused on drought conditions, specifically a drought equivalent to the one experienced in 2018 which is the worst on record for the Shannon Catchment. This is because drought conditions are when water quality risks are highest. The model tested a range of scenarios, including peak abstraction and future climate change and examined key risks such as algal blooms and pollutant concentration.

Preliminary Findings:

- *Across all scenarios, predicted changes in water quality were minimal and within the natural variability of the system*
- *The modelling indicates that the Proposed Project would have a neutral effect on water quality in Lough Derg and Parteen Basin.*

These findings will be detailed in the forthcoming Water Quality Modelling Report, which will be submitted as part of the planning application and the EIAR.

Uisce Éireann remains committed to protecting the ecological health and recreational value of Lough Derg and will continue to engage with local stakeholders as the Proposed Project progresses.

4.6.9 Climate Change

Several stakeholders raised the issue of climate change and its impact on the Proposed Project. Ballymore Eustace CDA requested more details on Uisce Éireann's commitment to demonstrating a carbon 'net zero ready' pathway for operation. They also suggested a full lifecycle carbon management table of calculations as part of the carbon management approach to support the detailed design, build and operation of the Proposed Project.

The climate impact in the EIAR will include a calculation of all phases of the project lifecycle including construction and operational carbon, with and without proposed mitigation. Beyond the planning application submission, Uisce Éireann is committed to providing a whole-life Carbon Management Plan to align with PAS 2080 to inform the detailed design, build and operation of Proposed Project. The development of a whole-life Carbon Management Plan for the Proposed Project aligns with Uisce Éireann's ambition to reach net zero by 2040. Uisce Éireann's vision is for a sustainable Ireland where water is respected and protected, for the planet and all the lives it supports, with a goal to be a low carbon, climate resilient organisation. This includes decarbonising Uisce Éireann's services through managing carbon in the construction and operation of its assets, such as the Carbon Management Plan of the Proposed Project, to reduce its greenhouse gas emissions and help achieve Uisce Éireann's net zero ambition.

The Eastern and Midlands Regional Assembly highlighted the Regional Policy Objective 7.43 of the Regional Spatial and Economic Strategy (Eastern and Midlands Regional Assembly 2019) which emphasises the need for Climate Action Regional Offices and local authorities to identify critical

infrastructure and interdependencies to inform long-term adaptation planning and investment priorities. The Assembly recommended that Uisce Éireann engage with Climate Action Regional Offices and local authorities to support this objective "*as a first step in 'future proofing' services and to help to inform longer-term adaptation planning and investment priorities*".

The Regional Spatial and Economic Strategy promotes best practices in resilience for critical infrastructure, including European best practices and identifying risks and vulnerabilities. The Assembly recommended Uisce Éireann follow these practices.

The Assembly welcomed the whole-life carbon management approach in the Proposed Project's design and operation, including lifecycle assessments and the use of low carbon/sustainable materials. However, it noted the significant embodied carbon emissions during construction and operation. The Assembly suggested identifying viable alternative options for a sustainable approach, assessing climate impacts from Construction and Operational Phases, and implementing comprehensive adaptation or climate proofing measures.

Uisce Éireann notes the Assembly's comments relating to climate change and can confirm the delivery of the Proposed Project is part of future proofing activities to create climate resilient drinking water supply infrastructure. Uisce Éireann collaborated with local authorities to align the Proposed Project with local development plans and ensure community needs are met, including:

- *Regional Spatial and Economic Strategies to support sustainable regional growth and infrastructure planning*
- *Metropolitan Area Strategic Plans to ensure the Proposed Project supports urban expansion, especially in the Greater Dublin Area*
- *Supporting the development of local authority Climate Action Plans, where water conservation and sustainable abstraction are key themes.*

A stakeholder commented the Proposed Project relies on a high-energy pumping system to transport water 172km across Ireland. They noted Uisce Éireann claims the Proposed Project is "net zero ready", there are several issues:

- No detailed lifecycle carbon assessment has been provided
- There are no guarantees that the electricity demand will be met through 100% renewable sources
- Pumping and treatment costs could rise significantly if Ireland's electricity grid remains under stress.

They requested that Uisce Éireann provides a full energy and carbon analysis to demonstrate compliance with Ireland's Climate Act 2015 and National Climate Action Plan (Government of Ireland 2024a).

Uisce Éireann is very conscious of the resilience of the Proposed Project and the efficient use of energy and materials. In particular, the design of the Proposed Project seeks to maximise the use of gravity flow to move the water through the pipeline and careful consideration has been given to the trade-off between the size of the pipe to be used, how much material is in the pipe itself and the use of pumping to move the water through the pipe when demand is high. The compromise that has been made is to reduce the size of the pipe (from 2m in diameter to 1.6m in diameter) and therefore reduce the amount of steel used in the pipe, enabling gravity pressure to meet normal demanding but accepting that additional pumping (provided by the Booster Pumping Station) would be needed during more exceptional periods of higher demand.

An assessment of the impacts associated with climate change, including a carbon assessment for each stage of the Proposed Project lifecycle, will be included within the EIAR. As part of the planning application for the Proposed Project, Uisce Éireann will set out the Proposed Project's compliance with the Climate Act and National Climate Action Plan (Government of Ireland 2024a).

Opportunities have been investigated throughout the design development to reduce the carbon footprint of the Proposed Project through construction techniques, materials, and the inclusion of sustainable energy sources where feasible. At all stages of design, the embodied carbon of both products and processes has been considered, so alternative approaches can be brought forward into the design. Below are some of the elements which have been included into the Proposed Project to reduce embodied carbon:

- *Using electricity generated from renewable sources for operational electrical power requirements. Procuring from suppliers that meet industry requirements for reducing their embodied carbon*
- *Optimising the operation of the pipeline taking into account the size of the steel pipe and the frequency with which pumping will be needed to supplement gravity fed supplies. This had to balance material use, embodied carbon and operational energy use*
- *Tunnel lengths have been optimised in the design stage to reduce the embodied carbon associated with their use*
- *Materials have been proposed that will reduce the friction within the pipes and thereby reduce energy losses so additional energy does not have to be expended pumping water in the system*
- *Materials proposed in the Proposed Project are expected to have a longer design life, thereby reducing the requirements for replacement over time.*

In addition to the above, a Carbon Management Plan will be implemented in the Construction and Operational Phases of the Proposed Project. This will include specific targets to reduce embodied carbon in the detailed design and operation of the Proposed Project

With regards to the use of 100% renewable energy, Uisce Éireann is in the process of initiating a procurement competition to purchase electricity from renewable energy sources via a Power Purchase Agreement so that Uisce Éireann can commit that the supply of operational electricity will be from renewable sources. Uisce Éireann also intends to mandate in the procurement documentation that contractors purchase Construction Phase electricity from 100% renewable energy sources and/or suppliers who can validate renewable energy origins.

Tipperary County Council suggested that Environmental & Sustainability Outcomes be refined to specifically address 'Climate Action' through both climate change mitigation (reducing greenhouse gas emissions) and climate change adaptation (reducing vulnerability to climate impacts). They requested a Climate Change Risk Assessment (Tier 1, 2, and 3 if appropriate) should be prepared to identify and adapt to climate risks posed to the Proposed Project and affected areas. Reference can be made to the National Risk Assessment of Impacts of Climate Change: Bridging the Gap to Adaptation Action (EPA, 2020) for guidance.

Additionally, a programme to monitor the potential impacts of the Proposed Project on Tipperary, considering climate change and climate change risks, was requested. The Tier 1 Climate Change Risk Assessment for Tipperary (Tipperary County Council 2023) is also available for reference.

Uisce Éireann welcome the comments of the Council. The sustainability ambitions set out in Section 6 of the Project Summary Report 2025 (Uisce Éireann 2025a) (published to support the Non-Statutory Consultation) are very much focused on 'Climate Action' including, for example:

- *Implementing a whole-life carbon management approach to support the detailed design, build and operation of the Proposed Project*
- *Demonstrating a carbon 'net zero ready' pathway for operation.*

Uisce Éireann acknowledges that vulnerability to climate change is not specifically listed but can confirm that as part of the assessment of the Proposed Project, Uisce Éireann has completed a climate change risk assessment and this will be reported within the EIAR. This assessment involves determining the vulnerability of the Proposed Project to climate change through an analysis of the sensitivity and exposure of the Proposed Project to climate hazards which together provide a measure of vulnerability. This is a holistic assessment of how the Proposed Project would impact the wider area and is not county specific as that would truncate the assessment. The assessment has been undertaken in accordance with best practice guidance and national and local policy, including the National Adaptation Framework (Department of Environment, Climate and Communications 2024), which is a more recent publication than the National Risk Assessment of Impacts of Climate Change: Bridging the Gap to Adaptation Action (EPA, 2020).

The IPCC raised the issue of carbon accounting. They requested that carbon input and output need to be investigated for the Proposed Project: "*Construction through peat soils have the potential to release carbon, atmospheric and dissolved organic carbon – impacting on the aquatic habitats surrounding the construction areas through peat sedimentation and eutrophication…how does this project propose to remedy this*". IPCC further queried what impact from drainage will occur due to the hydrological management of the pipeline infrastructure, how much peat will be removed for the development, and will there be any restoration of the habitats.

The impacts to land use change resulting from the Proposed Project will be assessed and then reported as part of the Climate chapter of the EIAR. This will include a calculation of carbon emissions from loss of peat carbon sinks. Uisce Éireann will implement a whole-life carbon management approach to support the detailed design, build and operation of the Proposed Project.

In the context of sedimentation and impacts on the aquatic environment, the Construction Environmental Management Plan and Surface Water Management Plan for the Proposed Project contain the mitigation measures proposed during construction to reduce these impacts.

Areas of previously undisturbed sensitive peat bog were avoided where practicable through the site-selection process, including avoiding areas of active raised bog. Most of the area's peat soils through which the Proposed Project passes have been subject to peat extraction and what remains it not a high-quality peat. Any peat material/soils excavated along the pipeline route will be temporarily stored and used as part of the reinstatement of the construction working area following installation of the pipe. Furthermore, Uisce Éireann is working with Bord na Móna to develop and engage in environmental restoration specifically in relation to peatland crossed by the Proposed Project.

A significant portion of the peatlands within Bord na Móna's ownership that are crossed by the Proposed Project are subject to rehabilitation plans aimed at returning the bogs to a more sustainable and ecologically stable condition. Through detailed planning and ongoing liaison with Bord na Móna, the Proposed Project has been carefully designed to ensure it does not hinder the implementation of these rehabilitation plans. Previously rehabilitated bogs or areas already subject to rehabilitation schemes will not be impacted, as the alignment and footprint of the pipeline have been fully considered and incorporated into the rehabilitation design process. A critical aspect of reinstating the land following pipeline construction will be the preservation of existing drainage and hydrological management systems established by Bord na Móna to support the long-term success of bog rehabilitation.

A stakeholder commented that the Proposed Project uses a linear methodology that ignores nature's water cycle and Ireland's commitment to sustainability, carbon neutrality, and the circular economy. While technically feasible, they commented that the Proposed Project is inefficient and unsustainable, involving high carbon and energy costs to extract, transport, use, treat, and discharge water. They stated that this model does not align with responsible water stewardship or Ireland's commitments to reducing carbon emissions and combating climate change.

Sustainability and a sustainable supply have been an integral factor of the Proposed Project. The Proposed Project, while significant in Ireland, is not unusual by European or international standards. While it is acknowledged that 172km is a long way to move water across Ireland and there will be embodied carbon in, for example, the construction materials used, such as the steel for the pipeline, this does not make it an unsustainable project.

Uisce Éireann acknowledges the importance of aligning major infrastructure projects with Ireland's commitments to sustainability, carbon neutrality, and the circular economy. The Proposed Project is not only technically feasible, it is a strategic response to the climate crisis and a key enabler of long-term water security for the Eastern and Midlands Region.

A Climate Mitigation Measure

The Proposed Project is designed to address the increasing vulnerability of existing water sources to climate change, particularly in the Greater Dublin Area. By abstracting water from the River Shannon—a resilient source with a vast catchment and natural storage capacity—the Proposed Project reduces reliance on overstretched local supplies and enhances national climate resilience.

Minimising Environmental Impact

- *The abstraction point is located at an existing hydroelectric impoundment, avoiding the need for new dam infrastructure and associated ecological disruption*
- *The pipeline will be constructed from durable materials such as steel, with embodied carbon considered at every stage of design and procurement*
- *The Proposed Project is being developed with a commitment to achieving net zero operational emissions by 2050, in line with Uisce Éireann's broader climate targets.*

Circular Economy and Carbon Reduction

Uisce Éireann is embedding circular economy principles across all capital projects. For the Proposed Project this includes:

- *Reuse of excavated materials and decommissioned infrastructure where feasible*
- *Use of low-carbon construction materials and modern methods of construction*
- *Integration of renewable energy sources and energy-efficient technologies during operation.*

A circular economy strategy will be developed as part of the detailed design phase to maximise opportunities for resource reuse, refurbishment, and recycling.

Ongoing Assessment and Transparency

The EIAR will include a dedicated Climate chapter outlining the measures taken to reduce carbon emissions during design, construction, and operation. A Resource and Waste Management assessment is also being prepared in line with national circular economy policies, including the Waste Action Plan for a Circular Economy (Government of Ireland 2020) and the National Waste Management Plan 2024–2030 (Regional Waste Management Planning Offices 2024).

Consequently, Uisce Éireann would contend that the Proposed Project does align with responsible water stewardship and Ireland's commitments to combating climate change.

An Taisce commented that up-to-date and reliable climate change forecast data should be incorporated into the Proposed Project's demand forecast, especially projections of increased drought. The National Climate Change Risk Assessment (EPA 2025) highlights that drought-related stress on water supplies will increase as demand rises and dry spells become more common. An Taisce highlighted that incorporating this data will ensure robust climate change forecast scenarios and effective adaptation planning to rectify current water supply infrastructure imbalances. Both meteorological drought (precipitation deficits) and hydrological drought (streamflow and groundwater deficits) need full consideration. Assessments of future water available for use should be updated using contemporary climate change projections. Additionally, Uisce Éireann should integrate learning from past drought events and other jurisdictions to inform drought management.

Uisce Éireann acknowledges the importance of integrating contemporary climate science into long-term water planning. The Proposed Project has been developed as a climate adaptation response to address the growing vulnerability of existing water sources in the Eastern and Midlands Region, particularly in the Greater Dublin Area, where 85% of supply is currently drawn from the River Liffey.

Incorporating Climate Change and Drought Scenarios
Hydrological modelling for the Proposed Project includes climate change scenarios based on two recognised sources of projected changes to Irish river flows. A 'reasonable worst-case' scenario for the 2080s was adopted to assess potential impacts on lake levels in the Parteen Basin. This approach ensures that both meteorological and hydrological drought conditions are considered in the abstraction modelling.

Demand Forecasting and Sensitivity Analysis
The demand forecast underpinning the Proposed Project includes sensitivity analysis to account for uncertainties in climate, population growth, and economic development. This includes a 70% projected increase in industrial and commercial demand in the Greater Dublin Area Water Resource Zone between 2020 and 2050. The forecasts have been reviewed and found to be broadly consistent with actual demand trends since 2019.

Learning from Past Events and Other Jurisdictions
Uisce Éireann has drawn on lessons from past drought events in Ireland and internationally. The NWRP and the Proposed Project both reflect a shift toward resilience-based planning, with a Level of Service target of 1 in 50 years—meaning customers should only experience significant supply limitations once every 50 years.

Next Steps
The EIAR will include a full account of the climate modelling, drought risk assessments, and adaptation measures embedded in the project design. This will ensure transparency and alignment with the EPA's Climate Change Assessment and Ireland's broader climate resilience goals.

IFI commented that sustainability must be central to the design and development of the Proposed Project. IFI highlighted climate change is expected to increase air temperatures, heatwaves, droughts, and heavy precipitation events, impacting fish species' distribution, abundance, and life events. These changes, along with altered flow regimes, increased water temperatures, habitat loss, and new invasive species, will affect fish production and freshwater ecosystems. Existing anthropogenic pressures will interact with climate change, exacerbating these impacts. IFI further commented that "*current flow regimes and low-flow rates are unlikely to remain static into the future and Q95 flows have been*

simulated to decrease by over 40% by century end. Therefore, IFI believe it is key that this shifting baseline is incorporated into any abstraction regime and accounted for in any modelling of the potential impacts".

Uisce Éireann agrees that sustainability must be central to the design and development of the Proposed Project, and that climate change presents significant challenges for freshwater ecosystems, including fish populations.

Climate-Informed Hydrological Modelling

The hydrological modelling for the Proposed Project incorporates climate change scenarios based on two recognised sources of projected changes to Irish river flows. A 'reasonable worst-case' scenario for the 2080s was adopted to assess the impact of abstraction on lake levels in the Parteen Basin. This includes consideration of both meteorological and hydrological drought conditions, and reflects the shifting baseline highlighted by IFI.

The modelling demonstrates that, even under these future climate scenarios and assuming a continuous abstraction of 300Mld, the water level in the Parteen Basin would remain within the current Normal Operating Band. This includes conditions equivalent to the 2018 drought—the most severe on record for the Shannon catchment.

Protecting Aquatic Ecosystems

Uisce Éireann recognises that climate change will affect fish species through altered flow regimes, increased water temperatures, and habitat pressures. The Proposed Project has been designed to avoid exacerbating these impacts:

- *Abstraction will occur from an existing hydroelectric impoundment, avoiding new physical barriers or habitat disruption*
- *Flow and level management will remain under ESB control, with abstraction designed to operate within existing regulatory and ecological thresholds*
- *The EIAR will include detailed assessments of aquatic ecology, including potential cumulative effects of climate change and abstraction on fish species and habitats.*

Commitment to Adaptive Management

Uisce Éireann is committed to ongoing monitoring and adaptive management. The Proposed Project is being developed within a resilience-based planning framework, aligned with the NWRP, and will be subject to continuous review as climate science and ecological data evolve.

4.6.10 Air Quality

The IPCC highlighted that nitrogen pollution is becoming an issue for designated sites, negatively impacting vegetation and conservation objectives. Sources of excess nitrogen include construction, urban wastewater, and agriculture, which can enter habitats via wet or dry deposition. The IPCC requested an assessment of the development's impact on nitrogen levels in designated sites and high-value nature habitats. Additionally, a long-term monitoring agenda should be implemented to track emission rates and inform future projects. The cumulative impacts of nitrogen from this and other developments should also be considered, as they may interact synergistically.

The air quality assessment that will be included in the EIAR and submitted as part of the planning application will consider the impacts of nitrogen deposition on designated sites, such as SACs and Special Protection Areas. The assessment will focus on traffic movements during construction because once the Proposed Project is operational, traffic would be negligible and would not result in nitrogen deposition. The traffic model, which the air quality assessment relies upon, will include traffic from

future committed development and will be based on a high growth scenario. The assessment of nitrogen deposition will therefore consider the cumulative impact from other development.

The HSE Environmental Health Service (HSE) commented on the Consideration of the Elements of the EIAR from the Scoping Methodology Report (Uisce Éireann 2023) and made the following observations on the proposed methodology and evaluation criteria:

Section 9: Air Quality, Paragraph 222 – food premises should be included in the list of sensitive receptors when considering dust. If averaging dust deposition standards are used to evaluate the significance of dust, then a maximum daily limit should be included in the assessment.

The key potential impacts on air quality would arise during the Construction Phase for the Proposed Project. This includes the potential for dust emissions to impact people, property and businesses in proximity to construction activities along the pipeline route and at the Infrastructure Sites, and for vehicle exhaust pollutant emissions to impact local air quality during the Construction and Operational Phases. A dust management plan will be included as part of the EIAR and will set out measures to mitigate likely effects arising from fugitive dust emissions.

Construction Phase dust impacts will be assessed at sensitive receptors (including food premises) within 250m of the Planning Application Boundary, as per the Institute of Air Quality Management (2024) Guidance on the Assessment of Dust from Demolition and Construction.

The TA Luft limit of 350mg/m2/day is the standard good practice limit applied in relation to dust deposition from construction works. Compliance with the limit is based on monthly sampling, with the maximum permissible emission level for dust deposition averaged over a one-year period. This standard good practice approach will be adopted for the Proposed Project. There is no guidance stipulating a maximum daily limit for dust deposition and the monitoring methodology is based on monthly sampling, therefore, a daily limit would not be feasible.

Peamount Healthcare raised concerns regarding the proposed Termination Point Reservoir of the Proposed Project due to its proximity to a healthcare setting. They highlighted the following health risks from construction activities:

- The movement of large volumes of earth during construction is expected to release Aspergillus spores and other moulds
- Aspergillus spp. can cause a range of illnesses, from mild respiratory issues to Invasive Aspergillosis, particularly dangerous for immunocompromised patients
- The risk of nosocomial (hospital-acquired) infections is heightened due to the proximity of the construction site to Peamount's vulnerable patient population.

Peamount Healthcare emphasised the need to implement the National Guidelines for the Prevention of Nosocomial Invasive Aspergillosis During Construction/Renovation Activities (National Disease Surveillance Centre 2002), which include:

- Air sampling
- Dust-limiting measures
- Ventilation and air filtration systems.

Uisce Éireann acknowledges the concerns raised by Peamount Healthcare regarding potential air quality impacts during construction of the Termination Point Reservoir, particularly in relation to vulnerable patient populations.

The Air Quality chapter of the EIAR will address dust emissions and mitigation measures in detail.

Further, in accordance with Transport Infrastructure Ireland (2022) guidance PE-ENV-01106, on which the Proposed Project assessment methodology is based, there is the potential for Aspergillus spp. to be present in dusts emitted as a result of the Proposed Project construction works and this will be considered as part of the air quality assessment.

The Proposed Project will adopt the standard good practice limit for dust deposition of 350mg/m²/day, as outlined in the TA Luft guideline[15]. This limit is based on monthly sampling and is averaged over a one-year period. There is currently no recognised daily limit for dust deposition, and daily monitoring is not considered feasible or scientifically supported. In areas of particularly high sensitivity, such as the Termination Point Reservoir location, which Peamount Hospital is adjacent to, a real-time particulate monitor to monitor particulate matter (PM_{10} and $PM_{2.5}$) concentrations will be used. This monitor has the capability to provide alerts if particulate concentrations are elevated above set trigger levels.

Aspergillus Risk and Mitigation

Aspergillus spp. is a naturally occurring fungus that may be present in soil, compost and rotting leaves, plants, trees and crops, and dust, and so spores may be released and become airborne during earthworks or other dust generating activities. As Aspergillus spp. can be spread by dust, the mitigation measures put in place to control construction dust are also considered as mitigation measures with respect to Aspergillus as they will limit the potential for spread of the fungal spores.

Aspergillus spores can become airborne during earthworks and pose a risk to immunocompromised individuals. Uisce Éireann recognises this risk and will implement a suite of mitigation measures, including:

- *A Dust Management Plan, to be included in the EIAR, which will outline site-specific measures to control fugitive dust emissions. These measures are designed for high-risk environments and will reduce airborne particulate matter*
- *The National Guidelines for the Prevention of Nosocomial Invasive Aspergillosis during Construction/Renovation Activities (National Disease Surveillance Centre 2002) and National Guidelines for the Prevention of Nosocomial Aspergillosis (Health Protection Surveillance Centre 2018) will be complied with by the appointed Contractor.*
- *An Aspergillus Prevention Plan, to be developed by a qualified specialist, in line with the HSE's National Guidelines for the Prevention of Nosocomial Aspergillosis (Health Protection Surveillance Centre 2018). This will include:*
    - *Air sampling where appropriate*
    - *Enhanced dust suppression techniques*
    - *An Aspergillus Prevention Plan will be developed by a suitably qualified specialist prior to commencement of works on the site to prevent Aspergillus spores spreading.*

These measures will ensure that both general air quality and specific risks related to Aspergillus are managed to protect public health, particularly in sensitive healthcare settings.

[15] Environmental Protection Agency Office of Environmental Enforcement (OEE) Air Emissions Monitoring Guidance Note (AG2) 2021 https://www.epa.ie/publications/compliance--enforcement/air/air-guidance-notes/AG2_Emissions-Monitoring-Guidance-Note_May2021_v7.pdf

4.6.11 Noise and Vibration

A stakeholder raised concerns regarding the impact on those living close to the Water Treatment Plant at Birdhill in terms of noise from pumps that will be heard during the day and, particularly, at night.

The National Environmental Health Service Executive made the following observations on the proposed methodology and evaluation criteria: Section 3: Noise and Vibration of the EIA Scoping Methodology Report (Uisce Éireann 2023) paragraph 29: fixed noise limit for pipe line construction. To provide adequate protection of Population Health, fixed noise limits must be complimented by a restriction on hours of construction activity, as per table 3.2. Irrespective of this, the Environment Impact Assessment Reports (EIAR) should also consider particularly sensitive receptors when considering the likely significance of construction noise. The National Environmental Health Service Executive has considered the proposed noise assessment methodology and the evaluation criteria and is satisfied that it will assess the likely significant effects of noise from the development.

Noise will primarily arise from the use of mechanical plant and machinery at the fixed Infrastructure Sites and at the proposed Construction Compounds and Pipe Storage Depots during construction.

The noisiest activities will include piling, groundbreaking, earthworks, trenchless crossings and the movement of machinery around the working areas. These impacts will be mitigated through a range of measures as appropriate. The mitigation options that will be used, where appropriate, will include:

- *Choosing mechanical plant and machinery with lower noise emissions*
- *Erection of temporary noise barriers around equipment or activities where noise sensitive receptors lie close to the construction work area*
- *Use of mechanical plant and machinery that has low noise emission and consideration of screening around equipment to screen noise further*
- *Providing information to landowners, local residents and businesses about the Proposed Project and details about construction activities and timings, particularly any night working.*

Trenchless crossings will include 24-hour working and so the following additional mitigation will apply to these works:

- *Restricting the activities that can occur outside of normal working hours.*

During the operation of the Proposed Project, the Raw Water Intake & Pumping Station, Water Treatment Plant and Booster Pumping Station will include activities with the potential for noise generating processes, e.g. the pumping of water.

The detailed design of the equipment in these Infrastructure Sites will mitigate potential effects by meeting agreed operational noise thresholds (these thresholds will be defined in the EIAR, and they will reference appropriate best practice guidance). This will be achieved by:

- *Specifying the equipment (e.g. pumps) to a particular noise level*
- *Designing the fabric of the structures to absorb/retain noise generated within the building.*

Peamount Healthcare highlighted the following noise and traffic concerns:

- The proposed access road runs along a significant portion of Peamount Hospital boundary
- Increased traffic and construction noise pose risks to patients, especially those with neurological conditions or disabilities who are sensitive to environmental stressors.

Peamount requested further consultation on noise abatement strategies.

An assessment of construction noise along the extent of the Proposed Project will be included in the EIAR. This will include an assessment for Peamount Hospital, which is identified as a specific noise sensitive location. The noise assessment is part of the ongoing work on the EIAR, but the assessment

completed to date has determined that with the inclusion of mitigation measures, construction noise levels can operate within the adopted construction noise thresholds. This applies to the construction of both the Termination Point Reservoir near the Peamount grounds and the access road to the west of the site. Work is ongoing to assess the potential effects of the construction traffic and these are addressed in the EIAR. To reduce potential noise effects (both from construction plant and construction vehicles) mitigation measures will include, among others, installing localised noise barriers, limiting construction activities to daytime only and a suite of other best practice control measures as set out in the EIAR and Construction Environmental Management Plan.

In addition, noise monitoring will be undertaken during the Construction Phase to check that levels are kept within required limits.

4.6.12 Resource and Waste Management

The Eastern and Midlands Regional Assembly welcomed the incorporation of a circular economy strategy as part of the project design with the aim of 70% of waste from excavation being used in the construction and operation of the Proposed Project.

In relation to the proposed Water Treatment Plant at Birdhill, IFI is concerned about the disposal of the substantial amounts of waste such as sludge produced by the plant and the associated risks of pollution both during construction and operation of the plant.

It is estimated that with the Water Treatment Plant operating a typical water supply in 2050 (which is 154Mld), approximately 9,000m^3 of sludge material would be generated over a six-month period. This material will be dried out and stored on-site and then transported away from the Water Treatment Plant by road. In accordance with its circular economy objectives, Uisce Éireann is intending to avoid the disposal of the sludge material. There is unlikely to be one single option to best reuse/recover sludge sustainably. Instead, it is likely to involve a suite of options. A number of circular economy options for the potential reuse of residuals are outlined in Technical Appendix K Residuals (Irish Water 2021b) of the NWRP Framework Plan, namely:

- *In integrated constructed wetlands or reed bed systems as a beneficial product for nutrient removal*
- *In cement manufacturing as an alternative to aluminium-containing raw materials such as bauxite*
- *In brick manufacturing as an alternative to raw materials*
- *In landfill remediation, incorporated into the material used to cover and remediate old landfill sites*
- *Discharge to Wastewater Treatment Plants to improve nutrient removal and dewatering of Wastewater Treatment Plant residuals*
- *Long-term storage for future usage*
- *Export while suitable outlets are being developed in Ireland. Uisce Éireann is actively investigating potential uses of the material which could include landfill remediation, cement and brick manufacturing. Arrangements for this will not be finalised until nearer the date of opening for the Proposed Project and could change over its lifespan as other uses emerge.*

Mitigation measures that will be implemented to avoid or reduce the effects of construction waste include:

- *Promoting the waste hierarchy and circular economy principles throughout the design and construction of the Proposed Project which prioritises reuse of materials ahead of recycling and disposal*
- *Seeking to balance cut and fill, where soil is suitable, to avoid the need to import soil and reduce the creation of waste. This may also involve reusing surplus soils in landscaping*

- *Developing a Construction Waste and By-Product Management Plan which will facilitate 70% of excavation arisings during construction being used as a by-product rather than becoming a waste, and 100% of recoverable waste being diverted from landfill during both construction and operation.*

4.6.13 Excess Materials Disposal

General stakeholder concerns worried about disturbance from construction and sludge disposal during the water cleaning process.

The Eastern Midlands Regional Assembly shared their general appreciation for the incorporation of circular economy strategy with the planned reuse of 70% of excavation waste. Ballymore Eustace CDA requested the Proposed Project aim for reuse of 100% of excavation waste.

Salmon Watch Ireland were concerned about protecting surface and groundwater from excavation spoils and suggested involving IFI as an observer during construction.

During the Construction Phase there will be measures in place to protect watercourses and avoid the risk of pollution e.g. from silt laden runoff. These measures will be set out in a Construction Environmental Management Plan which includes a Surface Water Management Plan. The Contractors building the Proposed Project will have to comply with the requirements set out in these documents. An ECoW will be appointed to oversee the implementation of environmental mitigation measures during construction. The ECoW will ensure that all works are carried out in compliance with environmental commitments and best practice, particularly in ecologically sensitive areas.

As part of the EIAR a Conceptual Site Model has been undertaken to check for potential areas at risk of contaminants being present and identifying appropriate mitigation with a management plan.

These documents will include the following measures which will be implemented to avoid or reduce the potential impacts for surface water, groundwater, soil and geology:

- *Applying buffer strips around watercourses and avoiding in-channel working where practicable*
- *Using good practice measures during construction to control, treat and attenuate silt-laden runoff and water from dewatering activities and temporary site drainage*
- *Adherence to agreed EPA discharge standards from silt ponds through peat working areas*
- *Use of drip trays under plant and equipment*
- *Programming*
- *In-channel working during times of low flow where practicable*
- *Monitoring water quality during construction and having a management plan that sets out appropriate mitigation measures should any deterioration in water quality be detected*
- *The design of the structures will include measures to reduce scours*
- *Agreeing methodology for discharges with the relevant authorities and following their issued guidelines, where available*
- *Using good practice measures during construction to reduce the risk of leakage and spills*

The majority of waste generated by the Proposed Project will be inert excavated and construction materials, such as soil, stone and rock. These will be reused within the Proposed Project, where practicable, rather than disposed of in landfill.

As set out in the Project Summary Report 2025 (Uisce Éireann 2025a) published as part of the Non-Statutory Consultation, Uisce Éireann has committed to the following:

- *Developing a By Product and Waste Management plan which will facilitate 70% of excavation arisings being used as a by-product rather than becoming a waste and 100% of recoverable waste being diverted from landfill, in both construction and operation*
- *Developing a circular economy strategy as part of detailed design to maximise the opportunity for resource reduction/reuse/refurbish/recycling and for optimised use of operational bioresources.*

This will substantially reduce the volume of material that may otherwise have needed to be disposed of to the landfill.

The HSE Environmental Health Service (HSE) requested that wastewater from temporary Construction Compounds be contained and taken off site to a Wastewater Treatment Plant.

Uisce Éireann will manage the construction site facilities waste through on-site treatment, segregation, and licensed disposal, avoiding the need for off-site transport. Wastewater will be handled via percolation areas, settlement systems, or sewer connections, while solid waste is managed under the Construction Environmental Management Plan and overseen by an ECoW to ensure environmental compliance. There is an appropriate strategy in place for construction wastewater and the proposed approach is in line with construction industry practices.

IFI had concerns over the sustainability of a pipeline of considerable length which will cross many watercourses which could result in significant fisheries habitat loss or damage. They also noted risk to watercourses in terms of pollution from suspended solids, concrete and hydrocarbons during construction. They commented that "*ground preparation and pipe-laying construction works have significant potential to cause the release of sediments and pollutants into surrounding waters. Pollution of the adjacent freshwater from poor on-site construction practices could have a significantly negative impact on the fauna and flora of surface waters in this area*".

IFI emphasised the need for proper preparation and mitigation measures to protect flora, fauna, and water quality. IFI recommended avoiding high-risk construction activities between 1 October and 30 June and ensuring no net loss to fisheries and aquatic habitats.

Uisce Éireann will be producing a Construction Environmental Management Plan to include details of the methods for surface water management. The guidance documents recommended by IFI will be considered as part of the EIAR, along with consideration of seasonal constraints in relation to construction activities. As set out above, this will include measures to manage sediment runoff and pollution risk.

In-stream works will not be carried out in watercourses frequented by salmon or trout during the annual close season and will be undertaken outside of the lamprey spawning season. River and brook lamprey spawn during the period March to April, while sea lamprey spawn during the period May to August. In-stream works may be carried out between October and March if juvenile lamprey are translocated; however, the salmonid spawning season will still need to be considered. The duration of the season for salmonids varies regionally. In-stream works will take place under the direction of the ECoW. The timing of works will always be considered on a site-specific basis (typically works can be carried out during the period July to September) and in agreement with IFI, as some rivers have late spawning salmonids.

Ballymore Eustace CDA requested Uisce Éireann provide details of all river crossings along the route and protection measures to ensure these rivers are not negatively impacted.

All river crossings will be listed in the EIAR supporting the Planning Application and measures for avoiding or reducing potential effects will be set out in the Construction Environmental Management Plan (which will include a Surface Water Management Plan).

4.6.14 Landscape and Visual Impact

Several stakeholders raised concerns about the impact to the landscape from construction of the pipeline and associated Infrastructure Sites.

Uisce Éireann acknowledges that there will be temporary visual effects during the construction of the Proposed Project, and these cannot be completely avoided with a project of this size and scale. However, there have been a number of steps taken to reduce these effects, including:

- *Sensitive landscape and visual features have been avoided where feasible through the site-selection process*
- *Land will be reinstated and the vegetation lost during construction will be replaced post-construction (and subject to planting restrictions within the Permanent Wayleave)*
- *Hoarding will be used around site compounds, and construction lighting will be designed to illuminate the working area only with minimum impact on surrounding receptors.*

To mitigate against operational impacts on the landscape character and views from the permanent above ground Infrastructure Sites, such as the Water Treatment Plant and Raw Water Intake and Pumping Station at the Parteen Basin, Uisce Éireann will implement the following measures where appropriate:

- *Using high-quality architectural treatments and finishes and applying recessive colour schemes as part of the design for the permanent buildings to minimise the risk of creating a discordant feature within the landscape*
- *Undertaking additional planting, such as hedgerows and trees, around the permanent above ground infrastructure to help screen these structures and integrate them into the surrounding landscape.*

Cloughjordan CDA raised concerns about the significant infrastructure development and change to the existing landscape of Knockanacree Woodlands on Scott's Hill outside Cloughjordan village as a result of the Break Pressure Tank. The Cloughjordan CDA are involved in the management of Knockanacree Woodlands with Coillte Forest.

The Break Pressure Tank, specifically the Control Building, has been designed to have a barn-like appearance in keeping with its surroundings and will be finished in a recessive colour scheme of muted grey/green tones. Due to the terrain, the Control Building (the most visible element of the Break Pressure Tank) would not be clearly visible from most directions, except from the top of Knockanacree Wood to the south. Mitigation screen planting will be provided along the southern and eastern embankments of the Break Pressure Tank which will almost entirely screen views of the Control Building from Knockanacree Wood. The proposed planting will also blend with the existing surrounding mature woodland context.

Cloughjordan CDA queried further information on the operational lighting and what measures are planned to mitigate adverse impacts.

Another stakeholder requested clarity on the potential light pollution from the Water Treatment Plant at Birdhill: "*I can thus assume there will be significant facility lighting for operational and safety reasons. Due to my proximity to the proposed plant, I would be able to see such lighting, and I would expect significant measures to reduce this*".

All of the proposed Infrastructure Sites would operate 24 hours a day. Only one of them, the Water Treatment Plant, would be staffed permanently. Therefore, there would be lighting at night at the Water Treatment Plant, but as outlined below a range of measures will be incorporated to reduce light spill.

For the other sites, operatives would only be on-site for routine activities such as monitoring and maintenance. However, this could include during hours of darkness, including during the winter months when it gets dark earlier in the day, or in certain circumstances during the night. Therefore, there would be provision for lighting for safe access and security at all the other Infrastructure Sites as well.

A range of mitigation measures will be incorporated into the detailed design of the lighting to reduce the potential for impacts upon residents of nearby properties. This will include:

- *External lighting will be designed to avoid night sky pollution/upward spill, and overspill into adjacent properties. This could include downward directional lighting and use of shrouds*
- *Exterior lighting will be automatically controlled and will be turned off unless operational staff are present on-site*
- *The required luminance levels will be achieved by selecting the most appropriate luminaires and lamp sources and carefully implementing the agreed control philosophy for operation of exterior lighting*
- *Continuous lighting in certain areas of the Water Treatment Plant Control Building will have window blinds to mitigate light overspill.*

The impact of the permanent lighting is being assessed and will be reported in the EIAR to be submitted with the planning application.

4.6.15 Socio-Economics – Impact on Tourism and Amenities

Ballymore Eustace CDA commented that "*the whole recreational use of the Shannon will have to change*". They cited experience of catchment management and planning restrictions, including amenities, on the Blessington Lakes.

Shannon Rowing Club have a long-standing presence on the River Shannon and commented that any reduction in water levels caused by the proposed abstraction would severely affect their facility at Annacotty, making it increasingly difficult to operate and presenting a significant threat to the sport of rowing at Castleconnell, Annacotty, and Plassey.

The Club urged Uisce Éireann to consider the potential downstream consequences of this abstraction and its direct impact on their club and the wider community. Garrykennedy and Castleconnell Boat Clubs raised concerns about the impact the Proposed Project would have on local communities that rely on the Shannon and Lough Derg for recreational activities, tourism, and their livelihoods. This includes local boating clubs, sailing clubs, swimming clubs, leisure boating businesses, canoeing and kayaking stakeholders, angling communities, and tourism-related businesses. They highlighted a reduction in water levels could hinder navigation and leisure activities, which are integral to the local economy. Garrykennedy Boat Club commented "*the project would provide no direct benefit to these communities, yet they will bear the brunt of its negative effects. The cost of this project should not come at the expense of local businesses and community well-being*".

Uisce Éireann acknowledges the concerns raised by local clubs and communities regarding the potential impact of the Proposed Project on water levels and recreational use of the River Shannon and Lough Derg.

It is important to clarify that the statutory compensation flow and water level management regime will not change as a result of the Proposed Project. The abstraction will occur from water already impounded for hydroelectric use at Ardnacrusha, and ESB will continue to manage water levels within the same Normal Operating Band that currently applies. This is also described in Sections 4.5.1 and 4.6.2.

Hydrological modelling has confirmed that even under extreme drought conditions—such as those experienced in 2018—water levels can be maintained within this band, while still allowing for the proposed abstraction of up to 300Mld. This means that although water levels may be slightly lower than they would have been without the Proposed Project during droughts, they will remain within the existing range that recreational users are already accustomed to.

In non-drought conditions, the abstraction will simply divert water that would otherwise have been used for electricity generation.

Therefore, activities such as rowing, boating, swimming, and angling will continue to operate under the same water level conditions as they do today. If these activities are currently viable throughout the full range of the Normal Operating Band, they will remain so with the Proposed Project in place.

Councillor Tony O'Brien objected to the Proposed Project due to the potential negative impact on the region's economy and recreational activities. Councillor O'Brien noted that the River Shannon is the primary natural resource in East Clare, driving the tourism economy and providing significant employment through hotels, restaurants, bars, and boat hire operators. The Proposed Project could harm the natural habitats and ecology of fish and wildlife, particularly in the lower Lough Derg area, which is marketed as Ireland's Hidden Heartlands.

Uisce Éireann acknowledges the importance of the River Shannon and Lough Derg to the economy, ecology, and identity of East Clare. Uisce Éireann recognises that this region—central to Ireland's Hidden Heartlands—relies heavily on the river for tourism, recreation, and local livelihoods.

It is important to clarify that the Proposed Project will not alter the existing water level management regime. The abstraction will occur from water already impounded for hydroelectric use at Ardnacrusha, and ESB will continue to manage water levels within the same Normal Operating Band that currently applies as set out in Sections 4.5.1 and 4.6.2. This means that navigation, boating, angling, and other recreational uses will continue to operate under the same water level conditions as they do today.

As summarised in Section 4.6.2, hydrological modelling has confirmed that even under extreme drought conditions—such as the 2018 event—water levels can be maintained within this band while allowing for the proposed abstraction. Therefore, there will be no change to the compensation flow or the range of water levels that support existing recreational and economic activities.

In relation to ecological concerns, a full NIS will be submitted with the planning application. While the NIS will only be finalised for the submission of the planning application, it is at a very advanced stage. The assessment undertaken to date, of the potential impacts, together with the proposed mitigation measures, shows that the Proposed Project will not pose a risk of adversely affecting (either directly or indirectly) the integrity of the Lower River Shannon SAC, including its habitats and species of conservation interest, either alone or in-combination with other plans or projects.

Uisce Éireann is committed to ensuring that the benefits of the Proposed Project—securing long-term water supply for the Eastern and Midlands Region—are delivered without compromising the environmental or economic vitality of communities along the Shannon.

The National Environmental Health Service identified areas in Cloughjordan that are used for formal and informal recreational use that might be impacted by the Proposed Project, particularly Knockanacree Woods, where the Break Pressure Tank is to be developed. Specific consideration should be given to this in the Environmental Impact Assessment.

The environmental assessment of the Proposed Project will be presented within the EIAR that will be submitted as part of the planning application to An Coimisiún Pleanála. The EIAR will include the consideration and assessment of the likely significant effects on areas currently used for informal or formal recreational use/activities.

The Break Pressure Tank, specifically the Control Building, has been designed to have a barn-like appearance in keeping with its surroundings and will be finished in a recessive colour scheme of muted grey/green tones. In addition to the colour scheme, the building will be substantially screened from all directions by terrain except from the top of Knockanacree Wood to the south. The view of the Break Pressure Tank from the top of Knockanacree Wood will be substantially mitigated by perimeter screen planting along the southern and eastern embankments that would blend with the surrounding woodland context.

4.6.16 Cultural Heritage and Archaeology

The IPCC highlighted that National Peatlands in Ireland hold a great deal of cultural and ancestral history, preserved in the anaerobic conditions. They noted Ireland has international obligations under the European Convention on the Protection of the Archaeological Heritage, ratified by Ireland in 1997. Article 1 of this convention states that Ireland must "*protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study*". IPCC observed that there needs to be scientific supervision from an independent body that will evaluate the pipeline project area for its archaeological importance. The IPCC cannot support the development before a full archaeological survey is undertaken, and the necessary precautions and mitigations are in place to ensure that no loss of cultural archaeological information occurs as a result of the development.

Desk studies and archaeological field inspections have been undertaken to identify sites of archaeological, architectural and cultural heritage significance along the route of the Proposed Project, which includes sections routed through the National Peatlands. Extensive work has been completed to identify potential constraints along the pipeline route, including a review of previous archaeological investigations that have taken place in the peatland surrounding the Proposed Project. All bog land is considered to possess high archaeological potential for the purpose of the assessment.

All removal of peat within former commercial bogland will be subject to archaeological monitoring by an archaeologist with specific bogland experience. Prior to construction, a detailed walkover of the bogland will be carried out in order to identify any specific features/deposits of archaeological potential. Works will be carried out in advance of laying the pipeline, in order to ensure that there is adequate time to preserve by record any archaeological features or deposits that may be identified. Preservation by record will require the agreement of the Department of Housing, Local Government and Heritage National Monuments Service.
Additional mitigation measures will include:

- *Pre-construction archaeological underwater/wade assessments and archaeological testing. These will be carried out in advance of construction and under licence to the Department of Housing, Local Government and Heritage. The results of the assessments may lead to additional testing and/or recording as agreed with the National Monuments Service.*
- *Locating compound areas and other focus areas of construction activities away from cultural heritage sites where practicable.*

- *Implementing an archaeological mitigation strategy agreed with the National Monuments Service. Subject to the value of the heritage asset and the potential impact, mitigation to be implemented may include preservation in situ, archaeological excavation (preservation by record), and written and photographic records carried out by a suitably qualified heritage specialist.*

As part of the development of the Proposed Project and the preparation of the EIAR, Uisce Éireann has engaged with the National Monuments Service of the Department of Housing, Local Government and Heritage, including most recently attending a meeting with them in August 2024. During this meeting, the National Monuments Service were provided with information relating to the Archaeological Impact Assessment methodology, the preliminary findings of the assessment of likely effects, and proposed mitigation and monitoring to be presented in the Cultural Heritage chapter of the EIAR. The National Monuments Service confirmed during the meeting that it was satisfied with the Archaeological Impact Assessment methodology and mitigation and monitoring approach that had been presented.

The Department of Housing, Local Government and Heritage acknowledged that the design team includes a qualified Consultant Archaeologist and that archaeological desk-studies and field inspections have been conducted to inform the design process. However, the Department found that the information provided was not sufficiently detailed to allow for a full assessment of the archaeological implications of the Proposed Project.

The full details of the Archaeological Impact Assessment will be presented in the Cultural Heritage chapter of the EIAR, which will be submitted with the planning application to An Coimisiún Pleanála. The information provided in the 2023 Scoping Methodology Report (Uisce Éireann 2023) was considered to be an appropriate level of detail for Non-Statutory Consultation based on the fact that the assessment is incomplete and the Cultural Heritage chapter of the EIAR is not finalised.

The Department highlighted that an Archaeological Impact Assessment for the Proposed Project must incorporate all lands on which development may be proposed, including but not limited to, access areas, haul roads, temporary compounds, temporary storage and working areas. The Archaeological Impact Assessment must include an assessment of the possible effects of the proposal on the wider archaeological landscape.

The Archaeological Impact Assessment will cover all lands on which development may be proposed (the Planning Application Boundary) and will include an assessment of the likely significant effects of the Proposed Project on the wider archaeological landscape.

The Department further commented that the study area for the Archaeological Impact Assessment should be of sufficient size and extent to support a comprehensive assessment of the archaeological implications of the Proposed Project.

Uisce Éireann recognises the importance of ensuring that the Archaeological Impact Assessment is based on a study area of sufficient size and scope to fully assess the potential archaeological implications of the Proposed Project.

The study area for the Archaeological Impact Assessment has been defined as extending approximately 250 metres from the Planning Application Boundary to the nearest upstanding remains—or the centre—of a cultural heritage site or structure. This approach reflects professional judgement and aligns with methodologies used for other large-scale linear infrastructure projects.

This study area was clearly outlined in the 2023 Scoping Methodology Report (Uisce Éireann 2023), which was made available for public consultation which gave stakeholders the opportunity to review and respond to the proposed approach.

Uisce Éireann considers the defined study area to be appropriate and proportionate to support a comprehensive and robust archaeological assessment.

The Department commented that the Archaeological Impact Assessment must include an archaeological impact statement and propose appropriate mitigation measures to protect archaeological heritage. It should outline the potential effects of the development at all stages. National policy, as detailed in the Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland, 1999), emphasises avoiding developmental impacts on archaeological heritage. Section 171 of the Historic and Archaeological Heritage and Miscellaneous Provision Act 2023 requires public and local authorities to consider historic heritage in their functions.

The Department's assessment of potential effects, based on Table 6.5 of the Project Summary Report 2025 (Uisce Éireann 2025a), indicated significant negative impacts on several archaeological sites, including recorded monuments, non-statutory Sites and Monuments Record sites, potential enclosure sites, a burial site, and burnt mound/Fulacht Fiadh sites.

The National Monuments Service has reviewed the Proposed Project mapping and advises potential direct negative impacts on several archaeological sites. The Department advised that these sites should be fully evaluated as part of the Archaeological Impact Assessment and appropriate mitigation measures should be incorporated where negative effects are identified.

The Archaeological Impact Assessment within the EIAR will describe the likely significant effects of the Proposed Project at all stages and will include details of proposed appropriate mitigation measures to protect archaeological heritage. The Proposed Project has sought to avoid impacts to archaeological sites through pipeline routing, noting that it is not feasible for a linear project of this scale to avoid all such sites, and therefore a small number of archaeological sites would inevitably remain negatively impacted. In such cases, appropriate mitigation measures have been developed, including archaeological testing, archaeological underwater/wade assessment, and written and photographic records. Mitigation measures will be implemented to reduce effects on the archaeological, architectural and cultural heritage resource as a result of the Proposed Project.

The Department recommend using non-intrusive geophysical survey techniques at areas of high archaeological sensitivity to provide detailed information for assessing impacts and informing mitigation by design.

Detailed magnetometry surveys have been carried out within four areas of specific archaeological potential associated with the Proposed Project. Two of the areas were located within the townland of Ballyannymore (County Tipperary), with a further area in Ballyanny Lower (County Tipperary) and another in Curralanty (County Offaly). The work was carried out under licence 17R0181. Further magnetometry survey work was also carried out within the accessible parts of the proposed Termination Point Reservoir site at Peamount (County Dublin) under licence 17R0243. The results of the surveys will be described within the EIAR.

For sections of the Proposed Project passing through peatland, which has dense distributions of known wetland archaeological sites like trackways or toghers, the Department strongly advised conducting up-to-date drain surveys in addition to walkover surveys to check for archaeological sites in exposed drain section faces.

Potential mitigation measures outlined in Table 6.5 of the Project Summary Report 2025 (Uisce Éireann 2025a)[16] include pre-development archaeological underwater/wade assessments and archaeological testing. The Department recommended expanding these assessments to include geophysical surveys of suitable greenfield areas and drain surveys within peatland.

The information provided in Table 6.5 of the Project Summary Report 2025 (Uisce Éireann 2025a), published to support the Non-Statutory Consultation, relates specifically to additional steps that would be taken prior to construction for unknown archaeology. Geophysical surveys have been completed at larger areas of archaeological potential as part of the preparation of the EIAR. This geophysical survey data forms part of the wider baseline on which the EIAR will be based and there is sufficient information for a robust assessment to be made. There is always the risk of unknown archaeology being discovered during the Construction Phase and so the mitigation set out in Table 6.5 is the proposed approach for dealing with this risk, and this has been discussed and agreed with the National Monuments Service. The Proposed Project comprises approximately 172km of pipeline, and the mitigation will be managed by a Project Archaeologist for the Proposed Project.

Uisce Éireann's approach does not include drain surveys and further geophysical survey of greenfield sites, as agreed with the National Monuments Service. Underwater survey and archaeological testing will be carried out prior to construction.

The Department also advised appointing a Project Archaeologist to coordinate the mitigation strategy throughout the project's lifetime.

A Project Archaeologist will be appointed for the Proposed Project to ensure that all mitigation measures are carried out to the full and to ensure the effectiveness of the measures. The results of the archaeological testing may lead to additional mitigation, such as archaeological excavation (preservation by record) and/or monitoring. Any further mitigation will be in accordance with the usual practices/recommendations of, and agreed with, the National Monuments Service of the Department of Housing, Local Government and Heritage.

The Department commented that the development area includes waterways that may contain recorded and unrecorded underwater cultural heritage, including shipwrecks and archaeological objects.

The Department cited the National Planning Framework and National Marine Planning Framework (Government of Ireland 2021). The national policy emphasises preservation *in situ* as the preferred option.

The EIAR will include an assessment of potential watercourse crossings. The Proposed Project is not located in a maritime landscape and there are no shipwrecks in the study area.

The Department advised of specific investigations that are to be undertaken prior to applying for planning permission/consent in order to inform the engineering and architectural design of the development, the contents of the Cultural Heritage assessment in the EIAR and its attendant mitigation proposals.

The mitigation measures proposed for Cultural Heritage have been discussed and agreed with the National Monuments Service, most recently at a consultation meeting held on 27 August 2024. The

[16] https://www.water.ie/sites/default/files/2025-01/WSP_Project-Summary-Report_No-ExSum_250102_WEB.pdf

Proposed Project comprises approximately 172km of pipeline, and the mitigation will be managed by a Project Archaeologist for the Proposed Project. Geophysical surveys have been completed at larger areas of archaeological potential as part of the EIAR. Underwater surveys and archaeological testing will be carried out prior to construction. In addition, ground investigations have been carried out and these were subject to archaeological monitoring (under licence).

4.7 Landowners

4.7.1 General

The Irish Farmers Association (IFA) is actively working to protect the interests of farmers and landowners affected by the Proposed Project. They have engaged with Uisce Éireann and agreed on a memorandum of understanding to facilitate detailed discussions and negotiations. The main concerns of farmers and landowners include the economic, environmental, and social impacts of the pipeline, as well as issues related to agricultural operations, local communities, and environmental conservation. The IFA is committed to continuing its efforts to address these concerns and protect the interests of rural communities.

Consultations and engagement with landowners continue to be a key priority throughout the development of the Proposed Project. There are approximately 500 landowners along the route of the Proposed Project and engagement has been ongoing with these landowners since 2016. Regular consultation is also taking place with the main farming organisations including the IFA, and Uisce Éireann will continue to engage with the IFA throughout the planning phase, through construction, and reinstatement.

An individual stakeholder commented that the Proposed Project involves crossing private land and interruption for landowners and potential legal challenges.

Several submissions from landowners including requests for minor route amendments of the pipeline on their land to accommodate access, productivity and unrestricted animal movement.

Where requests have been received from affected landowners to have the pipeline route amended, the request has been facilitated if it:

- *It is technically feasible*
- *Has no adverse environmental impact*
- *Is acceptable to any other impacted landowners.*

Of the 140 landowner re-route requests assessed using these criteria, the outcome has been as follows:

- *50 – facilitated*
- *44 – not facilitated*
- *43 – partially facilitated*
- *3 – no re-route required.*

Ballymore Eustace CDA queried whether Uisce Éireann already purchased land at Peamount for the Termination Point Reservoir or any other land along the route.

They further commented that the land gained by acquisition should not revert back to the current property owners after the Compulsory Purchase Orders and post-construction. They commented that the pipeline route should be viewed as a strategic cross-country infrastructural route joining Limerick and the Western Region to Greater Dublin Area and could be feasible to join with another large-scale service provider.

Permanent acquisition of land will be required for the Raw Water Intake & Pumping Station in Parteen Basin, Water Treatment Plant near Birdhill, Break Pressure Tank near Cloughjordan, Booster Pumping Station in Birr, Flow Control Valve in Kildare and Termination Point Reservoir at Peamount, and where permanent access roads to these locations are also required.

In addition, land will also need to be acquired permanently for lay-bys adjacent to Line Valve locations and at some Line Valves where land needs to be raised.

It is not proposed to acquire land required for the construction of the pipeline on a permanent basis.

Instead, a "Wayleave Package" will be offered to landowners affected by the Proposed Project pipeline for acceptance on a voluntary basis in advance of the submission of the Planning Application and Compulsory Purchase Order. If a landowner agrees to the Wayleave Package, then land would not need to be acquired through compulsory purchase.

A wayleave gives Uisce Éireann the right to construct, inspect, operate and maintain the Raw Water Rising Mains, Treated Water Pipeline and associated infrastructure. In addition, certain restrictions would apply within this wayleave in order to protect the pipeline including limiting future development and restricting planting of certain species of trees.

On completion of the Proposed Project, land will generally be returned to the current landowners, following reinstatement to its pre-existing condition and use. This means the reinstatement of vegetation post-construction on a like-for-like basis wherever reasonably practicable. Linear features will also be reinstated, including hedgerows and fence lines.

4.7.2. Potential Economic Impact on Landowners

Limerick Greens and Clare County Council highlighted the potential negative impacts on farming communities in the catchment area and downstream of the abstraction point to Limerick.

Elected Members of Nenagh Municipal District commented that the Proposed Project has the potential to cause damage to hectares of agricultural land and "*the issue of CPOs* [Compulsory Purchase Orders] *on prime agricultural land and how this will affect/restrict farm families to build on the land affected by this project needs to be outlined and addressed*".

The continued operation of Parteen Basin by the ESB within its established Normal Operating Band, along with the maintenance of the existing compensation flow regime, provides a strong assurance that current hydrological and ecological conditions will be preserved. These operational commitments are critical in addressing concerns related to potential changes in water levels, flow variability, and downstream environmental impacts.

Uisce Éireann shall be responsible for restoring all ground within the working width, and any other ground disturbed by its operations, to a condition equivalent to that existing before the commencement of the works.

Uisce Éireann's preferred approach is to acquire land and wayleaves by voluntary agreement, and a "Wayleave Package" will be offered to landowners affected by the Proposed Project pipeline for acceptance on a voluntary basis in advance of the submission of the Planning Application and Compulsory Purchase Order.

Uisce Éireann's approach has been to enter discussions with landowner representative organisations at an early stage. The aim of these discussions includes the development of a Code of Practice and financial compensation terms, which will be offered to the landowner in return for consenting to a wayleave through their lands. The proposed Wayleave Package will be issued to landowners for voluntary acceptance and will address the impact on farming enterprises and operations. Landowners have been compensated for any site investigations carried out on their lands to date.

A landowner objected to the Proposed Project on the grounds that "*it would be damaging, both in the short term and in the longer term in perpetuity, not only to my farm, but also to all the other farms affected by your proposed water pipeline from the Shannon to Dublin. It will harm the environment, biodiversity, and the countryside in general, and also negatively affect climate change*".

They further cited the impact on their own farm and land and to its future use for agriculture and other permissible uses in relation to energy production and environment sustainable uses. "*Given the severe major intrusive restrictions and limitations this proposed project would have on my farm and the consequential planning restrictions in perpetuity, as well as the interference and risks such a project would have to the security and privacy of my farm and dwelling in both the short and long term, I strongly object. Additionally, it poses risks to the environment and to animal health*".

As set out above, a large number of re-routes have been accepted along the route in order to try and reduce impacts on individual land holdings. Further, Uisce Éireann has undertaken extensive engagement with landowners including agricultural interviews in order to understand the concerns of landowners and the challenges that the Proposed Project will create for those directly impacted by the proposed route of the pipeline.

Uisce Éireann acknowledges that there will be disruption for landowners during the construction. In general, a 50m wide temporary working corridor is required during the Construction Phase to build the pipeline. This will be widened for particular constraints such trenchless crossings of major roads or rivers or to facilitate construction access. There will also be a series of Construction Compounds and Pipe Storage Depots along the route.

The construction industry has established experience and techniques to reduce noise and dust disruption during construction, as far as reasonably practicable.
Sensitive receptors, such as local businesses, food production business and residential houses will be identified, and mitigation measures will be put in place where necessary to reduce disruption.

Traffic impacts will be assessed before construction of the pipeline and the associated infrastructure so mitigation measures can be incorporated into the management plans and EIAR. Traffic movements will be projected based on the calculated pipeline and materials volumes to be brought to, and removed from, the sites, based on the planning stage design.

Land Liaison Officers will keep landowners fully informed of developments and a Community Liaison Officer will be on hand to provide updates to the local community and answer any questions throughout the Construction Phase.

After construction is completed, the land can be reinstated, and agricultural practices can return. Again, it is acknowledged that there will be some restrictions on the use of the land above the pipeline, however this will be within a narrow 20m wide Permanent Wayleave.

It is also the case that a compensation package will be set out and offered to landowners in recognition of the impact that they will experience.

There will be no restriction on development outside of the 20m wide Permanent Wayleave, or on crossing of the pipeline with development roads servicing adjacent development lands outside the Permanent Wayleave.

4.8 Community Gain

Several stakeholders queried further details on the community gain proposals to advance community, educational, recreational and environmental initiatives.

Tipperary County Council welcomed the proposed Community Gain Investment Fund but emphasised that it must be substantial and ambitious. The fund should:

- Reflect the Proposed Project's size and scale
- Be in place for the Proposed Project's full operational life
- Recognise that benefits will primarily go to distant communities, businesses, and urban centres
- Increase annually with the consumer price index
- Distribute funds effectively and efficiently
- Support the Water Action Plan's objectives.

Tipperary County Council stated the fund should favour local communities, providing long-term support for sustainable projects. It should also support the local economy through sustainable tourism, environmentally friendly farming, and other innovative initiatives. The community gain process should complement existing efforts to improve water quality and involve stakeholders like Tipperary County Council, Local Authority Waters Programme, local angling clubs, ESB fisheries conservation, and IFI.

Clare County Council noted the Community Gain themes centre around Education, Environment and Economy in the locations of the Infrastructure Sites and not at the point of abstraction.

Limerick City and County Council requested clarification that communities downstream from the extraction point in villages like Castleconnell are included in the Community Gain Investment Fund.

Uisce Éireann is committed to delivering safe, secure, and sustainable water services to support the growing population and as a key enabler for investment in Ireland's future. Uisce Éireann is working to transform its water infrastructure and services in communities all over Ireland.

The Proposed Project has capacity to address water supply needs for up to 50% of the State's population through providing a new sustainable water source for the Eastern and Midlands Region. While this is a key benefit in itself, Uisce Éireann recognises that communities in proximity to the proposed infrastructure can be impacted during construction.

In recognition of this, Uisce Éireann is proposing a project-specific Community Benefit Scheme as part of the Proposed Project.

The Community Benefit Scheme aims to deliver positive supports and benefits for hosting communities within the following counties which form the study area for the Proposed Project:

- *Tipperary*
- *Offaly*
- *Kildare*
- *South Dublin*
- *Clare*
- *Limerick.*

The formulation of the bespoke Community Benefit Scheme which included extensive social research, stakeholder engagement (including with local authorities) and public consultation, identified opportunities to support socio-economic, environmental and educational progress in host communities.

Table 4.3: Proposed Project Community Benefit Scheme High-Level Overview

Categories	Objectives	Commitments
Economy	To support sustainable economic development within the project area through the provision of employment opportunities and the application of social inclusion initiatives.	Providing local employment opportunities for jobseekers (including support for long-term unemployed persons returning to work, youth unemployed, or persons entering the workforce for the first time) through the use of social procurement/social inclusion initiatives.
		Providing opportunities for SMEs and social enterprises to benefit from the delivery of the Proposed Project.
Education	To act as a thought leader and inspire students to pursue educational pathways in science, technology, engineering or maths (STEM).	Initiatives that support progression in education at all levels or which seek to encourage pathways in STEM. Support for initiatives which seek to reduce early school leaving in disadvantaged areas.
Environment	To encourage and empower thriving communities through environmental protection and enhancement.	Supports for local projects that seek to protect or enhance the natural environment including those aligned with the objectives of protecting and enhancing water bodies, water conservation and climate actions initiatives as per the objectives of the Water Action Plan, the Climate Action Plan, and the National Biodiversity Action Plan.

As part of the bespoke Community Benefit Scheme Uisce Éireann is committing to funding sustainable community development projects and initiatives, working in collaboration with the hosting local authorities.

The proposed fund will be benchmarked against similar large-scale infrastructure projects and weighted allocations will be based on quantifiable aspects of the Proposed Project and reflective of the positive gains the Proposed Project will bring for water supply and security of supply.

The highest level of impact is experienced during the five-year construction duration, and while there is no statutory obligation to do so, Uisce Éireann proposes to provide a Community Benefit Scheme during this period to offset some of the social impacts of this major infrastructure development in a fair and proportionate way.

A number of community funding models were assessed, and as Uisce Éireann considers that the local authorities are already experienced in grant-making and administration, it is proposed that the fund will be managed by the local authorities over this period with annual callouts for applications. Uisce Éireann will provide oversight and audit to ensure consistency of application funding over the five years.

This is the first community fund of its kind associated with a public water infrastructure project in Ireland. It reflects Uisce Éireann's commitment to social value and to building lasting, positive relationships with host communities.

As a publicly funded utility, Uisce Éireann must ensure that all expenditure—including community gain—is responsible, proportionate, and aligned with statutory obligations.

Proposals for a fund that extends over the full operational life of the Proposed Project or escalates annually are more typical of commercial developments. Uisce Éireann must balance community support with the need to deliver value for money for taxpayers and ensure that public funds are directed toward essential water services across the country.

Uisce Éireann considers that the Community Benefit Scheme proposes a fair and proportionate level of benefit to support the sustainable development of host communities. Uisce Éireann is committed to delivering a fair and impactful Community Gain Investment Fund and will continue to engage with local authorities and community stakeholders as the proposed scheme is implemented.

Councillor Seamie Morris suggested a Development Contribution Levy (Class 18) or an abstraction levy to ensure that Tipperary County Council benefits. This was reiterated by the Elected Members of Nenagh Municipal District.

Uisce Éireann has had extensive interactions with Tipperary County Council's Directors of Services to understand existing local community infrastructure, policy and development plans, and as a result the emerging Community Benefit Scheme proposes that a significant percentage will be allocated to Tipperary County Council. Uisce Éireann remains of the view that the funding allocation and duration should reflect the Proposed Project's impact on communities during the five-year Construction Phase rather than a fund based on an abstraction or development levy over the Proposed Project's full operational life, which is more aligned with private developer led, or profit driven, projects. Therefore, Uisce Éireann's Community Benefit Scheme will propose a more equitable and proportionate utilisation of limited public taxpayers' money.

The Cloughjordan CDA provided a submission regarding the proposed Break Pressure Tank development as follows:

- Walkway around the Break-Pressure Tank site connecting to Knockanacree Woodland trails
- Access for the Beara-Breifne Way to better connect Main Street Cloughjordan & Knockanacree with Scohaboy/Sopwell
- Addressing lighting and sound impacts
- Environmental screening and habitat surveying near woodlands
- Purchase of field area for new native woodland plantation
- Access via existing service road, no new road development along Featherbed Lane
- Consultations with Coillte Forest
- Archaeological excavations at Modreeny with local exhibition and workshops
- Artist in Residence programme during site works
- Upgrade of the local Wastewater Treatment Plant
- Enhancement of local water supply reservoir habitat
- Sponsorship for Heritage Group/Thomas MacDonagh Museum Summer School
- Uisce Éireann's official stakeholder status with Scohaboy Bog SAC and financial support for boardwalk/amenity resources.

Cloughjordan CDA highlighted Tipperary County Council's 2022 Dark Skies policy in regards public lighting. Cloughjordan CDA queried what are the lighting system plans for the Break Pressure Tank site and how will Uisce Éireann ensure there will be no wildlife disturbance and light pollution/glare from the completed facility.

Cloughjordan CDA commented about the proposed provision of walking areas around the perimeter of the Break Pressure Tank and requested field/habitat fencing to protect proposed woodlands and habitat areas from unauthorised access. They also proposed signage to explain the Proposed Project and its importance to the area.

Uisce Éireann welcome feedback from Cloughjordan CDA and will continue to directly engage with them on their community gain submission which is aligned with a recommendation in the National Environmental Health submission regarding the importance of Knockanacree Woodland trails and Healthy Ireland Initiatives. Uisce Éireann will endeavour to incorporate the community gain proposals specific to the Break Pressure Tank into the finalised Community Benefit Scheme which is still under development, and the final proposal will form part of the planning application to An Coimisiún Pleanála[17] for the Proposed Project.

Mitigation measures are being considered to avoid or reduce the environmental effects of lighting used in the Infrastructure Sites, and compounds. This will include the use of hoarding around site compounds and construction lighting designed to illuminate the working area only with minimum impact on surrounding receptors.

Ballymore Eustace CDA generally supported the Proposed Project but wants to ensure it brings real benefits to the River Liffey at Ballymore Eustace. They noted a history of issues with water services authorities, who have impacted the community with various abstractions and discharges.

A stakeholder suggested the Termination Point Reservoir at Peamount be a public amenity with access for anglers and walkers and would add a significant amenity to the Greater Dublin Area. The Peamount Hospital submission noted their concerns regarding potential construction impacts on immunocompromised patients which are acknowledged by Uisce Éireann as are the issues of providing public access to reservoirs containing treated water.

Limerick Kayak Club suggested developing a whitewater kayaking course at the extraction point in Parteen Basin. This facility could serve as a national centre for canoe slalom, rafting, and recreational kayaking, which currently doesn't exist in Ireland. Benefits include enhancing local sports facilities, promoting efficient use of resources, and boosting tourism in the area. They cited two examples: Cardiff International Whitewater Centre and Holme Pierre Point in Nottingham.

Working in collaboration with the hosting local authorities, Uisce Éireann is committing to funding sustainable community development projects and initiatives as part of the bespoke Community Benefit Scheme for the Proposed Project. Local clubs and organisations will be able to apply for funding to support community-led recreational and environmental projects.

Uisce Éireann understands the perceived amenity value suggestions and comments as follows: Parteen is the abstraction point for raw untreated water; however the basin remains under the operational control of ESB. The Peamount Termination Point Reservoir will contain treated water in a covered reservoir which would not be suitable for the introduction of angling.

Uisce Éireann has carried out a Community Gain/Impact study, initially consisting of a Socio Demographic baseline analysis, followed by a report on the existing local community infrastructure, policy and development plans. The scope of the study was primarily along the 170km pipeline route,

[17] An Bord Pleanála has been renamed to An Coimisiún Pleanála, effective June 18, 2025. This change is part of the implementation of Part 17 of the Planning and Development Act 2024. References to An Bord Pleanála in any existing legal documents or proceedings will be understood as referring to An Coimisiún Pleanála.

and a feature of the study was the interaction with the core local authorities to ensure an informed study.

A Community Benefit Scheme will accompany the planning application based on this study and which will also take into account community gain comments received in this Non-Statutory Consultation. It will propose a Community Gain Investment Fund to assist community initiatives along the pipeline route based on three focus areas: Environment, Education Economy.

Uisce Éireann welcomed suggestions from stakeholders on possible benefits which could be delivered as part of the Proposed Project to support sustainable community development. Uisce Éireann wishes to thank the individuals and organisations that provided feedback on community benefit throughout the pre-planning phase.

Research and stakeholder engagement has been undertaken to inform the formulation of a bespoke Water Supply Project Community Benefit Scheme. The scope of the study was primarily along the 170km pipeline route, and a feature of the study was the interaction with the core local authorities to ensure alignment with community development policies and plans. This identified opportunities to support socio-economic, environmental and educational progress in host communities. The greatest ccommunity impact, and gain, is during the five-year construction duration and while there is no statutory obligation to do so, Uisce Éireann proposes to provide a Community Gain Investment Fund in order to help offset Construction Phase impacts of this major infrastructure development in a fair and proportionate way.

A number of community funding models were assessed. As Uisce Éireann considers that the local authorities are already experienced in the administration of similar grant funding, it is proposed that the Community Gain Investment Fund will be managed by the local authorities over this period with annual callouts for applications. Funding allocation per local authority has been discussed with the three main counties that the pipeline affects and Uisce Éireann will provide oversight and audit to ensure consistency of application funding over the five years.

4.9 Public Consultation

4.9.1 Engagement

Stakeholders welcomed the engagement to date on the Proposed Project and emphasised the need to continue communicating with the public in an open and transparent manner for the remaining project lifecycle.

An Fóram Uisce emphasised the critical importance of public engagement, communication, and transparency in the Proposed Project's development and implementation. An Fóram Uisce recommended extensive planning for public engagement and effective communication throughout the project's lifetime. According to An Fóram Uisce, this should include educating people nationwide on water scarcity issues across Ireland, informing the public that smaller urban and rural water supplies remain a strategic priority, explaining the critical need for the Proposed Project and its widespread benefits and detailing protection measures to prevent negative impacts on local water levels and aquatic ecosystems.

A stakeholder underscored the need for a comprehensive public engagement strategy that goes beyond project implementation. It suggested incorporating education on water system vulnerabilities, promoting water conservation practices, and considering broader regional development strategies, highlighting the importance of addressing public understanding to achieve long-term water security and climate resilience.

Tipperary County Council suggested expanding the Proposed Project's public engagement strategy beyond the proposed visitor centre in Tipperary. Given the national significance of the Proposed Project, they recommended implementing an extensive communication and education programme that spans both the Construction Phase and continues after completion. The objective of this approach is to ensure that "*customers of this project are empowered to use water produced sustainability, to value the treated water as an essential public service and to understand the cost and impacts of the project*".

Salmon Watch Ireland suggested that Uisce Éireann liaise with directly with the Department of Housing, Local Government and Heritage in order to progress the Proposed Project and fulfil their environmental responsibilities.

The Southern Regional Assembly acknowledged Uisce Éireann's ongoing process of stakeholder engagement in their submission. They recognised the iterative nature of this engagement, suggesting a continuous and evolving dialogue between the parties. The Assembly also highlighted the positive collaboration that had developed between their organisation and Uisce Éireann.

Uisce Éireann has prioritised public and stakeholder engagement throughout the development of the Proposed Project. Four rounds of non-statutory consultation have been completed on previous iterations of the project, involving over 1,500 stakeholders including landowners, community groups, and public bodies. The process includes input from statutory bodies such as the EPA and various government departments.

From 7 January to 4 March 2025, an eight-week consultation on the Proposed Project was held. A comprehensive media and outreach campaign supported the consultation, including national and regional media, social media, public webinars, and six in-person events in Tipperary, Offaly, and Kildare. A virtual consultation room and a freephone line were also provided. This is further detailed in Chapter 2 of this report.

Dedicated Landowner Liaison Officers have conducted around 28 engagements per landowner along the pipeline route.

Uisce Éireann works in close coordination with the Department of Housing, Local Government and Heritage to ensure that the Proposed Project aligns with national policy, planning regulations, and environmental obligations.

Uisce Éireann continues to engage stakeholders through its National Stakeholder Forum and other initiatives. It also promotes water conservation through campaigns, school programs, Water Stewardship Programme and tools like the Conservation Calculator and the First Fix Free Scheme.

An Taisce noted the importance of ongoing public participation throughout the Proposed Project's lifecycle. They advocated regular updates to the public, particularly regarding the potential increases in capital costs. Their submission stressed the need for a two-way communication process, encouraging feedback from the public on the Proposed Project, including during the planning application. They indicated that this approach would help build trust in the Proposed Project among the public. They also suggested that proactive engagement could anticipate "*grievances and objections*" early, potentially reducing both "*litigation and subsequent project delays*".

As detailed above, Uisce Éireann has actively sought and responded to public feedback throughout the Proposed Project's development. The feedback from this consultation alongside further technical and environmental studies and engagement with landowners and other stakeholders will inform the details of the final project. This will be detailed in the Planning Application including all plans, particulars, supporting reports, EIAR and NIS to be submitted to An Coimisiún Pleanála. The activities to be undertaken as part of the process of finalising the planning application will include external stakeholders and statutory bodies working on the proposals as they are being finalised.

Ibec highlighted the importance of proactive communication efforts by Uisce Éireann regarding the Proposed Project and stressed the value of highlighting the community benefits that would result from the Proposed Project's implementation.

The community gain proposals are under development and will be finalised in consultation with the relevant local authorities. The final proposal will form part of the planning application to An Coimisiún Pleanála for the Proposed Project. Community gain is responded to in Section 4.8 of this report.

Mapping

Ballymore Eustace CDA suggested that improvements in mapping on the current design would provide a more comprehensive public understanding of the water infrastructure. This would in turn offer stakeholders a more holistic view of the Proposed Project, facilitating better understanding of the Proposed Project's scope and its integration with existing systems. Enhanced maps will support more informed decision-making and aid in effective public engagement efforts.

Enhanced mapping elements were used within the project documentation. A suite of documentation including landscape plans, site layout plans, component maps and infographics were available on the project website. An interactive map was available on the project website virtual room that allowed members of the public to zoom in on the route of the Proposed Project. A recorded presentation and webinars[18] with key members of the Project Team provided further opportunities to better understanding of the Proposed Project's scope and its integration with existing systems.

[18] To view the presentation and webinars visit https://www.water.ie/projects/national-projects/water-supply-project-east-1

Transparency

Killaloe-Ballina District Anglers Association, St. Flannan's Fishing Club, and Lough Derg Anglers called for a more transparent relationship with Uisce Éireann in future communications and engagements. The Association specifically referenced submissions from Kennedy Analysis and the Shannon Protection Alliance that queried the transparency of data used by Uisce Éireann. They called for a more transparent relationship with Uisce Éireann moving forward. The club referenced both the Kennedy Analysis, as well as the findings from the Castleconnell River Association, which claimed that the data selection in determining drought levels for the lower lake is not accurate. The Fishing Club indicated that these drought levels did not rank among the top 10 most severe for the area. The Fishing Club emphasised a lack of trust in the Proposed Project's data and analysis, and a desire for more accurate and transparent information from Uisce Éireann.

GSI is committed to providing free, open, and accurate data and maps on Ireland's subsurface to all stakeholders. Given the Proposed Project's estimated cost of €4.6 to €6 billion, which will be publicly funded, the data collected from this and similar Uisce Éireann projects should be shared with other government agencies managing Ireland's water resources. GSI noted that Ireland's hydrogeology is complex, and this project offers a unique opportunity to enhance our understanding of water resources.

Uisce Éireann acknowledges the importance of data transparency, particularly in relation to Uisce Éireann's role in managing and communicating water infrastructure projects. The drought that had the most impact upon the Lough Derg/Parteen Basin system within the 50-year period of records considered (1972 – 2023) is the drought of 2018. Modelled simulations of this drought for two constant abstraction rates (154Mld and 300Mld) predict that the water level of Lough Derg would remain within the Normal Operating Band. The size and rate of change in water level as a result of drought with the Proposed Project fits within the commonly observed water level changes seen within the 50-year period of observed levels.

Uisce Éireann welcomes the opportunity to share gathered data and insights with key stakeholders such as GSI.

Another stakeholder who attended the public event in Killaloe stated their objection to the Proposed Project and emphasised the need for more public engagement. A stakeholder requested further engagement with St. Flannan's Fishing Club as the Proposed Project progresses.

Regarding the public information event in Ballina, Co. Tipperary, a local resident attended to express their support. The stakeholder appreciated the opportunity to meet the planning team, finding them helpful and informative, and gained valuable knowledge about the Proposed Project.

Uisce Éireann welcomes the positive feedback in relation to the consultation event in Ballina. Uisce Éireann has a customer code of practice that is set by its regulator which also sets out requirements for communications. Public participation is essential to proper project development and, as such, committed throughout the development of the Proposed Project to provide continuous and responsive two-way communication with all stakeholders. All stakeholders who made a submission have been added to the mailing list and will continue to be contacted. Uisce Éireann has prioritised public and stakeholder engagement throughout the development of the Proposed Project. This is further detailed in Chapter 2 of this report.

Kennedy Analysis expressed concerns about the public consultation and engagement process related to a proposed water pipeline project over the past decade. They claim that their detailed submission from 14 March 2022 was not responded to adequately by Uisce Éireann. They warn that if their

concerns prove valid in the future and the pipeline turns out to be an ineffective solution for Dublin's water supply issues, there should be accountability for the potential waste of billions of euros in taxpayers' money.

Kennedy Analysis' submission in March 2022, as part of the Regional Water Resources Plan Eastern and Midlands public consultation, has been responded to in the consultation report found here*.*

4.10 Out of Scope

This section summarises the key references in submissions to issues under the broad theme of "*outside of the scope of this project*". Although not directly related to this consultation, the feedback has been captured and summarised and any queries forwarded to the relevant teams in Uisce Éireann.

Limerick Greens and Limerick County Council requested Uisce Éireann to explore the feasibility of connecting the proposed Water Treatment Plant at Birdhill, County Tipperary, to the Limerick City water supply scheme. They believe this connection is essential due to the lack of new water treatment infrastructure proposals for Limerick City.

Tipperary County Council emphasised the importance of maintaining and upgrading Uisce Éireann's wastewater infrastructure in towns and villages within the Lough Derg and Parteen Basin Catchment to support planned population and economic growth while protecting the receiving waters. Tipperary County Council requested that Uisce Éireann develop a roadmap for providing and managing wastewater services in settlements without current infrastructure.

Uisce Éireann is focused on delivering a sustainable, efficient, and environmentally responsible wastewater system and will work with regulators and stakeholders to develop a Wastewater Strategy Framework.

The Wastewater Strategy Framework will include plans to continue upgrading wastewater networks and facilitating separation of stormwater entering the combined system in line with requirements under the recast Urban Wastewater Treatment Directive for Integrated Urban Wastewater Management Plans which is also an action in the Water Services Strategic Plan 2050 (Uisce Éireann 2025b).

This framework will consider Developer Provided Infrastructure and unsewered towns and outline the responsibilities and standards for developers when delivering wastewater infrastructure that will ultimately be connected to the public network.

Through the National Wastewater Sludge Management Plan (Irish Water 2016b), Uisce Éireann aims to centralise and streamline sludge treatment. These hubs will help manage the 80% projected increase in sludge volume by 2040, ensuring safe and efficient processing.

Limerick is included in the Regional Water Resources Plan – Eastern Midlands (RWRP-EM) (Irish Water 2022). This plan aims to address water infrastructure requirements, including retrofitting existing networks and planning for future growth.

The RWRP-EM has considered that predicted growth of 61% in Limerick City and suburbs will be met by expansion of the existing sustainable abstraction at Clareville Water Treatment Plant.

These initiatives are part of Uisce Éireann's broader efforts to ensure the availability of safe drinking water and protect the environment from wastewater impacts.

Ibec and Medtronic welcomed further information from Uisce Éireann as to the future plans for addressing Galway's water supply and associated infrastructure.

Uisce Éireann has several strategic plans in place to address Galway's future water supply and infrastructure needs which includes developing Water Treatment Plant capacity based on the existing sustainable source of supply to the city and the surrounding area. Uisce Éireann has completed construction of a critical new intake structure on the River Corrib which will ensure a reliable, safe and

secure source of drinking water supply for Galway City and surrounding areas. Uisce Éireann, working in partnership with Galway County Council, has completed works on the Terryland Raw Water Intake Project to safeguard the water supply to homes and businesses across Galway City and surrounding areas in the county. This €14 million investment included construction of the new intake structure along the River Corrib and has now reached completion. This milestone will ensure a reliable and safe supply of drinking water.

The Regional Water Resources Plan: North West outlines a 25-year strategy to ensure a sustainable and reliable water supply for Galway and the wider North West region. The plan focuses on consolidating 119 smaller water supply systems into 81 larger, interconnected zones, upgrading 104 existing water treatment plants, constructing 10 new ones, and decommissioning 38 outdated facilities. It also targets reducing water leakage to 23% of regional demand through improved pressure management and asset replacement. Additionally, 692km of trunk mains will be laid to enhance supply resilience and support regional growth and economic development.

These measures are designed to improve water quality, ensure a reliable supply, and support growth and economic development in Galway and the broader North West region

Wastewater treatment capacity issues were highlighted by several stakeholders. Deputy Mattie McGrath commented there are wastewater treatment facilities which are at capacity or over capacity, with some areas still without any treatment facility. Deputy McGrath sought increased funding from Uisce Éireann to address wastewater treatment capacity.

Ballymore Eustace CDA raised the following queries:

- Wastewater Treatment Plants: Number of plants in the area and their discharge of rivers
- Fines and Non-Compliances: Details of fines and non-compliances against Uisce Éireann since 2014 from IFI and EPA
- Capital Investment: Level of capital investment in water services infrastructure since 2014
- Specific Water Treatment Plants: Information on Wastewater Treatment Plants in Nenagh, Tullamore, Mullingar, Carlow, and others needing significant intervention like Glenary/Clonmel and Mallow Wastewater Treatment Plant at Ballyellis.

Enterprise Ireland commented that Wastewater Treatment Plants must provide adequate capacity to operate continuously without service interruption.

Uisce Éireann is responsible for Ireland's water and wastewater infrastructure, which includes over 1,700 Water and Wastewater Treatment Plants, over 4,000 pumping stations, and 90,000km of pipes. Despite the scale of this network, and the age and condition of much of the infrastructure it inherited, Uisce Éireann has in the past decade delivered improvements across all areas of water services. Compliance with environmental regulations for both water and wastewater are at higher levels than ever before, and new operating standards introduced by Uisce Éireann have been critical in addressing risks and minimising incidents impacting public health and the environment.

Given the scale of investment needed, identifying key priorities for investment has enabled Uisce Éireann to make significant progress in improving water and wastewater services. Highlights include 136 new Wastewater Treatment Plants built or upgraded since 2014, and raw sewage discharges have been eliminated in 35 locations.[19] Uisce Éireann recognises that challenges exist given the age of some of the infrastructure and the scale of investment needed. Many treatment plants were built decades

[19] Completion of Arklow Wastewater Treatment Plant marks 35 locations where raw sewage discharges have been eliminated as of the publication of this report https://www.water.ie/projects/national-projects/eliminating-raw-sewage

ago and may not have been designed to meet today's environmental standards. This makes them more susceptible to equipment failures, operational issues, and accidental discharges. Uisce Éireann acknowledges and regrets that there have been several incidents of discharges from treatment plants which have had an environmental impact. Such incidents are not acceptable, and Uisce Éireann is committed to minimising the recurrence of such incidents in the future.

To achieve this, Uisce Éireann is investing in modernising and upgrading its infrastructure, including replacing outdated equipment and improving treatment processes. This includes much greater oversight and monitoring of water infrastructure through the introduction of telemetry which has resulted in an increase in the reporting of incidents. Previously, many such incidents may have gone unreported due to the absence of standardised reporting and oversight processes. This enhanced monitoring has also enabled Uisce Éireann to identify risks and prioritise investment in areas where it is needed most.

Uisce Éireann has made significant progress in improving compliance and addressing under investment in Ireland's water and wastewater infrastructure. In 2023, Uisce Éireann invested €1.2 billion in water and wastewater services, and estimates it will require a minimum investment of €55-€60 billion up to 2050 to enable growth, improve compliance and increase the resilience of its assets.

Uisce Éireann will work with regulators and stakeholders to develop a Wastewater Strategy Framework. The Wastewater Strategy Framework will include plans to continue upgrading wastewater networks and facilitating separation of stormwater entering the combined system in line with requirements under the recast Urban Wastewater Treatment Directive for Integrated Urban Wastewater Management Plans which is also an action in the Water Services Strategic Plan 2050 (Uisce Éireann 2025b).

Ballymore Eustace CDA requested the status of the following Wastewater Treatment Plant infrastructure:

- *Birr: EPA – D0109-01 – Is the Little Brosna upstream of Parteen? Have the flows from this Water Treatment Plant been accounted for in the Uisce Éireann Parteen abstraction proposal.*
- *Tullamore EPA – D0039-01: Agglomeration. The discharge is also upstream of Parteen abstraction point. Have the flows from this Water Treatment Plant been accounted for in the Uisce Éireann Parteen abstraction proposal.*

The RWRP-EM is the Regional Water Resources Plan relevant to the Proposed Project (Irish Water 2022). The RWRP-EM was adopted by Uisce Éireann in Autumn 2022 following public consultation, and applied the methodologies set out in the NWRP Framework Plan (Irish Water 2021a) to identify the water supply needs of the Eastern and Midlands Region and develop the preferred approaches to resolve them. That process included the consideration of all existing resources upstream of Parteen Basin. Future supplies within the Water Supply Area, including the infrastructure associated with these, will be subject to future projects brought forward by Uisce Éireann.

Uisce Éireann has assessed the impact of treated wastewater discharges from upstream agglomerations and found no significant risk to water quality at Parteen Basin. Analysis of raw water at this location confirms it meets the necessary standards for potable supply following treatment. Therefore, Parteen Basin is considered a suitable and sustainable source for the Proposed Project.

An individual stakeholder commented that the failure to address systematic water leaks is a major planning deficiency. They highlighted a key issue that has not been properly assessed is the geotechnical and hydrological impact of large volumes of treated water leaking into the ground beneath Dublin. Such impacts may include the following:

- Sinkholes and Ground Subsidence: Continuous water seepage can dissolve geological materials, leading to the collapse of roads, pavements, and buildings
- Weakening of Building Foundations: High water tables from leaks can weaken foundations, especially in older structures, increasing the risk of structural failures
- Sewer and Infrastructure Failure: Leaks can overload wastewater systems, increase pollution risks, and exacerbate pipe bursts
- Groundwater Contamination: Continuous leakage can cause cross-contamination between clean water and polluted subsurface water, posing public health risks**.**

Before proposing any new water abstraction scheme, Uisce Éireann should:

- Develop a citywide geospatial model to map active leaks, water loss volumes, and their hydrological effects
- Conduct ground stability risk assessment, including sinkhole formation and structural impacts on buildings
- Quantify the economic cost of continued leaks versus targeted repairs
- Compare the carbon footprint of large-scale leak reduction programs with the energy-intensive Proposed Project.

Uisce Éireann acknowledges the stakeholder's concern regarding the potential geotechnical and hydrological consequences of persistent treated water leakage in the Greater Dublin Area, including risks such as ground subsidence, structural instability, and groundwater contamination.

Uisce Éireann recognises that leakage management is a critical component of sustainable water resource planning. As outlined earlier, national leakage rates have already been reduced from 46% in 2018 to 37% in 2022, with further reductions from current levels targeted both nationally and in the Greater Dublin Area. This progress reflects a sustained investment in active leak detection, pressure management, and mains rehabilitation.

While a leakage rate of 20% in the Greater Dublin Area still represents a considerable volume of water, it must be viewed in the context of the scale and complexity of the Greater Dublin Area Water Supply Zone. Given the extensive distribution network and the geological characteristics of the region, the risk of subsidence and associated impacts remains limited. Uisce Éireann continues to monitor and manage these risks as part of its integrated approach to water supply resilience and infrastructure sustainability.

Regarding the specific risks raised:

- *Ground Stability and Sinkholes: The EIAR includes geotechnical assessments for the Construction and Operational Phases of the Proposed Project.*
- *Foundation and Infrastructure Risk: The Proposed Project's design phase includes structural risk assessments for pipeline corridors and urban interfaces. These assessments are being updated to reflect stakeholder feedback and emerging data from hydrological modelling.*
- *Groundwater Contamination: Uisce Éireann's abstraction and treatment protocols are governed by EPA standards. While treated water leakage is not typically a contamination source, Uisce Éireann agrees that interactions with polluted subsurface water merit further study. This will be addressed through the ongoing Strategic Environmental Assessment Monitoring process and the NWRP implementation.*
- *Leakage vs. New Supply: The stakeholder's suggestion to compare the carbon and economic costs of leak reduction versus new abstraction aligns with the principles of the NWRP. A multi-criteria assessment, including a cost-benefit analysis of leakage reduction, is already embedded in the Preferred Approach selection process.*

Uisce Éireann appreciates the stakeholder's detailed and constructive input and welcomes these recommendations. Uisce Éireann is already progressing in many of these areas:

- *Leak Mapping: Uisce Éireann is expanding smart technologies like district metering and acoustic sensors to build a detailed, data-driven understanding of leakage across the network.*
- *Ground Stability: Geotechnical and hydrogeological assessments are standard in major projects, including the Proposed Project, to manage risks like subsidence and structural impacts.*
- *Leakage Economics: Uisce Éireann continuously assesses the cost-benefit of leak repairs versus water loss, balancing economic efficiency with long-term sustainability.*
- *Carbon Footprint: Uisce Éireann is integrating carbon accounting into project planning and will compare the emissions of leakage reduction with those of the Proposed Project as part of Uisce Éireann's net zero strategy.*

These efforts reflect Uisce Éireann's commitment to sustainable, resilient, and evidence-based water supply planning.

5 Next Steps

Uisce Éireann plans to seek planning permission from An Coimisiún Pleanála to construct and operate the Proposed Project. The planning application, including all necessary plans, reports, and environmental assessments, will be submitted to An Coimisiún Pleanála in 2025. Additionally, applications for a Compulsory Purchase Order will be submitted to secure consent for building and operating the Proposed Project.

References

Department of Environment, Climate and Communications (2024). National Adaptation Framework – Planning for a Climate Resilient Ireland 2024.

Department of Housing, Local Government and Heritage (2021). Roadmap for the Lower River Shannon – Provision of Expert Advisory Services regarding Fish Migration in the Lower River Shannon Catchment.

Eastern and Midland Regional Assembly (2019). Regional Spatial and Economic Strategy, Eastern and Midlands Region 2019-2031. [online] Available at: https://www.emra.ie/rses-download/EMRA-RSES.pdf [Accessed 6 October 2025].

Environmental Protection Agency (EPA) (2020). National Risk Assessment of Impacts of Climate Change: Bridging the Gap to Adaptation Action. Report No. 346.

Environmental Protection Agency (EPA) (2022). Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.

Environmental Protection Agency (EPA) Water Quality Report (2023).

Environmental Protection Agency (EPA) (2025). National Climate Change Risk Assessment.

European Benchmarking Cooperation, publi*c* report of the international water benchmark (2013).

Gilbert, G., Stanbury, A. and Lewis, L. (2020). Birds of Conservation Concern in Ireland 4: 2020–2026.

Government of Ireland (1999). Framework and Principles for the Protection of the Archaeological Heritage.

Government of Ireland (2020). A Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020-2025.

Government of Ireland (2021). National Marine Planning Framework.

Government of Ireland (2023). Ireland's 4th National Biodiversity Action Plan 2023–2030.

Government of Ireland (2024a). Ireland Climate Action Plan 2024.

Government of Ireland (2024b). Water Action Plan 2024 – A River Basin Management Plan for Ireland.

Government of Ireland (2025). National Planning Framework – First Revision.

Health Protection Surveillance Centre (2018). National Guidelines for the Prevention of Nosocomial Aspergillosis.

Institute of Air Quality Management (2024). Guidance on the Assessment of Dust from Demolition and Construction.

Irish Water (2016a). Water Supply Project Eastern and Midlands Region – Final Options Appraisal Report.

Irish Water (2016b). National Wastewater Sludge Management Plan.

Irish Water (2021a). National Water Resources Plan – Framework Plan. [online] Available at: https://www.water.ie/sites/default/files/projects/strategic-plans/national-water-resources/2.-NWRP-Framework-Plan_For-Final-Adoption_2021_05_25.pdf [Accessed 6 October 2025].

Irish Water (2021b). National Water Resources Plan – Framework Plan, Technical Appendix K Residuals.

Irish Water (2022). Regional Water Resources Plan – Eastern and Midlands Plan. [online] Available at: https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/eastern-midlands [Accessed 6 October 2025].

National Competitiveness and Productivity Council (2024). Ireland's Competitiveness Challenge 2024.

National Disease Surveillance Centre (2002). National Guidelines for the Prevention of Nosocomial Invasive Aspergillosis During Construction/Renovation Activities.

National Parks and Wildlife Service (NPWS) (2020). The Habitats of Cutover Raised Bog, George F. Smith & William Crowley, Irish Wildlife Manual 128.

Regional Waste Management Planning Offices (2024). National Waste Management Plan for a Circular Economy 2024–2030.

TA Luft guidelines - Environmental Protection Agency Office of Environmental Enforcement (OEE) Air Emissions Monitoring Guidance Note (AG2) 2021.

Tipperary County Council (2022). Public Lighting Policy 2022.

Tipperary County Council (2023). Tier 1 Climate Change Risk Assessment.

Tipperary County Council (2024). Tipperary Climate Action Plan 2024–2029.

Transport Infrastructure Ireland (TII) (2022). Air Quality Assessment of Specified Infrastructure Projects – Overarching Technical Document (PE-ENV-01106).

Uisce Éireann (2023). Scoping Methodology Report. [online] Available at: https://www.water.ie/sites/default/files/2024-12/Scoping-Methodology-Report-A04-Clean.pdf [Accessed 6 October 2025].

Uisce Éireann (2024a). Water Supply Project Eastern and Midlands Region – Preliminary Business Case. [online] Available at: https://www.water.ie/sites/default/files/2024-06/22122023%20WSP%20PBC%20Final%201.4.pdf [Accessed 6 October 2025].

Uisce Éireann (2024b). Strategic Funding Plan 2025–2029.

Uisce Éireann (2025a). Water Supply Project Eastern & Midlands Region – Project Summary Report 2025. [online] Available at: https://www.water.ie/sites/default/files/2025-01/WSP_Project-Summary-Report_No-ExSum_250102_WEB.pdf [Accessed 6 October 2025].

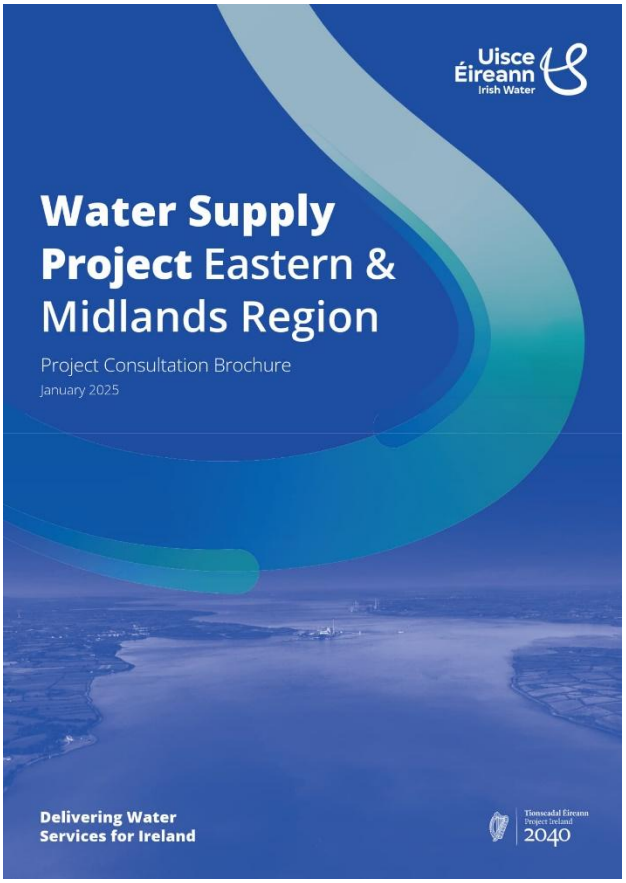
Uisce Éireann (2025b). Water Services Strategic Plan 2050.

Uisce Éireann 2021 Biodiversity Action Plan.

World Wildlife Fund (2020). Living Planet Report.

World Wildlife Fund (2021). The World’s Forgotten Fishes.

Appendix A Consultation Brochure



Water Supply Project Eastern and Midlands Region | Project Consultation Brochure

Project Background

Uisce Éireann's purpose is to rise to the challenge of delivering transformative water services that enable communities to thrive.

The Water Supply Project Eastern and Midlands Region ('The Proposed Project') is a generational project and is the first major 'new source' infrastructure in the region in the last 60 years.

It will deliver a safe, secure, sustainable source of water supply necessary to support our growing population and economy, including the demand for housing. It is a project that will enable us to adapt to the effects of climate change by diversifying our water supply sources.

It will provide improved levels of service for the Eastern and Midlands Region, including the provision of a resilient water supply for the Greater Dublin Area (GDA), infrastructure with capacity for offtakes to serve communities in Tipperary, Offaly and Westmeath along the route, and the capability to promote balanced regional development across the Region. It will also enable the redirection of water supplies currently serving Dublin to the counties of Louth, Meath, Wicklow, Carlow and Kildare.

1

Uisce Éireann

Need for a sustainable water supply for the Eastern and Midlands Region

Water Supply Deficit

The Greater Dublin Area is already experiencing a deficit in the reliability of drinking water supply. In recent years this has resulted in widespread outages due to seasonal weather events. In the broader Eastern and Midlands Region, total demand is projected to increase by approximately 10%, driven by a 25% rise in the regional population. If no action is taken, the water deficit in this region will grow significantly. By 2044, it is estimated that 34% more water will be needed than is currently available.

The lack of a new water source will have severe consequences for the region. In some areas, this could mean restrictions on housing or commercial water supply connections for new customers by the end of the decade. Additionally, existing customers will face more frequent water supply outages and restrictions over time.

Sustainable Abstraction

Currently a single source, the River Liffey, supplies 85% of the water requirements for 1.7 million people in the Greater Dublin Area, comprising Dublin and parts of Meath, Kildare and Wicklow. In addition, 67% of the water resource zones in the Eastern and Midlands Region are unable to provide adequate reliability to our customers. Overdependence on one source is a critical weakness in the water supply and action must be taken to ensure the Eastern and Midlands Region's water supply can meet current and future demand.

Furthermore, a new abstraction licensing regime to comply with the Water Framework Directive, may also reduce the amount of water which we can abstract from these existing water sources, in the future.

Lack of Resilience

The Water Supply Project is designed to address the vulnerabilities in the current water supply system. By introducing a new water source from Parteen Basin on the River Shannon, the project aims to diversify the water supply, thereby enhancing resilience against climate change and other potential disruptions.

Leakage reduction is a significant component of Uisce Éireann's strategy to improve water supply efficiency with a national target to reduce leakage to 25% by 2030. In the Greater Dublin Area, the goal is even more ambitious, aiming to bring leakage down to below 20% by 2030. Fixing the leaks is only part of the solution however, as it will not address the situation of a growing water supply deficit and lack of supply resilience.

2

Climate Change

Climate change will increase pressure on existing water supplies by reducing availability and increasing the likelihood of droughts. Therefore, a new water supply is essential to reduce the vulnerability of these supplies to climate change.

The Proposed Project will create a water spine across the country. It will develop a new, climate-resilient, long-term water source to meet the demands of a growing population and economy, including the need for housing and help us to adapt our water supplies to the effects of climate change.

Population and Economic Growth

The population of the Eastern and Midlands Region is expected to grow by 26% by 2044 increasing demand for water services. The Water Supply Project will deliver a secure, climate resilient supply of water with the capacity to serve up to 50% of the State's population. It will facilitate increased demand for housing, enable sustainable economic growth and support competitiveness across the Region.

What are the Benefits of the Proposed Project?

IMPROVED LEVELS OF SERVICE
to homes and businesses in the Region

Capacity to create a **SUSTAINABLE CLIMATE CHANGE RESILIENT** water supply for up to **50% OF THE POPULATION OF THE STATE**

Infrastructure with capacity for offtakes to supply communities and industry in **TIPPERARY, OFFALY AND WESTMEATH** along the route

MEET THE WATER SUPPLY DEMANDS
of population, housing and economic growth

Greater resilience against the impact of **CLIMATE CHANGE** through climate adaptation and the provision of a new, sustainable source of water supply.

MEET THE DEMAND FOR WATER
within the GDA Water Resource Zone to 2050 and beyond;

INCREASED RESILIENCE AND SUSTAINABILITY
in the water supply through diversification of sources to Louth, Meath, Kildare, Wicklow and Carlow and a new water supply with capacity to serve communities along the route in Tipperary, Offaly and Westmeath in the future.

The Proposed Project

The potential solutions to the water supply needed in the Eastern and Midlands Region including the Greater Dublin Area have been under review for over 25 years. Hundreds of options have been considered to date.

The preferred solution is a new source of water supply from the River Shannon with the capacity to address the water supply demand deficits and improve supply resilience and levels of service in the region.

The abstraction will be from Parteen Basin, upstream of Parteen Weir and will come from water currently used by ESB to generate power at Ardnacrusha. The maximum volume of water taken by the Proposed Project will be 300 million litres a day which will be less than 2% of the average flow in the River Shannon at Parteen Basin.

It is proposed raw water will be abstracted at an intake site on the eastern shore of Parteen Basin, Co Tipperary and transferred 2km by pipeline to a water treatment plant near Birdhill. It is proposed that treated water will then be piped 170km through a 1.6m diameter steel pipeline through counties Tipperary, Offaly and Kildare to a termination point reservoir at Peamount in Co. Dublin, connecting into the Greater Dublin Area water supply network.

50%

The Proposed Project infrastructure has the capacity to meet the water supply needs of up to 50% of the State's population.

2%

The volume of water taken by the Proposed Project will equate to a maximum 2% of the long term annual flow of the River Shannon at Parteen Basin, the longest river in the country.

- Raw Water Intake and Pumping Station on the eastern shore of Parteen Basin, Co. Tipperary,
- Water Treatment Plant located in the townland of Incha Beg in Co. Tipperary, 2.6km north-east of the village of Birdhill.
- Break Pressure Tank near Cloughjordan, Co. Tipperary,
- Booster Pumping Station east of Birr, Co. Offaly,
- Flow Control Valve near Hazelhatch, Co. Kildare,
- Termination Point Reservoir at Peamount, Co. Dublin.

The Proposed Pipeline Route

Water Supply Area that the Proposed Project provides the capacity to supply

Pipeline Construction

The 172km route of the pipeline will run largely through open countryside and construction will generally be by open cut trench. A construction working width will be temporarily required for the period of construction of the pipeline. The fenced off working width will generally be 50m in width and will be wider at features such as road, rail and river crossings, access and egress points from the public road network and Pipe Storage Depots.

A 20m wide permanent wayleave will be required to facilitate access to and maintenance of the pipeline post construction.

There will be nine construction compounds to support this work and five of these will be at the locations of the proposed Infrastructure Sites. The construction of the permanent infrastructure at the infrastructure sites will take up to five years with the longest programme being the at the Water Treatment Plant. The construction will be different at each site but will generally include construction access, site clearance and preparation, earthworks and construction of the on-site buildings. At the end of the construction there will be demobilisation and reinstatement including on-site planting.

Operation of the Proposed Project

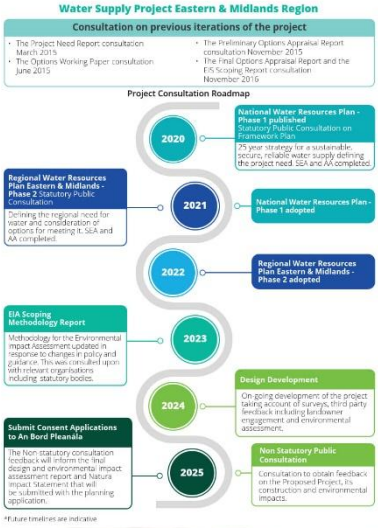
A combination of pumping and gravity will be used to move the water through the pipeline. Raw water will be pumped 2km from the Raw Water Intake and Pumping Station to the Water Treatment Plant. Treated water will be pumped for the first 37km of the pipeline from the Water Treatment Plant to the Break Pressure Tank. The Break Pressure Tank is designed to be located at the high point along the pipeline and so from there the water will usually flow by gravity along the remaining 133km to the Termination Point Reservoir. This has been done to reduce the energy needed to move water through the pipeline and will therefore, reduce energy used during operation.

At times when the volume of water needed is higher, the water will be pumped through the pipeline from the Booster Pumping Station to the Termination Point Reservoir. The Booster Pumping Station provides the capability for this additional pumping, when it is required.

The volume of water that needs to be abstracted on a particular day will be dictated by water usage in the Eastern and Midlands Region and the predicted short term demand. By 2050 up to 300 Million litres a day can be abstracted and this will provide the capacity to supply up to 36 water resource zones in the Eastern and Midlands Region.

What is happening now?

Uisce Éireann is asking stakeholders and all interested parties to provide feedback on the proposed Water Supply Project Eastern and Midlands Region in advance of Uisce Éireann submitting a planning application to An Bord Pleanála later this year.



How can I get involved?

The purpose of the consultation is to provide an opportunity to give feedback on the proposed Water Supply Project Eastern and Midlands Region. The public consultation will run for a minimum of eight weeks.

To make a submission please send it to us by email, feedback form or post by 4 March 2025. Stakeholders can use the following questions to guide their feedback. However, this is just an aide, and all relevant submissions received in response to the consultation will be considered.

We will also host two public information webinars on the proposed Water Supply Project during the consultation period. You can register for these events by visiting **www.water.ie/watersupplyproject** or contact the project team for details.

Consultation Questions

1. What are your thoughts on the potential benefits of the Proposed Project?
2. Do you have any feedback on the key infrastructure components of the Proposed Project, such as the water intake and pumping station, pipelines, water treatment plant, storage reservoir, booster pumping station and break pressure tank?
3. What are your views on the proposed construction approach, including the use of identified roads for construction traffic, and the locations of temporary storage and working areas?
4. Can you provide any comments on the potential environmental impacts of the Proposed Project and the measures proposed to mitigate these impacts?
5. Are there any additional comments you would like to share regarding the Proposed Project?

The feedback received in response to this consultation will be used to inform the design and accompanying environmental reports in advance of submitting a planning application to An Bord Pleanála.

Drop-In Public Information Events

LOCATION	VENUE	DATE
Ballina	Lakeside Hotel	Wednesday 15th Jan
Nenagh	Abbeycourt Hotel	Thursday 16th Jan
Tullamore	Tullamore Court Hotel	Wednesday 22nd Jan
Birr	The County Arms	Thursday 23rd Jan
Johnstownbridge	Hamlet Court Hotel	Tuesday 28th Jan
Maynooth	Glenroyal Hotel	Wednesday 29th Jan
Webinar 1	Online	Friday 7th Feb
Webinar 2	Online	Tuesday 18th Feb

Uisce Éireann
Irish Water

Get in touch

watersupply@water.ie
ROI: 01 2027770
If you would prefer to write to us, please send any correspondence to:
Water Supply Project, PO Box 13748, Dublin 16
Consultation closes on 4 March 2025

Delivering Water Services for Ireland

Appendix B Consultation Events

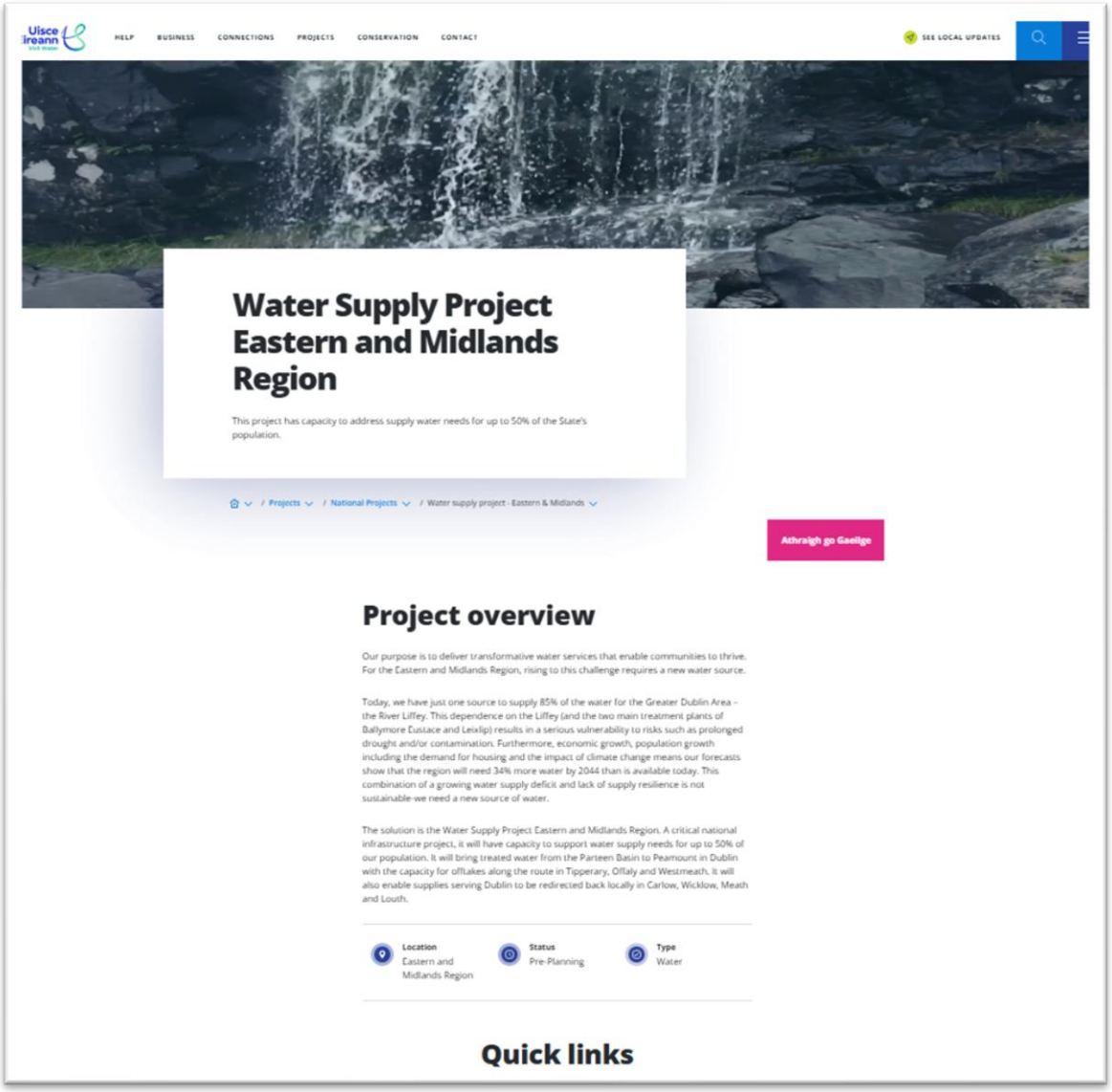
Picture 1 Ballina Consultation Event

Picture 2 Ballina Consultation Event

Picture 3 Ballina Consultation Event

Picture 4 Maynooth Consultation Event

Appendix C Project Website



Appendix D Sample Factsheets

FACTSHEET

Uisce Éireann
Irish Water

The Water Treatment Module Buildings will be approximately 141m long, 59m wide and 13m high. The Sludge Storage Silo will be the tallest building on site at approximately 14m tall.

In addition to the Water Treatment Plant buildings there will be a series of buildings needed for other treatment processes including the chemical and UV dosing. There will also be Sludge Dewatering and Storage Buildings, the High Lift Pumping Station and five surge vessels.

A Visitor Centre will be located at the southern end of the Control Building and will contain a reception area and foyer, lecture theatre, display / exhibition area and offices. The Visitor Centre has been included in the design following consultation with the local authority and will be used for pre-arranged events such as school visits.

The site will be permanently staffed with operations controlled from a Control Building, which will include laboratories, a workshop, storage, and welfare facilities for operational staff. The Control Building will be approximately 73m long by 30m wide and 10m high. A new electricity substation, with associated switch gear, will also be required. There will also be a new access road, perimeter fencing, site drainage and buried pipes.

The permanent land take for the proposed site will be approximately 29.3 hectares, including the access road.

How will the Water Treatment Plant be built?

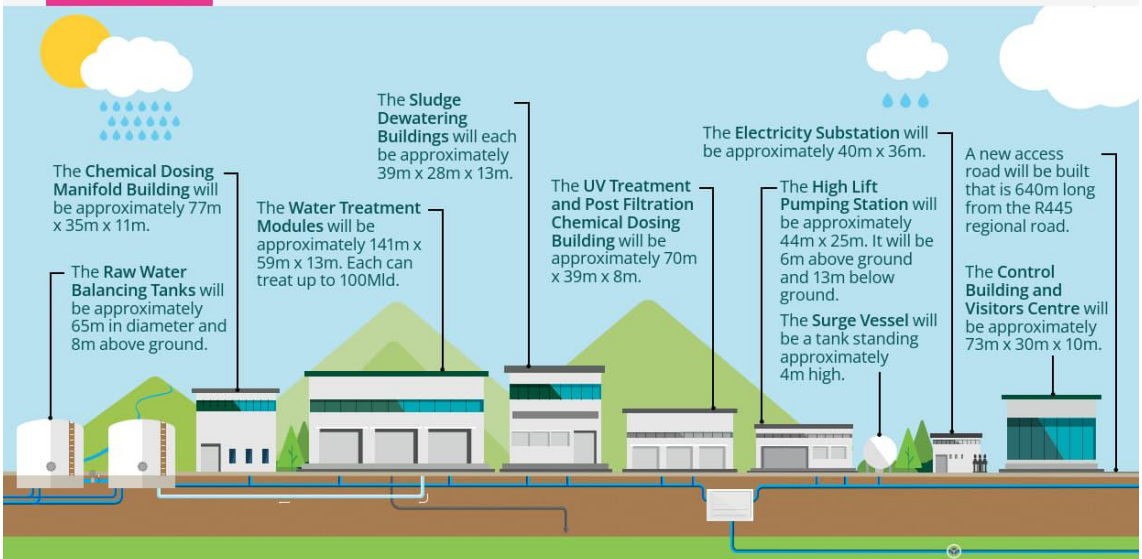
Construction will last approximately 5 years between site establishment and demobilisation. During this period the WTP site will also be used as a principal construction compound.

The proposed construction sequence includes:

- Site preparation works.
- Topsoil stripping.
- Phased earthworks to achieve the required ground level across the site.
- Installation of site drainage and construction of Tank Draindown Management and Commissioning Lagoons.
- Construction of Raw Water Balancing Tanks, Chemical and UV Dosing Manifold Building and temporary water treatment facility.
- Construction of Backwash Water Tank and Pumping Station, Clear Water Storage Tanks and High Lift Pumping Station.
- Construction of filters, tanks and settlement areas.
- Construction of Water Treatment Module Buildings.
- Construction of Sludge Dewatering Buildings.
- Construction of Sludge Storage Buildings.
- Site works, landscaping and boundary treatment.

The total area of land required temporarily for the construction of the site is approximately 31.8 hectares.

KEY FACTS



The permanent land take required for the WTP will be approximately 29.3 hectares (including the access road)

Get in touch watersupply@water.ie 01 202 7770 Water Supply Project, PO Box 13748, Dublin 16

FACT SHEET

Uisce Éireann
Irish Water

Water Supply Project Eastern and Midlands Region

Ancillary Pipeline Features and Flow Control Valve

Overview

The ancillary features of the pipeline are needed to facilitate the operation of the pipeline including any planned maintenance.

What are the ancillary features of the pipeline?

System Control – the overall pipeline system control will be located at the Control Building at the Water Treatment Plant in Birdhill and monitored remotely by Uisce Éireann National Operations Management Centre.

Line Valves – There will be approximately 50 line valves along the length of the pipeline. They will be below ground and will enable sections of the pipeline to be isolated, drained and refilled for maintenance purposes. There will be an above ground kiosk at each line valve containing an actuator, power connection and telemetry.

Lay-Bys – At each of the line valves there will be a lay-by to provide safe parking for planned periodic maintenance. The above ground kiosk will be adjacent to the lay-by.

Example of a valve control kiosk

Example of below ground valves

Example of a kiosk and lay-by

Safeguarding our water for our future

FACTSHEET

Washout Valves – The washout valves will be located at every low point along the pipeline. There are approximately 200 of these along the route of the pipeline. These will be used to empty sections of the pipeline, if this is required. This is expected to be a very rare occurrence and will only be for emergency repairs or possibly for cleaning, perhaps every 20 to 30 years.

Example of a washout

Air Valves – These will located at high points along the pipeline to allow air to be managed for efficient operation. There are approximately 300 of these proposed along the pipeline.

Example of a typical air valve

Flow Control Valve (FCV) – There will be one larger, specific valve approximately 5km west of the Termination Point Reservoir, at Newtown, County Kildare. The purpose of the FCV is to control the flow of water arriving at the Termination Point Reservoir.

The FCV site will consist of three 700mm diameter valves and three flow meters installed in parallel with the line valve, housed within an underground chamber. These will provide fine control of the flows in the Treated Water Pipeline.

There will be a permanent power supply to the site via a combination of overhead lines and buried cables routed to a control kiosk on the site. Two other kiosks at the FCV site will house the control Programmable Logic Controller, telemetry and the actuators for the Line Valve. This site will have a permanent above ground compound with 2.4m high palisade fencing. Permanent access with be from the L1016 Commons Road Upper. The permanent land take for the proposed site will be approximately 0.4 hectares.

Power connections – There will be a permanent power connection to each line valve and to the Infrastructure Sites. Two of these connections are larger than the others. For the Raw Water Intake and Pumping Station Site and the Water Treatment Plant there will be an upgrade of the existing overhead 38kV power line between Ardnacrusha and Birdhill and the Ardnacrusha – Birdhill – Nenagh line. For the Booster Pumping Station there will be a new connection to Birr electricity substation.

How will the ancillary features of the pipeline be built?

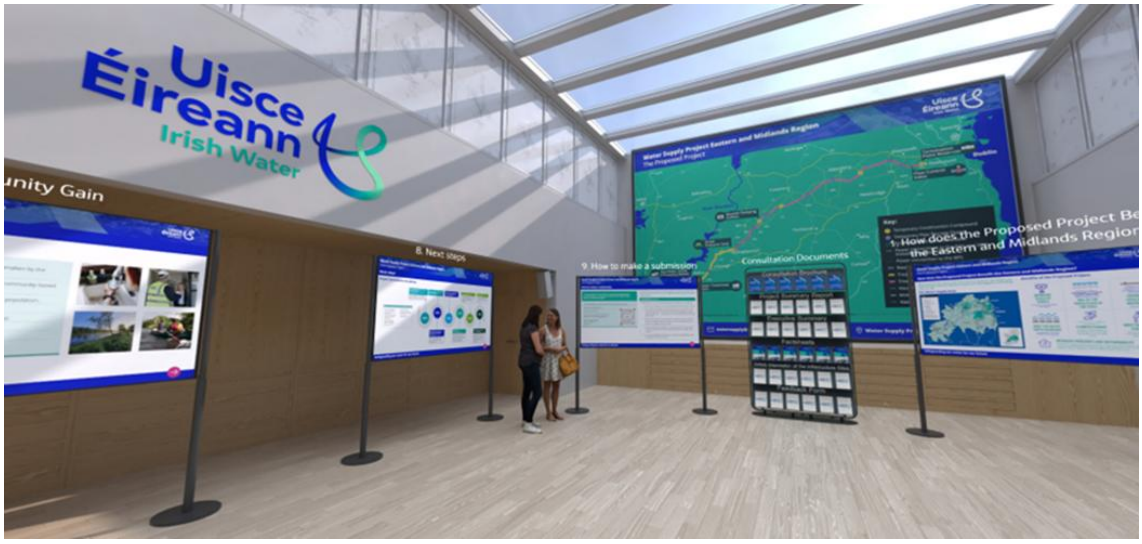
The ancillary pipeline features will be constructed as part of the be part of the overall construction of the pipeline. Generally the valves will be installed after the pipeline has been put in place toward the end of the process. Power connections are expected to be constructed by the Electricity Supply Board after the main infrastructure elements have been built.

The ancillary pipeline features will usually be constructed within the 50m Construction Working Width required to build the pipeline. There will be permanent land take associated with some of the ancillary pipeline features such as the lay-bys, kiosks and in some instances the valves.

The FCV will be built as part of the overall construction of the pipeline. The extent of the total area of land required temporarily during construction of the FCV will be approximately 0.9 hectares.

Get in touch watersupply@water.ie 01 202 7770 Water Supply Project, PO Box 13748, Dublin 16

Appendix E Virtual Room



Appendix F Stakeholder Briefings

Stakeholder	Date
ICMSA	7 February 2025
An Fóram Uisce	13 January 2025
Inland Fisheries Ireland	4 February 2025
Ibec	13 February 2025
IFA & ICMSA	20 February 2025
Dublin Chamber	18 February 2025
Tipperary County Council	13 January 2025
Fingal County Council	21 January 2025
South Dublin County Council	5 February 2025
Dún Laoghaire Rathdown County Council	6 February 2025
Offaly County Council	11 February 2025
Clare County Council	14 February 2025
Offaly County Council	17 February 2025
Kildare County Council	18 February 2025
Limerick City & County Council	24 February 2025
Wicklow County Council	3 March 2025
Tipperary County Council Councillors	13 January 2025
Fingal County Council Councillors	21 January 2025
Offaly County Council Councillors	17 February 2025
Kildare County Council Councillors	18 February 2025
An Fóram Uisce	5 November 2024
Bord na Móna	5 November 2024
Dept. of Housing, Local Government & Heritage	22 November 2024

Stakeholder	Date
Eastern & Midland Regional Assembly	22 October 2024
Dublin City Council	7 November 2024
EirGrid	8 November 2024
ESB	19 November 2024
Greater Dublin Strategic Infrastructure Group	11 November 2024
Irish Rail	6 November 2024
Inland Fisheries Ireland	30 October 2024
National Federation of Group Water Schemes	27 November 2024
Offaly County Council	12 November 2024
Tipperary County Council	25 October 2024
Waterways Ireland	21 October 2024
Westmeath County Council	23 October 2024

Appendix G Planning Counters & Libraries

Planning Counter	Library
Planning Department, Carlow County Council	Borrisokane Library
Planning Department, Cavan County Council	Cahir Library
Planning Department, Clare City Council	Carrick-On-Suir Library
Planning Department, Cork City Council	Cashel Library
Planning Department, Cork County Council Headquarters	Clonmel Library
Planning Department, Donegal County Council Headquarters	Cloughjordan Library
Planning Department, Dublin City Council	Killenaule Library
Planning Department, Dun Laoghaire Rathdown County Council County Hall	Nenagh Library
Customer Care Unit, Fingal County Council	Roscrea Library
Planning Department, Galway City Council	Templemore Library
Planning Department, Galway County Council	Thurles Library
Planning Department, Kerry County Council	Tipperary Town Library
Planning Department, Kildare County Council	Banagher Library
Planning Department, Kilkenny County Council	Birr Library
Planning Department, Laois County Council,	Clara Library
Planning Department, Leitrim County Council	Daingean Library
Planning Department Limerick City & County Council	Edenderry Library
Planning Department, Longford County Council	Ferbane Library
Customer Services, Louth County Council	Kilcormac Library
Planning Department, Mayo County Council	Tullamore Library
Planning Department Sligo County Council	Athy Community Library
Planning Department, Roscommon County Council	Ballitore Community Library
Planning Department, Offaly County Council	Castledermot Community Library

Planning Counter	Library
Planning Departments, Tipperary County Council	Celbridge Community Library
Planning Department, Monaghan County Council,	Clane Community Library
Planning Department, Meath County Council,	Clocha Rince Commuity Library
Planning Department, Wicklow County Council	Kilcock Community Library
Planning Department, Wexford County Council	Kilcullen Community Library
Planning Department, Westmeath County Council,	Kildare Town Community Library
Carrickphierish Library, Waterford	Leixlip Community Library
Planning Department, South Dublin County Council	Maynooth Community Library
	Monasterevin Community Library
	Naas Library and Cultural Centre
	Newbridge Community Library
	Rathangan Community Library
	Limerick City Library

Appendix H Stakeholder Email

Subject Line: Consultation on Uisce Éireann's Water Supply Project Eastern and Midlands Region is now live.

Dear Stakeholder,

Public consultation on the proposed Water Supply Project Eastern and Midlands Region is now underway. An eight-week consultation will run from 7 January to 4 March 2025.
The Water Supply Project Eastern and Midlands Region is a generational project and is the first major 'new source' water infrastructure in the region in the last 60 years. It will provide a safe, secure, and sustainable water supply essential for supporting our growing population and economy, including the demand for housing. It is a project that will also enable us to adapt to the effects of climate change by diversifying our water supply sources.

The Proposed Project consultation documents are available to view and download from www.water.ie/watersupplyproject

Submissions, or observations can be made up to the closing date of the consultation period, by email, feedback form or post to:

Email: watersupply@water.ie
Post: Water Supply Project, PO Box 13748, Dublin 16
Feedback Form: https://forms.office.com/r/uGUnum94j2

Stakeholders are also invited to provide feedback on the following consultation questions. However, this is just an aid, and all relevant submissions received in response to the consultation will be considered.

Question 1: What are your thoughts on the potential benefits of the Proposed Project?
Question 2: Do you have any feedback on the key infrastructure components of the Proposed Project, such as the water intake and pumping station, pipelines, water treatment plant, storage reservoir, booster pumping station and break pressure tank?
Question 3: What are your views on the proposed construction approach, including the use of identified roads for construction traffic, and the locations of temporary storage and working areas?
Question 4: Can you provide any comments on the potential environmental impacts of the Proposed Project and the measures proposed to mitigate these impacts?
Question 5: Are there any additional comments you would like to share regarding the Proposed Project?

Uisce Éireann will be holding public webinars on 7 and 18 February to answer any questions you may have that will assist you in making a submission. Registration for the briefings can be done through the following link www.water.ie/watersupplyproject
In-person events will also be held at the following locations:

Venue	Address	Date	Time
Lakeside Hotel	The Lakeside Hotel & Leisure Centre, Ballina, Killaloe, Co.Clare V94 E2D6	15th January	4pm-8pm

Venue	Address	Date	Time
Abbeycourt Hotel	Abbey Court Hotel and Leisure Centre, Dublin Rd, Nenagh, Co. Tipperary, E45 KA99, Ireland	16th January	4pm-8pm
Tullamore Court Hotel	O'Moore Street, Tullamore, Co. Offaly, Ireland	22nd January	4pm-8pm
The Hamlet Court Hotel	Hamlet Court Hotel, Johnstownbridge, Enfield, A83 WC04, Ireland	28th January	4pm-8pm
Glenroyal Hotel	Glenroyal Hotel & Leisure Club, Straffan Road, Maynooth, Co. Kildare, W23 C2V1	29th January	4pm-8pm
County Arms	County Arms, Birr, Co. Offaly, Ireland	30th January	4pm-8pm

The Proposed Project will provide Dublin, Meath, Kildare and Wicklow with a resilient, safe, secure water supply and will have infrastructure with capacity for potential future connection points to serve communities in Tipperary, Offaly and Westmeath along the route. It will promote balanced regional development by redirecting water supplies currently serving Dublin to the counties of Louth, Meath, Wicklow, Carlow, and Kildare, thereby creating new regional development opportunities.

If you no longer wish to receive updates from Uisce Éireann on the Water Supply Project Eastern and Midlands Region, please advise by return email.

Yours sincerely,
Water Supply Project Team

Appendix I Press Release

07 January 2025

Uisce Éireann has today launched a non-statutory consultation for the Water Supply Project Eastern and Midlands Region. This is a once in a generation project and is the first major 'new source' water infrastructure in the region in the last 60 years. It will deliver a safe, secure, sustainable source of water supply necessary to support our growing population and economy, including the demand for housing. It is a project that will enable us to adapt to the effects of climate change by diversifying our water supply sources. The consultation will provide all stakeholders with an opportunity to give feedback on the proposed project until the 4th of March, in advance of Uisce Éireann's submission of the planning application to An Bord Pleanála.

The Water Supply Project Eastern and Midlands Region proposes to abstract water from Parteen Basin, upstream of Parteen Weir on the Lower River Shannon, utilising a maximum of 2% of the long-term average flow at Parteen Basin. It is proposed that the water be treated near Birdhill, Co. Tipperary and treated water will then be piped 170km through counties Tipperary, Offaly and Kildare to a termination point reservoir at Peamount in County Dublin, connecting into the Greater Dublin Area water distribution network.
The project will develop a new, climate-resilient, long-term water source to meet the demands of a growing population and economy, including the need for housing, as well as enabling us to adapt to the effects of climate change by diversifying our water supply sources. This essential project will provide Dublin, Meath, Kildare and Wicklow with a resilient, safe, secure water supply. It will also create a treated water supply 'spine' across the country, providing infrastructure with the capacity for future potential future connection points to serve communities along the route in Tipperary, Offaly, and Westmeath. In addition, it will enable supplies currently serving Dublin to be redirected back to Louth, Meath, Kildare, Carlow and Wicklow, providing security of supply to homes and businesses, which will support growth and regional development.

As part of the Consultation process, Uisce Éireann will be hosting a number of public information open days at key locations along the route in Tipperary, Offaly and Kildare, in addition to online webinars. The consultation material can be viewed online in advance at water.ie/watersupplyproject where you can make a submission. The feedback received in response to the consultation will be used to inform the design and accompanying environmental reports, where appropriate, in advance of submitting a planning application to An Bord Pleanála.

Speaking about the Consultation, Director of Infrastructure Delivery at Uisce Éireann, Maria O'Dwyer said, "Water supply in the Eastern and Midlands region faces a number of serious challenges, notably the over-reliance on the River Liffey to supply 1.7 million people in the Greater Dublin Area. With forecasts showing that the region will need 34% more water by 2044 than is available today, this combination of a growing water supply deficit and lack of supply resilience is simply not sustainable. The launch of this consultation is another major milestone towards the delivery of this essential infrastructure. We look forward to further engaging with stakeholders, landowners and communities along the route to provide them with more information and an opportunity to provide feedback."

The Consultation will run from 7 January until 4 March 2025. Further information on the consultation events, webinars, Frequently Asked Questions and details on how to make a submission can be found at www.water.ie/watersupplyproject.

Appendix J Submissions Received

Submission No	Stakeholder	Stakeholder Group	Format
1	An Fóram Uisce	Environmental Authority	Email
2	Private Individual	Individual	Email
3	Ballymore Eustace Community Development Association	Community Group	Email
4	Private Individual	Individual	Email
5	Private Individual	Individual	Email
6	Private Individual	Individual	Email
7	Private Individual	Individual	Email
8	Private Individual	Individual	Email
9	Private Individual	Individual	Email
10	EirGrid	Government Agency	Email
11	ESB Generation	Government Agency	Email
12	Private Individual	Individual	Email
13	Jennings O'Donovan	Private Company	Email
14	Private Individual	Individual	Email
15	Kennedy Analysis	Private Company	Email
16	Private Individual	Individual	Email
17	Private Individual	Individual	Email
18	Private Individual	Individual	Email
19	Private Individual	Landowner	Written Form
20	Private Individual	Landowner	Written Form
21	Private Individual	Landowner	Written Form
22	Private Individual	Landowner	Written Form
23	Private Individual	Landowner	Written Form
24	Private Individual	Landowner	Written Form

Submission No	Stakeholder	Stakeholder Group	Format
25	Private Individual	Landowner	Written Form
26	Private Individual	Landowner	Written Form
27	Private Individual	Landowner	Written Form
28	Private Individual	Individual	Online Form
29	Private Individual	Landowner	Online Form
30	Private Individual	Individual	Online Form
31	Private Individual	Individual	Online Form
32	Private Individual	Individual	Online Form
33	Private Individual	Landowner	Online Form
34	Private Individual	Individual	Online Form
35	Private Individual	Individual	Online Form
36	Private Individual	Individual	Online Form
37	Private Individual	Individual	Online Form
38	Private Individual	Individual	Online Form
39	Private Individual	Individual	Online Form
40	Private Individual	Individual	Online Form
41	Private Individual	Individual	Online Form
42	Private Individual	Individual	Online Form
43	Private Individual	Individual	Online Form
44	Private Individual	Individual	Online Form
45	Private Individual	Individual	Online Form
46	Private Individual	Individual	Online Form
47	Private Individual	Individual	Online Form
48	Private Individual	Individual	Online Form
49	Private Individual	Individual	Online Form
50	Private Individual	Individual	Online Form
51	Private Individual	Individual	Online Form

Submission No	Stakeholder	Stakeholder Group	Format
52	Private Individual	Individual	Online Form
53	Private Individual	Individual	Online Form
54	Private Individual	Individual	Online Form
55	Private Individual	Individual	Online Form
56	Private Individual	Individual	Online Form
57	Limerick Kayak Club	Sports Club	Online Form
58	Private Individual	Individual	Online Form
59	Private Individual	Landowner	Online Form
60	Private Individual	Individual	Online Form
61	Shannon Rowing Club	Sports Club	Email
62	Private Individual	Individual	Email
63	Castleconnell Boat Club	Sports Club	Email
64	Private Individual	Individual	Email
65	Private Individual	Individual	Email
66	Councillor Seamie Morris / Nenagh District Councillors	Elected Representative	Email
67	Chambers Ireland	Government Body	Email
68	Dept. of Environment, Climate & Communications	Government Department	Email
69	Private Individual	Individual	Email
70	Limerick Greens	Elected Representative	Email
71	Tipperary County Council	Council	Email
72	Tony O'Brien	Elected Representative	Email
73	Irish Peatland Conservation Council	Environmental Group	Email
74	Private Individual	Individual	Email
75	Medtronic	Private Company	Email

Submission No	Stakeholder	Stakeholder Group	Format
76	Derg Outdoor Swim School	Sports Club	Email
77	Private Individual	Individual	Email
78	River Shannon Protection Alliance	Environmental Group	Email
79	Salmon Watch Ireland	Environmental Group	Email
80	St. Flannan's Fishing Club	Sports Club	Email
81	Private Individual	Individual	Email
82	Enterprise Ireland	Government Agency	Email
83	Dublin City PPN	Individual	Email
84	Private Individual	Individual	Email
85	Castleconnell River Association	Sports Club	Email
86	Pádraig McEvoy	Elected Representative	Email
87	Deputy Mattie McGrath TD	Elected Representative	Email
88	Dublin Chamber	Business Organisation	Email
89	Southern Regional Assembly	Government Agency	Email
90	IDA Ireland	Government Agency	Email
91	Dept. of Enterprise, Trade & Employment	Government Department	Email
92	Private Individual	Individual	Email
93	Eastern & Midland Regional Assembly	Government Agency	Email
94	Shannon Chamber	Business Organisation	Email
95	Lough Derg Anglers' Association	Sports Club	Email
96	Killaloe Ballina District Angers' Association	Sports Club	Email

Submission No	Stakeholder	Stakeholder Group	Format
97	Clare County Council	Council	Email
98	Portumna & District Angling Association	Sports Club	Email
99	Ormond Anglers' Association Nenagh	Sports Club	Email
100	Tullamore & District Chamber	Business Organisation	Email
101	An Taisce	Environmental Group	Email
102	Ibec	Business Organisation	Email
103	Private Individual	Business Organisation	Online Form
104	Private Individual	Individual	Email
105	Private Individual	Individual	Online Form
106	National Environmental Health Service (HSE)	Government Agency	Email
107	Limerick City & County Council	Council	Email
108	Inland Fisheries Ireland	Government Agency	Email
109	Lorrha & Dorrha Angling Club	Sports Club	Email
110	Cloughjordan Community Development Association	Community Group	Email
111	Private Individual	Individual	Email
112	Private Individual	Individual	Email
113	Garrykennedy Boat Club	Sports Club	Email
114	Garrykennedy Fishing Club	Sports Club	Email
115	Private Individual	Landowner	Letter
116	Private Individual	Individual	Letter
117	Irish Farmers' Association	Government Agency	Email

Submission No	Stakeholder	Stakeholder Group	Format
118	The Department of Housing, Local Government and Heritage	Government Agency	Email
119	Peamount Healthcare	Private Company	Email
120	Private Individual	Individual	Email
121	Private Individual	Individual	Email

Stakeholder	Total
Environmental Authority	1
Individual	62
Community Group	2
Government Agency	10
Landowner	10
Private Company	4
Elected Representative	5
Sports Club	13
Business Organisation	5
Government Department	2
Council	3
Environmental Group	4
Total	121

Appendix K Consultation Questions & Feedback Form

No	Consultation Question
1	What are your thoughts on the potential benefits of the Proposed Project?
2	Do you have any feedback on the key infrastructure components of the Proposed Project, such as the water intake and pumping station, pipelines, water treatment plant, storage reservoir, booster pumping station and break pressure tank?
3	What are your views on the proposed construction approach, including the use of identified roads for construction traffic, and the locations of temporary storage and working areas?
4	Can you provide any comments on the potential environmental impacts of the Proposed Project and the measures proposed to mitigate these impacts?
5	Are there any additional comments you would like to share regarding the Proposed Project?

Water Supply Project Consultatic
Feedback Form January 2025

January 2025

Consultation survey for Uisce Éireann's Water Supply Project Eastern and Midlands Region.

Introduction

Welcome to the survey for Uisce Éireann's Water Supply Project Eastern and Midlands Region. The purpose of the consultation is to provide an opportunity for the public and key stakeholders to give feedback on the proposed Water Supply Project Eastern and Midlands Region. The feedback received in response to this consultation will be used to inform the design and accompanying environmental reports in advance of submitting a planning application to An Bord Pleanála.

The closing date for submissions is 4th March 2025. Submissions can also be sent to us via email at watersupply@water.ie, feedback form or by post to Water Supply Project, PO Box 13748, Dublin 16.

Personal details - Optional

Uisce Eireann respects your right to privacy.

Any personal information which you volunteer will be treated securely and confidentially in accordance with the Data Protection Acts 1988 - 2018 and the General Data Protection Regulation (GDPR). For more information, visit our privacy policy online at https://www.water.ie/privacy-notice

Your submission remains anonymous and your email address will not be stored or linked to your response.

About You

The information you give us in this section is confidential and will help us to understand the views of different groups, and to check if services are being delivered in a fair and accessible way.

1. I am making this submission in my capacity as a ...

- ◯ Member of the public
- ◯ Environmental Group
- ◯ Statutory Organisation
- ◯ Student
- ◯ Residents' Association / Community Group Organisation
- ◯ Landwoner
- ◯ Elected Representative
- ◯ Other

2. If you are a landowner please provide your Eircode (optional).

3. How many people live in your household?

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5+

4. Which age group do you belong to?

- ◯ 15-24
- ◯ 25-29
- ◯ 30-39
- ◯ 40-49
- ◯ 50-64
- ◯ 65 and over
- ◯ Prefer not to say

Consultation Questions

5. Do you agree or disagree with the benefits of the Proposed Project, as set out below?

	Agree	Neutral	Disagree
Improved levels of service to homes and businesses in the Region	○	○	○
Capacity to create a sustainable climate change resilient water supply for up to 50% of the population of the state	○	○	○
Infrastructure with capacity for offtakes to supply communities and industry in Tipperary, Offaly and Westmeath along the route.	○	○	○
Meet the water supply demands of population, housing and economic growth	○	○	○
Greater resilience against the impact of climate change through climate adaptation and the provision of a new, sustainable source of water supply	○	○	○
Meet the demand for water within the Greater Dublin Area Water Resource Zone to 2050 and beyond	○	○	○
Increased resilience and sustainability in the water supply through diversification of sources to Louth, Meath, Kildare, Wicklow and Carlow.	○	○	○

6. Could you please elaborate further on your response to Question 5 on the Proposed Project benefits?

7. Do you have any further feedback in relation to the Infrastructure Sites as listed below?

- Raw Water Intake and Pumping Station
- Water Treatment Plant
- Break Pressure Tank
- Booster Pumping Station
- Termination Point Resevoir

8. Do you have any feedback on any of the specific permanent features of the Proposed Project, such as the pipeline and ancillary features?

Please indicate the permanent feature you are commenting on.

9. What are your views on the proposed construction approach, including the use of working areas? Please indicate the area/ feature you are commenting on.

10. Are there any additional comments you would like to share regarding the Proposed Project?

End of Feedback Form

Thank you for taking the time to participate in our consultation process. Your feedback will be recorded, collated, analysed, and evaluated to assist in shaping the Proposed Project. After you submit your final question, you will no longer be able to go back and change any of your answers.

11. Do you wish to be added to our mailing list for periodic Project updates? (If you do not wish to receive any updates on the Project's progress you will not need to provide an email address)

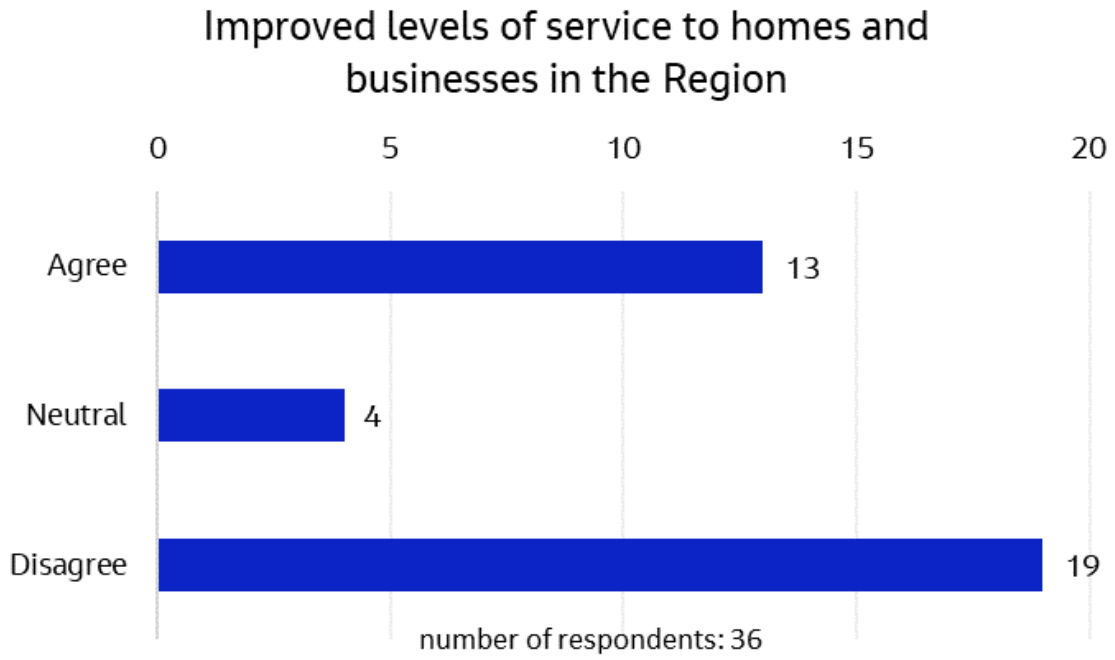
Once the consultation has finished, and responses been collated, the consultation report will be made publicly available.

Appendix L Feedback Form Statistics

There were 35 online feedback forms, and 9 hardcopy feedback forms received as part of the consultation. Not all respondents filled every question so the number of respondents for each question may be varied.

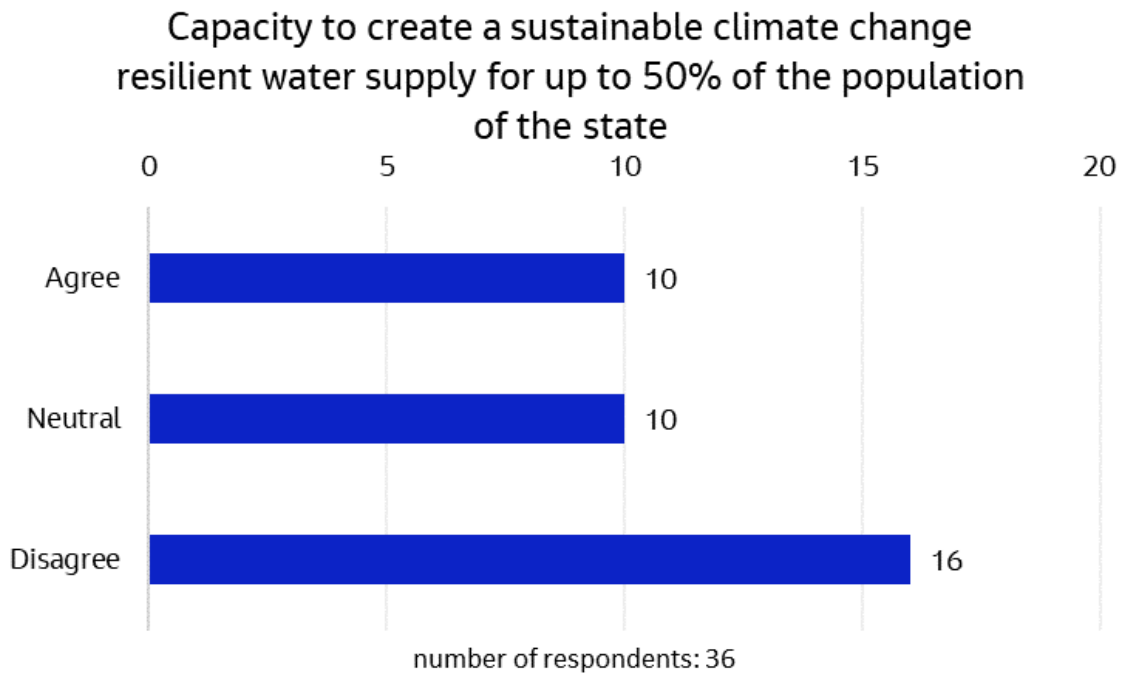
Benefits of the Proposed Project – Improved Level of Service

Respondents were asked for their opinion about benefits of the Proposed Project: "*Do you agree or disagree with the benefits of the Proposed Project, as set out below?*"
While asked about their opinion if the Proposed Project will improve levels of service to homes and businesses in the region, 13 out of total 36 respondents agreed with this statement, 19 disagreed and 4 remained neutral.



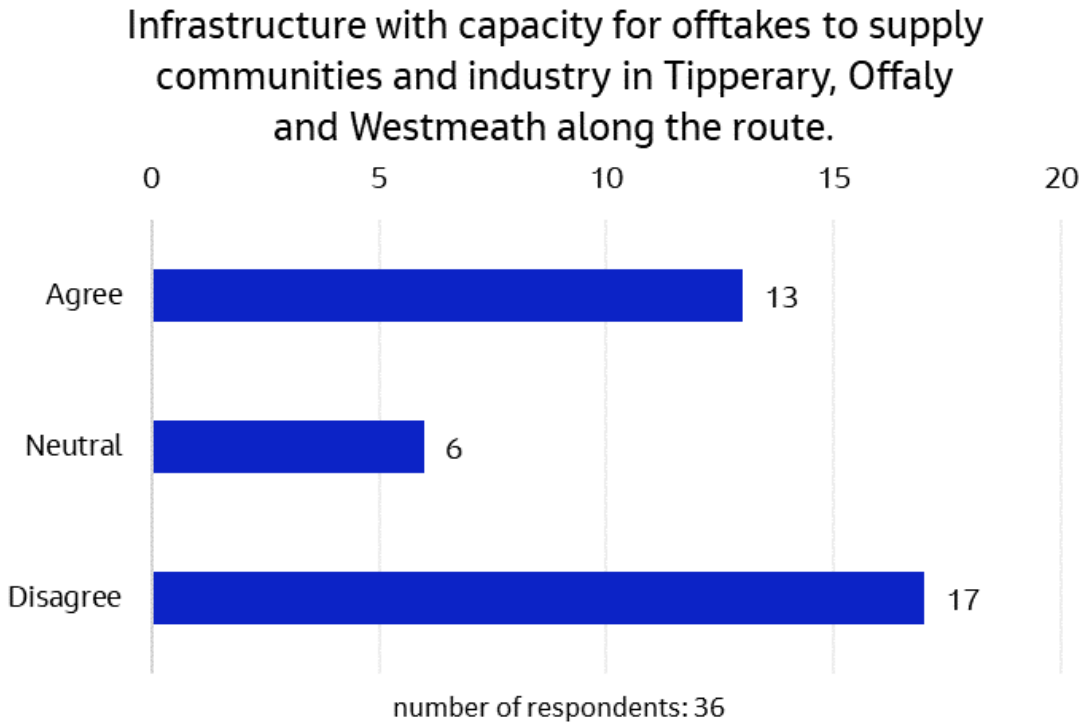
Benefits of the Proposed Project – Capacity to create a new, sustainable supply of drinking water

Ten respondents agreed with the benefit "*Capacity to create a sustainable climate change resilient water supply for up to 50% of the population for up to 50% of the population of the state*", 16 disagreed with this statement, while 10 remained neutral.



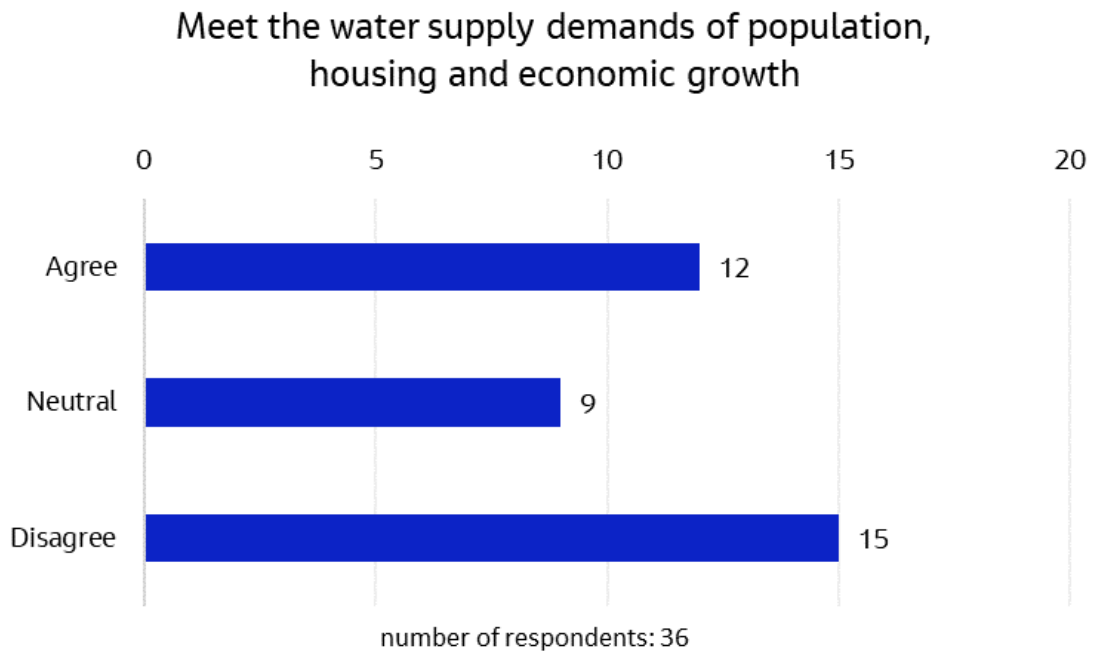
Benefits of the Proposed Project – Capacity for future offtakes along the route

Thirteen respondents agreed that the Proposed Project would deliver infrastructure with capacity for offtakes to supply communities and industry in Tipperary, Offlay and Westmeath along the route, 17 disagreed and 6 remained neutral.



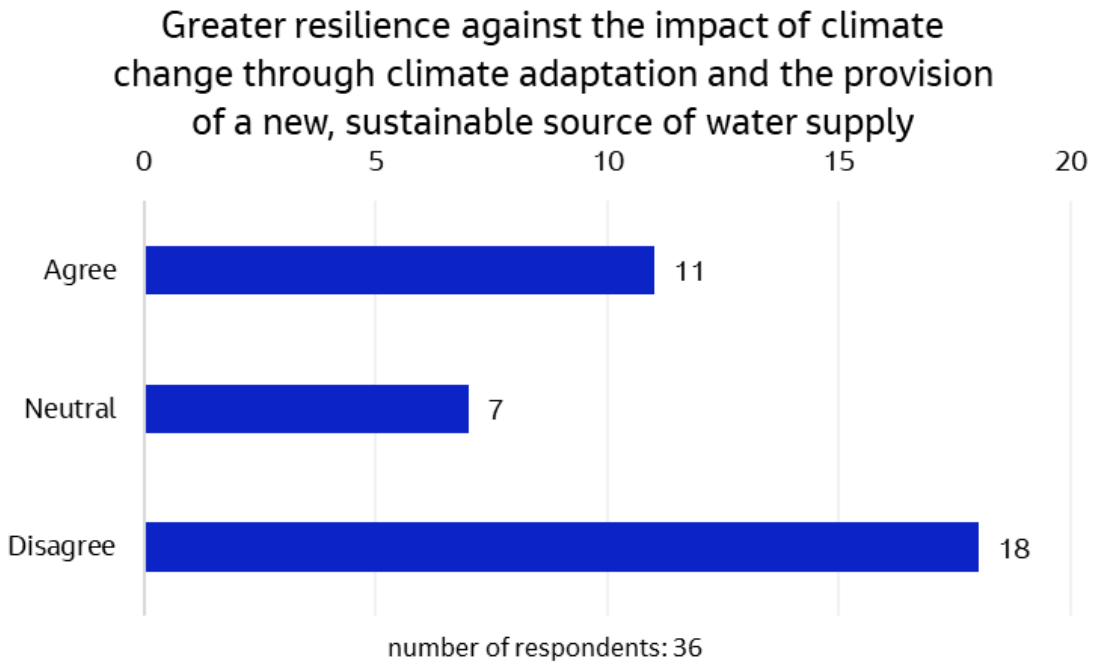
Benefits of the Proposed Project – Capacity for future growth

Twelve of the respondents agreed that the Proposed Project will help meet the water supply demands of population, housing and economic growth, 15 disagreed and 9 remained neutral.



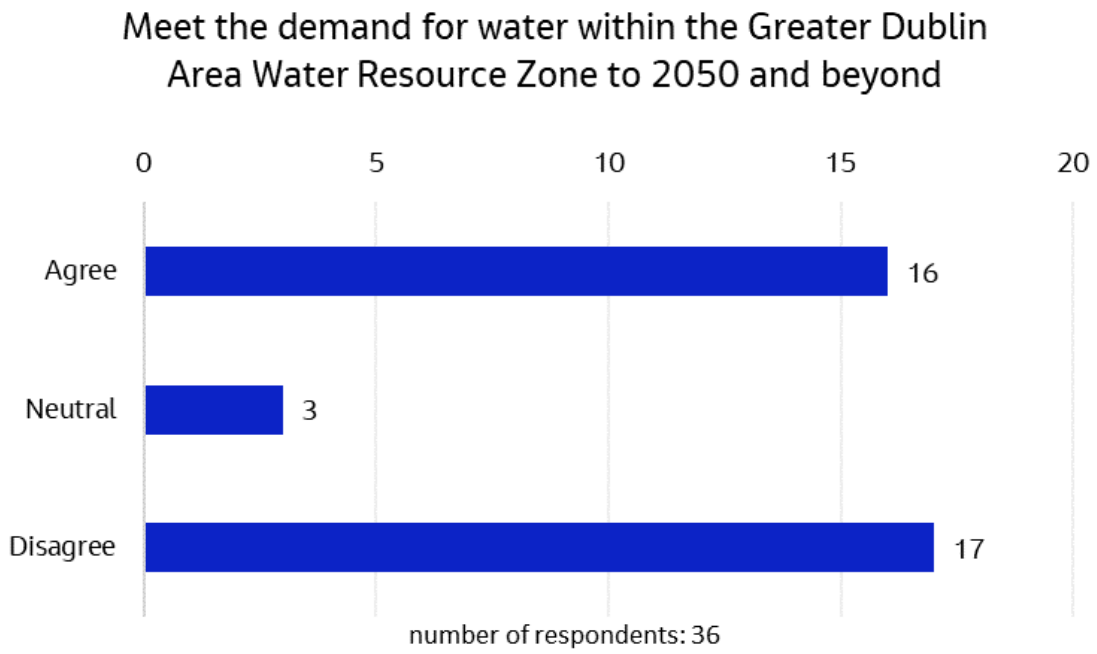
Benefits of the Proposed Project – Resilience to Climate Change

Respondents were asked whether they agree with the statement that the Proposed Project will provide greater resilience against the impact of climate change through climate adaptation and the provision of a new, sustainable source of water supply. Eleven respondents agreed with this benefit, 18 disagreed and 7 remained neutral.



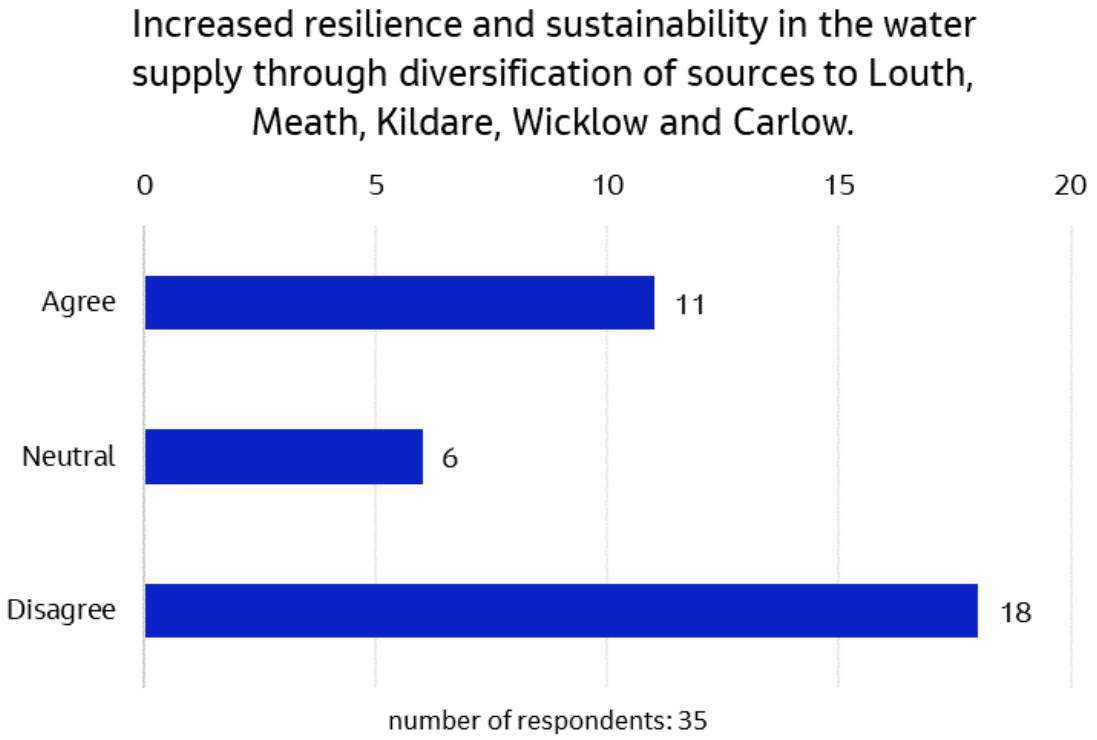
Benefits of the Proposed Project – Meeting Future Demand

Sixteen respondents agreed that the Proposed Project will help meet the demand for water within the Greater Dublin Area Water Resource Zone to 2050 and beyond, 17 disagreed and only 3 remained neutral.



BENEFITS OF THE PROPOSED PROJECT – CAPACITY FOR FUTURE OFFTAKES ALONG THE ROUTE

Eleven respondents agreed the Proposed Project would increase resilience and sustainability in the water supply through diversification of sources to Louth, Meath, Kildare, Wicklow and Carlow, 18 of the respondents disagreed, and 6 remained neutral.



The feedback form also contained open text questions:

- Could you please elaborate further on your response to Question 5 on the Proposed Project benefits?
- Do you have any further feedback in relation to the Infrastructure Sites as listed below?
- Do you have any feedback on any of the specific permanent features of the Proposed Project, such as the pipeline and ancillary features?
- What are your views on the proposed construction approach, including the use of working areas? Please indicate the area/ feature you are commenting on.
- Are there any additional comments you would like to share regarding the Proposed Project?

Responses for these questions were analysed qualitatively together with emails and letters, and emerging themes are described in the Chapter 4: Summary of Submissions.

Appendix M Media Clippings

Clip Book

(August 20, 2025)

ruepoint

Publication:	Clare Champion	Media Cost (€):	9098.4
Date:	Friday, January 10, 2025	Reach	14,000
Page:	7	Size (Sq. Cm)	892

Uisce Éireann launches Non-Statutory Consultation for The Water Supply Project Eastern and Midlands Region

The Water Supply Project Eastern and Midlands Region, is a critical national infrastructure project, which has the capacity to support the water supply needs for up to 50% of the State's population. It will bring treated water from Parteen Basin, Co. Tipperary to Peamount in Dublin with the capacity for offtakes along the route in Tipperary, Offaly, and Westmeath.

An 8-week non-statutory consultation will take place from 7th January 2025 to 4th March 2025, to inform the public of the details of the Proposed Project. Uisce Éireann is inviting feedback from members of the public, landowners, and stakeholders on the proposed plans.

Please visit our website through the QR code to the right to find out more about the project, details of forthcoming public information events and to provide feedback.

Comments and feedback can also be sent to Uisce Éireann via email, phone, or post.

Email
watersupply@water.ie

Postal address
Water Supply Project, PO Box 13748, Dublin 16

Phone number
01 202 7770

Website
water.ie/watersupplyproject

Uisce Éireann will host a series of information events for members of the public in January 2025.

Wednesday 15th January
Lakeside Hotel, Killaloe

Thursday 16th January
Abbeycourt Hotel, Nenagh

Wednesday 22nd January
Tullamore Court Hotel, Tullamore

Thursday 23rd January
Birr County Arms, Birr

Tuesday 28th January
Hamlet Court Hotel, Johnstown bridge

Wednesday 29th January
Glenroyal Hotel, Maynooth

All relevant submissions on the Proposed Project are welcomed and will be carefully considered. After the consultation period is finished, a Consultation Submissions Report will be available on the project website.

The feedback received in response to this consultation will be used to inform the design and accompanying environmental reports in advance of submitting a Strategic Infrastructure Development planning application to An Bord Pleanála.

Delivering water services for Ireland

Uisce Éireann
Irish Water

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Publication:	Midland Tribune	Media Cost (€):	1433.5
Date:	Thursday, January 9, 2025	Reach	7,429
Page:	9	Size (Sq. Cm)	235

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water.ie/watersupplyproject

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Publication:	Leinster Leader	Media Cost (€):	1561.6
Date:	Tuesday, January 7, 2025	Reach	5,778
Page:	11	Size (Sq. Cm)	244

Uisce Éireann launches Non-Statutory Consultation for The Water Supply Project Eastern and Midlands Region

The Water Supply Project Eastern and Midlands Region, is a critical national infrastructure project, which has the capacity to support the water supply needs for up to 50% of the State's population. It will bring treated water from Parteen Basin, Co. Tipperary to Peamount in Dublin with the capacity for offtakes along the route in Tipperary, Offaly, and Westmeath.

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Publication:	Limerick Leader	Media Cost (€):	6720
Date:	Saturday, January 11, 2025	Reach	11,407
Page:	5	Size (Sq. Cm)	525

Uisce Éireann launches Non-Statutory Consultation for The Water Supply Project Eastern and Midlands Region

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ruepoint

Publication:	Offaly Independent	Media Cost (€):	1653.6
Date:	Saturday, January 11, 2025	Reach	11,000
Page:	5	Size (Sq. Cm)	312

Uisce Éireann launches Non-Statutory Consultation for The Water Supply Project Eastern and Midlands Region

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An 8-week non-statutory consultation will take place from 7th January 2025 to 4th March 2025, to inform the public of the details of the Proposed Project. Uisce Éireann is inviting feedback from members of the public, landowners, and stakeholders on the proposed plans.

Please visit our website through the QR code below to find out more about the project, details of forthcoming public information events and to provide feedback.

Comments and feedback can also be sent to Uisce Éireann via email, phone, or post.

Email
watersupply@water.ie

Postal address
Water Supply Project,
PO Box 13748,
Dublin 16

Phone number
01 202 7770

Website
water.ie/watersupplyproject

Uisce Éireann will host a series of information events for members of the public in January 2025.

Wednesday 15th January
Lakeside Hotel, Killaloe

Thursday 16th January
Abbeycourt Hotel, Nenagh

Wednesday 22nd January
Tullamore Court Hotel, Tullamore

Thursday 23rd January
Birr County Arms, Birr

Tuesday 28th January
Hamlet Court Hotel, Johnstown bridge

Wednesday 29th January
Glenroyal Hotel, Maynooth

All relevant submissions on the Proposed Project are welcomed and will be carefully considered. After the consultation period is finished, a Consultation Submissions Report will be available on the project website.

The feedback received in response to this consultation will be used to inform the design and accompanying environmental reports in advance of submitting a Strategic Infrastructure Development planning application to An Bord Pleanála.

Delivering water services for Ireland

Uisce Éireann
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