

4. Preliminary Options Appraisal Report (POAR) – Public Consultation

This section should be read in conjunction with *Appendix J: Preliminary Options Appraisal Report - Consultation Submissions Report* which presents the findings from the POAR consultation.

4.1 Introduction

Public consultation was undertaken on the POAR between the period 26th November 2015 and 4th February 2016. Recognising the difficulties imposed on stakeholders in the lower Shannon region by exceptional flooding in the December-January period, briefings and consultation meetings continued through March 2016, and Appendix J reports on submissions received up until 11th March 2016.

Consultation on the POAR was the third non-statutory public consultation stage in the WSP Road Map (refer to Section 2.2) and sought feedback on, but was not limited to, the following questions:

- 1) Has Irish Water taken all relevant factors into account in reaching the findings outlined in the Preliminary Options Appraisal Report?
- 2) How would you like to be communicated with as the project progresses?

As in previous consultation periods, advertisements, press releases and other forms of distribution of the key messages (such as sending all report documentation to the County Libraries and Planning Departments of the County Councils in the study area) were used to help promote consultation and to ensure that as wide an audience as possible was made aware of the project and its consultation and engagement opportunities.

A dedicated project website continues to be provided at www.watersupplyproject.ie. The project website outlines the project development to date, includes the Project Road Map, details of the public consultation process and full details on the various Information Services available for contacting the Project Team. Downloadable copies of all project documentation are available in full on the publication page of the project website, including all documentation from the previous three consultation stages on the Project Need Report (PNR) & Project Road Map, Options Working Paper (OWP) and the POAR, as well as from the current consultation stage on the FOAR and EIS Scoping Report. The project documentation also includes Non-Technical Summaries and Newsletters which synthesise the key findings of the various reports. There is also a dedicated Frequently Asked Questions (FAQ) page on the website relating to common queries received throughout the life cycle of the project.

In addition to publicising the consultation period, Irish Water issued written briefings outlining the key findings of the POAR and details of the consultation process to 850 stakeholders, including members of the public who had previously registered their interest in the WSP, Elected Representatives and County Councils in the study area, and various stakeholder groups. Many of these stakeholders were also offered face-to-face briefings with the Project Team, with over 40 meetings being held during the POAR public consultation period. In addition, four Public Open Days were held in key locations along the Benefitting Corridor to extend the face-to-face briefings with the Project Team to all interested parties. An Oireachtas Open Day was held for Ministers, Teachtaí Dála (TDs) and Senators at the launch of the public consultation period.

The feedback received in stakeholder meetings, public consultation days, Oireachtas open days, and stakeholder submissions (via email, post and phone) during this third public consultation period has been thoroughly reviewed by the Project Team to inform the assessment and selection of the Preferred Scheme, as well as the development of the EIS Scoping procedure for it.

4.2 Consultation Feedback

There were 78 incoming emails, letters and phone calls from stakeholders during the POAR consultation period. Four public open days were also held in the WSP Study Area during the consultation period. The Project Team met with over 60 individuals at the open days including landowners and local residents, Elected Representatives, and members of public and private local organisations. The Project Team briefed the

attendees (on a one-to-one basis) on the key findings of the POAR and discussed any stakeholder feedback. All feedback received during these Open Days was taken into account by the Project Team and informed the project development.

4.2.1 Submissions Received

Submissions and discussions in stakeholder meetings and public open days covered a broad range of themes, as shown below, many of which had been raised in previous consultation periods, such as leakage and water conservation, alternative options such as rainwater harvesting, and the importance of environmental protection and a nationally coherent approach to spatial planning. New issues also emerged during the most recent consultation period, such as flooding and energy usage, which did not receive the same level of stakeholder focus in earlier stages. The stakeholder feedback received under each theme is discussed in detail in Section 3 of the Consultation Submissions Report in Appendix J. Each submission is also summarised in Appendix J of the Consultation Submissions Report.

The Submission themes are as follows:

- 1) Alternative Options
 - Desalination
 - Reservoir Storage
 - Rainwater Harvesting
 - Greywater Reuse
- 2) Leakage & Water Conservation
 - Leakage
 - Water Demand & Conservation
- 3) Environment & Fisheries
 - Environment & Ecology
 - River Shannon water levels
 - Fisheries
 - Flooding
- 4) Tourism & Amenity
- 5) Communities / Benefitting Corridor
 - Community gain
 - Water allocation to the benefitting counties
- 6) Engineering & Planning
- 7) Public Consultation Process
- 8) Sustainability
 - Sustainability & Carbon Footprint
 - Energy

4.2.2 Response to submissions

Each and every submission and query received during the POAR consultation period was reviewed, logged and acknowledged by the Project Team, and specific responses were issued, where possible, to address the various points raised in each submission and to answer all questions posed in each query. As discussed above,

all submissions were compiled according to key themes at the end of the consultation period and were thoroughly reviewed by the Project Team to extract all of the stakeholder opinions and suggestions for input into this subsequent project stage; the identification of the Preferred Scheme and the drafting of the proposed scope for the EIS for this option. In preparing the EIS Scoping Report, which is now offered for public consultation, the views of environmental stakeholders was sought, and incorporated, at drafting stage.

Section 4 of the Consultation Submissions Report in Appendix J outlines the responses issued to all submissions, according to the submission themes.

Appendix J also includes a review of each of the issues raised in the PNR, OWP and POAR consultation periods, the Irish Water responses to the issues, and the influence of the stakeholder feedback on project development. The main elements of this review are summarised in Table 4.1.

Table 4.1: Summary of Consultation issues & Responses

Submission theme	Issues Raised	Influence on Project Development
<ul style="list-style-type: none"> Alternative Options 	<ul style="list-style-type: none"> Reconsider alternative SEA options, Shannon (Lough Ree, Lough Derg, with and without storage). 	<ul style="list-style-type: none"> Mid Shannon Options eliminated due to water availability & Habitats Directive issues. Abstraction from L Derg eliminated due to modelling, geotechnical investigations & environmental risk
<ul style="list-style-type: none"> Desalination 	<ul style="list-style-type: none"> No issue on available water. Modular development possible. High cost, high carbon emissions, high energy required, waste brine disposal. 	<ul style="list-style-type: none"> 'Dublin centric' solution. Not 'like-for-like' comparable on key WSSP objectives on Midlands water supplies. No risk diversification for existing sources. Desalination deemed technically possible but does not address all project objectives.
<ul style="list-style-type: none"> Reservoir Storage - Garryhinch 	<ul style="list-style-type: none"> Potential environmental benefits. Potential Tourism benefits in Midlands. Possible flood relief. 	<ul style="list-style-type: none"> As per feedback from SEA consultation a hydrodynamic model was produced for Lough Derg/ Parteen Basin and ground investigation surveys were undertaken at Garryhinch. Modelling shows no residence time benefits in drought. Storage would have insignificant impact on flood flows. Invasive species transfer risk Raw water storage not proceeded with.
<ul style="list-style-type: none"> Rainwater Harvesting 	<ul style="list-style-type: none"> Rainwater harvesting should be implemented. Improve sustainability of commercial water usage. Potential for rainwater harvesting on farms. 	<ul style="list-style-type: none"> Irish Water supports rainwater harvesting in new build designs. Water need cannot be met by rainwater harvesting. Resources needed to adapt existing dwellings. Water conservation grant introduced in 2015.

Submission theme	Issues Raised	Influence on Project Development
<ul style="list-style-type: none"> Greywater Reuse 	<ul style="list-style-type: none"> Reuse water to reduce demand for potable water. Water reuse will become a standard part of water supply Consider environmental flow replacement on Liffey. 	<ul style="list-style-type: none"> Greywater reuse not a primary source option. Absence of European standards for greywater reuse. Environmental flow replacement on Liffey not sustainable.
<ul style="list-style-type: none"> Groundwater 	<ul style="list-style-type: none"> Aquifers have untapped potential. Newbridge test bore yielded largest flow rate in State. Use water extracted at mines. 	<ul style="list-style-type: none"> Groundwater alone not enough to supply demand. Large aquifer yield with predicted yield of 33-41 Mld, proved at just 22Mld on testing. Environmental issues. Groundwater considered best developed as local supplementary option.
Leakage & Water Conservation		
<ul style="list-style-type: none"> Leakage 	<ul style="list-style-type: none"> Leakage reduction could negate need for a new water source. Project costs unjustifiable given the high levels of leakage. Increased investment needed in pipe repairs and leakage reduction. 	<ul style="list-style-type: none"> Irish Water has committed to reducing leakage. Ambitious leakage reduction targets included in water demand calculation. Reducing leakage lower than the sustainable economic level of leakage (~20%) is very expensive, and would not provide a sustainable resilient solution to meet demand. Aiming to achieve 63.9 Mld saving from leakage reduction at 2041.
<ul style="list-style-type: none"> Water Demand & Conservation 	<ul style="list-style-type: none"> Demand could drop if leakage is reduced. Dublin / Benefitting Corridor water demand will vary with population changes, agriculture, industry, and weather conditions. Accurate 35-year forecasts are not possible. Dublin urgently needs additional supply. Water conservation mechanisms needed to reduce demand. 	<ul style="list-style-type: none"> Water demand projections already include leakage targets. Demographic projections developed by specialist planning advisers and demographers. Planning for a resilient water supply must take place independently of progress on water conservation. Irish Water is committed to water conservation Phasing proposals permit capacity to match demand Irish Water is encouraging water conservation “Be Water Smart” and other initiatives.
Environment & Fisheries		
<ul style="list-style-type: none"> Environment & Ecology 	<ul style="list-style-type: none"> Potential impacts of the WSP on water levels, and environment / ecology of the River Shannon. 	<ul style="list-style-type: none"> Extensive hydrodynamic, water quality and phyto-dynamics surveys being undertaken in Parteen Basin

Submission theme	Issues Raised	Influence on Project Development
	<ul style="list-style-type: none"> Impact on nutrient balance of Parteen Basin, increased pH of supplies to Dublin, impacts on Freshwater Pearl Mussel. Significant impact on lake ecology & biodiversity. 	<ul style="list-style-type: none"> and L Derg. State of the art model has been produced to analyse impacts of the abstraction. Water levels will be managed within the same water level 'normal operating band' as currently applies. Residence time of water, important for the Lough Derg ecosystem, will remain unaffected. Extensive environmental investigations, including fish surveys are underway.
<ul style="list-style-type: none"> River Shannon water levels 	<ul style="list-style-type: none"> Impacts on River Shannon water levels and local businesses / boating in the area. Peak water demand and reduced water levels during dry weather 	<ul style="list-style-type: none"> Abstraction would be within the normal operating range that currently applies Navigation and tourism will experience the same operating water level range as normal. Dry weather will not exert an unforeseen impact, already factored into projections.
<ul style="list-style-type: none"> Fisheries 	<ul style="list-style-type: none"> Impacts on fishing, angling and boating. Support for a fish pass improvement at Parteen. 	<ul style="list-style-type: none"> Water quality survey contract continuing. Loss of spawning ground is not expected. Fish stock surveys undertaken with IFI. Fisheries specialist engaged to advise on fisheries issues. Engagement with fisheries authorities underway
<ul style="list-style-type: none"> Flooding 	<ul style="list-style-type: none"> Taking 2% out of flow would reduce flooding downstream of Parteen Weir. Abstraction could be increased when flooding is forecast. 	<ul style="list-style-type: none"> Scale of flooding too large compared to water supply abstraction. Difficult to develop a single hybrid solution effective in achieving water supply and flood reduction. A marginal reduction in flood flow would not result in a significant reduction in flood water level.
<ul style="list-style-type: none"> Alien Invasive Species 	<ul style="list-style-type: none"> Concerns around spread of invasive species. 	<ul style="list-style-type: none"> Key challenge in Water Services Strategic Plan. Taken into account in discounting raw water storage (Garryhinch) option. Risks considered in options appraisal overall.
<p>Tourism & Amenity</p>	<ul style="list-style-type: none"> Impacts on tourism and amenity. 	<ul style="list-style-type: none"> Abstraction will operate within the

Submission theme	Issues Raised	Influence on Project Development
	<ul style="list-style-type: none"> • Tourism benefits of Garryhinch storage option. 	<ul style="list-style-type: none"> • same water level range as currently applies on Lough Derg & Parteen Basin. • Modelling showed that water residence time impacts of abstraction on Lough Derg not mitigated by storage capacity at Garryhinch.
Communities / Benefitting Corridor		
<ul style="list-style-type: none"> • Community gain 	<ul style="list-style-type: none"> • Potential job opportunities with the pipeline construction, • Advantages of strategic infrastructure in the Midlands Region. 	<ul style="list-style-type: none"> • Community gain aims to provide lasting benefits • Irish Water propose to fund community initiatives through a Community Gain Fund. • Fund would be targeted at tourism, environmental projects, training & education or sport and leisure.
<ul style="list-style-type: none"> • Water allocation in the Benefitting Corridor 	<ul style="list-style-type: none"> • Counties in the Midlands included in the water supply proposal are not in need of additional supply. 	<ul style="list-style-type: none"> • Over 100 schemes in the region can benefit from WSP. • Irish Water aims to consolidate existing schemes relying on smaller vulnerable water sources of unreliable yield as per the objectives of the WSSP.
Engineering & Planning	<ul style="list-style-type: none"> • Surrounding lands would be compromised by location of terminal reservoir 	<ul style="list-style-type: none"> • Location & elevation of reservoir are under development with due regard to surrounding lands.
Public Consultation Process	<ul style="list-style-type: none"> • Engagement with stakeholders & criticism of the project's public consultation process. • Consultation documents are long, extensive, detailed and technical. 	<ul style="list-style-type: none"> • Non-statutory public consultation has been carried out at each project stage. • The FOAR is the fourth such consultation. • Summaries included with reports produced and individual sections partitioned on the project website. • Alternative means for accessing project documentation and information are being developed for the fourth phase of consultation, including a document library and explanatory animation
Sustainability		
<ul style="list-style-type: none"> • Sustainability, Carbon Footprint, Climate Change 	<ul style="list-style-type: none"> • WSP is Dublin-centric. • Unsustainable development capacity in Greater Dublin Area. • Project will have a big carbon footprint, impacting on efforts to address climate change. 	<ul style="list-style-type: none"> • As per Irish Water's remit, the WSP now to supply water in Eastern & Midlands Region, not just Dublin Area. • Sustainable development involves planning for future growth. • Climate change is being considered

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	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> in the design development and in the EIS.
<ul style="list-style-type: none"> Energy 	<ul style="list-style-type: none"> Reduction of renewable energy generation capacity at Ardnacrusha does not fit in with government policy to realise a low carbon/energy economy 	<ul style="list-style-type: none"> Irish Water & ESB are discussing curtailing power generation water usage by an equal amount to the water abstracted for water supply. Replacement from sustainable sources being considered. Energy recovery in the WSP infrastructure is being considered
Constraints & Assessment Criteria	<ul style="list-style-type: none"> Assessment criteria were unclear / lacking 	<ul style="list-style-type: none"> The Options Working paper consultation outlined the assessment criteria and asked if anything else needed to be considered. The case on each of the options was transparently presented The project team recognise the extent and volume of information that was reported on. A document library is being developed to try and assist in people accessing information more easily.
Economic Development	<ul style="list-style-type: none"> WSP a positive economic development, losses to economy if additional supply is not provided 	<ul style="list-style-type: none"> IW strive to ensure water services enable economic development.
Water Framework (WFD) & Habitats Directive	<ul style="list-style-type: none"> Project should not be contrary to aims / objectives of WFD. Concern about adverse effects on SPA. 	<ul style="list-style-type: none"> Options will be assessed for compliance with WFD. Meeting Habitats Directive is a primary objective of IW.

4.3 Next Steps

As can be seen in the Project Road Map in Section 2.2, public consultation and engagement is a crucial element in the development of the WSP. All of the feedback received during the first three non-statutory public consultation periods was analysed in detail and it assisted in and was considered as part of the selection process for the Preferred Scheme, as identified in the FOAR. The fourth consultation period commencing in November 2016 seeks feedback on this preferred scheme, including the proposals in the FOAR and EIS Scoping Report for the scope of the environmental assessments, design and construction of this option.

The feedback from this consultation period alongside further technical and environmental studies and engagement with landowners and the general public will inform the selection of the final scheme. This will be detailed in the EIS and will accompany Irish Water's planning application to An Bord Pleanála. In this way, Irish Water has from the beginning sought, and continues to invite, feedback from as wide an audience as possible to assist them in shaping the project.

During this consultation period a number of landowner evenings and eight public open days will be held at various locations along the proposed pipeline route where members of the project team will be available to answer any questions.

Following on from the conclusion of the consultation process in early 2017, Irish Water will be in direct contact with landowners affected by the proposed pipeline route.

An Bord Pleanála will undertake all necessary statutory consultations including Oral Hearings where everyone will again be entitled to have their say, following which the An Bord Pleanála will determine whether consent should be granted.