



Environmental Impact Assessment Report (EIAR)

Volume 3 of 6: Environmental Assessment

(Chapter 14) Population

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Acronyms and Abbreviations

Acronyms and Abbreviations	Meaning
AADT	Annual Average Daily Traffic
BPS	Booster Pumping Station
BPT	Break Pressure Tank
CBS	Community Benefit Scheme
CIF	Construction Industry Federation
CSO	Central Statistics Office
CPO	Compulsory Purchase Order
DMRB	Design Manual for Roads and Bridges
EC	European Commission
ED	Electoral Division
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESBN	ESB Network
FCV	Flow Control Valve
FTE	Full-time Equivalent
GDA	Greater Dublin Area
GDA WRZ	Greater Dublin Area Water Resource Zone
GVA	Gross Value Added
HLPS	High Lift Pumping Station
HSE	Health Service Executive
Mld	Million litres per day
NPF	National Planning Framework
NSL	Noise Sensitive Location
OSI	Ordnance Survey Ireland
RFC	Ratio of Flow to Capacity
RWI&PS	Raw Water Intake and Pumping Station
RWRMs	Raw Water Rising Mains
SAPS	Small Area Population Statistics
TII	Transport Infrastructure Ireland
TPR	Termination Point Reservoir
WTP	Water Treatment Plant

14. Population

14.1 Introduction

1. This chapter reports the assessment of the likely significant effects on people and communities associated with the Proposed Project. In accordance with the requirements of the EIA Directive, this chapter identifies, describes and assesses the likely significant effects of the Proposed Project on the receiving environment during the Construction and Operational Phases of the Proposed Project.
2. This chapter sets out the methodology used, describes the existing environment, examines the likely significant effects of the Proposed Project, proposes mitigation measures (where necessary) and identifies residual impacts. The assessment has been conducted in accordance with current relevant standards and guidance.
3. 'Population' refers to the people who live in, work in, relax in or visit an area. Potential impacts on people and communities affect the way in which people live, work, relax, relate to one another, organise to meet their needs and generally operate as members of society. This chapter assesses the likely significant effects on population as a result of the construction and/or operation of the Proposed Project.
4. Table 14.1 outlines the principal Proposed Project elements. A full description is provided in Chapter 4 (Proposed Project Description) in Volume 2 of this Environmental Impact Assessment Report (EIAR).

Table 14.1: Summary of the Proposed Project Infrastructure

Proposed Project Infrastructure	Outline Description of Proposed Project Infrastructure*
Permanent Infrastructure	
Raw Water Intake and Pumping Station (RWI&PS) (Infrastructure Site) County Tipperary	<ul style="list-style-type: none"> • The RWI&PS would be located on a permanent site of approximately 4ha on the eastern shore of Parteen Basin in the townland of Garrynatineel, County Tipperary. In addition, approximately 1ha of land would be required on a temporary basis during construction. • The RWI&PS has been designed to abstract enough raw water from the River Shannon at Parteen Basin to provide up to 300Mld of treated water by 2050. • The RWI&PS site would include a bankside Inlet Chamber, the Raw Water Pumping Station Building, two Microfiltration Buildings, an Electricity Substation and Power Distribution Building, and Dewatering Settlement Basins. The tallest building on the RWI&PS site would be the Microfiltration Buildings which would be 10.9m above finished ground level. Additionally, there would be a telemetry mast, the top of which would be 14m above finished ground level. • Power for the RWI&PS would be supplied via an underground connection to the existing Birdhill 38 kV electricity substation. • A new permanent access road from the R494 would be constructed to access the proposed RWI&PS site. This access road would be 5m in width and 670m in length. • The RWI&PS site boundary would be fenced with a stock proof fence and a 2.4m high paladin security fence 5m inside the boundary. The site would be landscaped in line with the surrounding environment to reduce its visual impact.
Raw Water Rising Mains (RWRMs) (Pipeline) County Tipperary	<ul style="list-style-type: none"> • The RWRMs would consist of two 1,500mm underground pipelines made from steel that would carry the raw water approximately 2km from the RWI&PS to the Water Treatment Plant (WTP) at Incha Beg, County Tipperary. The water would be pumped from the pumping station at the RWI&PS to the WTP. • Twin RWRMs have been proposed so that one RWRM can be taken out of service for cleaning and maintenance while still providing an uninterrupted flow of raw water through the other RWRM. • The RWRMs would include Line Valves, a Lay-By, Air Valves and Cathodic Protection. • A 20m wide Permanent Wayleave would provide Uisce Éireann with operational access to the RWRMs.

Proposed Project Infrastructure	Outline Description of Proposed Project Infrastructure*
<p>Water Treatment Plant (WTP) (Infrastructure Site) County Tipperary</p>	<ul style="list-style-type: none"> The WTP would be located on a permanent site of approximately 31ha at Incha Beg, County Tipperary, 2.6km north-east of the village of Birdhill, and 2km east of the proposed RWI&PS. In addition, approximately 2.5ha of land would be required on a temporary basis during construction. The WTP would treat the raw water received from the RWI&PS via the RWRMs. Once treated, the High Lift Pumping Station (HLPS) would deliver the treated water onwards from the WTP to the Break Pressure Tank (BPT) at Knockanacree, County Tipperary, via the Treated Water Pipeline. The WTP would comprise of a series of tanks and buildings including the Raw Water Balancing Tanks, Water Treatment Module Buildings, Sludge Dewatering Buildings, Sludge Storage Buildings, Clear Water Storage Tanks and HLPS, an Electricity Substation and Power Distribution Building, and the Control Building. The tallest building on the WTP site would be the Water Treatment Module Buildings which would be up to 15.6m above finished ground level. Additionally, there would be a telemetry mast, the top of which would be 14m above finished ground level. There would also be a potential future water supply connection point at the junction between the permanent access road and the R445. Power for the WTP would be supplied via an underground connection to the existing Birdhill 38 kV electricity substation. Solar panels would be placed on the roofs of the Chemical Dosing Manifold Building, the Water Treatment Module Buildings, Clear Water Storage Tanks and Sludge Storage Buildings, and at a number of locations on the ground to supplement the mains power supply. A new permanent access road from the R445 would be constructed and would be 6m in width and 640m in length. The WTP site boundary would be fenced with a stock proof fence and a 2.4m high palisade security fence 5m inside the boundary. The site would be landscaped in line with the surrounding environment to reduce its visual impact.
<p>Treated Water Pipeline from the WTP to the BPT (Pipeline) County Tipperary</p>	<ul style="list-style-type: none"> The Treated Water Pipeline from the WTP to the BPT would consist of a single 1,600mm underground steel pipeline which would be approximately 37km long. The water would be pumped through this section of the Treated Water Pipeline by the HLPS. The Treated Water Pipeline would include Line Valves, Washout Valves, Air Valves, Manways, Cathodic Protection and Lay-Bys. A 20m wide Permanent Wayleave would provide Uisce Éireann with operational access to the pipeline (this Wayleave has been extended to approximately 30m at some Line Valves to provide access between the Lay-Bys and Line Valves). There would be an additional 10m wide Permanent Wayleave at certain locations for operational access to smaller pipes connecting Washout Valves with permanent discharge locations.
<p>Break Pressure Tank (BPT) (Infrastructure Site) County Tipperary</p>	<ul style="list-style-type: none"> The BPT would be located on a permanent site of approximately 7ha in the townland of Knockanacree, County Tipperary. In addition, approximately 0.8ha of land would be required on a temporary basis during construction. The BPT would be located at the highest point of the pipeline. It marks the end of the Treated Water Pipeline from the WTP to the BPT and the start of the Treated Water Pipeline from the BPT to the Termination Point Reservoir (TPR) in the townland of Loughtown Upper, at Peamount, County Dublin. It would act as a balancing tank and would be required to manage the water pressures in the entire Treated Water Pipeline during flow changes, particularly during start-up and shut-down. The BPT site would include the BPT and a Control Building. The BPT would be a concrete tank divided into three cells covered with an earth embankment. The BPT tanks would be 5m in height and partially buried below finished ground levels. The Control Building would be 7.5m over finished ground level. Additionally, there would be a telemetry mast, the top of which would be 14m above finished ground level. Access to the BPT site would be via a new permanent access road from the L1064 which would be 5m wide and 794m in length. Power for the BPT would be supplied via an underground connection from the existing overhead power line. Solar panels would be placed on the south facing side of the control building roof, on the BPT and at ground level to the south of the site to supplement the mains power supply. The BPT site boundary would be bounded by the existing hedgerow / tree line with a 2.4m high palisade security fence around the permanent infrastructure. The site would be landscaped in line with the surrounding environment to reduce its visual impact.

Proposed Project Infrastructure	Outline Description of Proposed Project Infrastructure*
<p>Treated Water Pipeline from the BPT to the TPR (Pipeline)</p> <p>Counties Tipperary, Offaly, Kildare and Dublin (within the administrative area of South Dublin County Council)</p>	<ul style="list-style-type: none"> The Treated Water Pipeline from the BPT to the TPR would consist of a single 1,600mm underground steel pipeline, approximately 133km long. The water would normally travel through the Treated Water Pipeline by gravity; however, flows greater than approximately 165Mld would require additional pumping from the Booster Pumping Station (BPS) in the townland of Coagh Upper, County Offaly. The Treated Water Pipeline would include Line Valves, Washout Valves, Air Valves, Manways, Cathodic Protection, Lay-Bys and potential future connection points. A 20m wide Permanent Wayleave would provide Uisce Éireann with operational access to the pipeline (this Wayleave has been extended to approximately 30m at some Line Valves to provide access between the Lay-Bys and Line Valves). There would be an additional 10m wide Permanent Wayleave at certain locations for operational access to smaller pipes connecting Washout Valves with permanent discharge locations.
<p>Booster Pumping Station (BPS) (Infrastructure Site)</p> <p>County Offaly</p>	<ul style="list-style-type: none"> The BPS would be located on a permanent site of approximately 2.6ha in the townland of Coagh Upper, County Offaly. It would be located approximately 30km downstream from the BPT. In addition, approximately 3ha of land would be required on a temporary basis during construction. The BPS would be required when the demand for water causes the flow through the pipeline to exceed approximately 165Mld. The BPS site would consist of a single-storey Control Building with a basement below. It would have a finished height of 7.6m above finished ground level. There would also be a separate Electricity Substation and Power Distribution Building. Additionally, there would be a telemetry mast, the top of which would be 14m above finished ground level. Power to the BPS would be supplied from an existing 38 kV electricity substation at Birr, through cable ducting laid within the public road network. There would be ground mounted solar panels on the southern side of the BPS site to supplement the mains power supply. The site would be accessed directly from the L3003. The BPS site boundary would be fenced with a stock proof fence and a 2.4m high palisade security fence between 5m -12m inside the boundary. The site itself would be landscaped in line with the surrounding environment to reduce its visual impact.
<p>Flow Control Valve (FCV) (Infrastructure Site)</p> <p>County Kildare</p>	<ul style="list-style-type: none"> The FCV controls the flows in the Treated Water Pipeline from the BPT to the TPR. It would be a small permanent site of approximately 0.5ha in the townland of Commons Upper in County Kildare. In addition, approximately 0.6ha of land would be required on a temporary basis during construction. It would consist of three 700mm diameter FCVs and three flow meters installed in parallel with the Line Valve and housed within an underground chamber. Access to the FCV site would be directly off the L1016 Commons Road Upper. Power supply to the FCV site would be provided from the existing low voltage network via a combination of overhead lines and buried cables. There would be ground mounted solar panels on the north-eastern side of the site to supplement the mains power supply. Kiosks at the FCV site would house the Programmable Logic Controller, telemetry and power supply for the Line Valve. There would also be a telemetry mast, the top of which would be 14m above finished ground level. The site boundary would be fenced with a stock proof fence and a 2.4m high palisade security fence 5m inside the boundary.

Proposed Project Infrastructure	Outline Description of Proposed Project Infrastructure*
<p>Termination Point Reservoir (TPR) (Infrastructure Site) County Dublin (within the administrative area of South Dublin County Council)</p>	<ul style="list-style-type: none"> The TPR would be located on a permanent site of approximately 8.3ha adjacent to an existing treated water reservoir in the townland of Loughtown Upper, at Peamount, County Dublin (within the administrative area of South Dublin County Council) and would have capacity for 75MI of treated water supply. In addition, approximately 1.1ha of land would be required on a temporary basis during construction. It would be located at the downstream end of the Treated Water Pipeline from the BPT to the TPR and would be the termination point for the Proposed Project. It would be at this location that the Proposed Project would connect to the existing water supply network of the Greater Dublin Area Water Resource Zone (GDA WRZ). The TPR would consist of an above-ground storage structure, associated underground Scour Water and Overflow Water tanks and a Chlorine Dosing Control Building. The TPR would be a concrete tank divided into three cells and covered with an earth embankment. The top of the TPR would be 11.2m above finished ground level. The Chlorine Dosing Control Building would be 8.4m over finished ground level. Additionally, there would be a telemetry mast, the top of which would be 14m above finished ground level. Power for the TPR would be supplied via an underground connection to the existing electricity substation at Peamount Reservoir. There would be solar panels on top of a portion of the northern cell of the TPR to supplement the mains power supply. A new permanent access road from the R120 would be constructed and would be 5m wide and 342m in length. The TPR site would be bounded by the existing hedgerow to the west and existing fence to the east with a 2.4m high palisade security fence around the permanent infrastructure. The site itself would be landscaped in line with the surrounding environment to reduce its visual impact.
Proposed 38 kV Uprate Works – Power Supply to RWI&PS and WTP	
<p>Proposed 38 kV Uprate Works Ardnacrusha – Birdhill (Power Supply) Counties Clare, Limerick and Tipperary</p>	<ul style="list-style-type: none"> The proposed 38 kV Uprate Works would be necessary to deliver adequate electrical power to the RWI&PS and WTP. The proposed works would include the uprating of the existing Ardnacrusha – Birdhill Line and the replacement of polesets/structures with an underground cable along a section of the Ardnacrusha – Birdhill – Nenagh Line. There would also be works at the existing Birdhill 38 kV electricity substation including the provision of a new 38 kV modular Gas Insulated Switchgear Modular Building, new electrical equipment and lighting, together with new fencing and associated works.
Temporary Infrastructure – Required for Construction Phase Only	
<p>Construction Working Width Counties Tipperary, Offaly, Kildare and Dublin (within the administrative area of South Dublin County Council)</p>	<ul style="list-style-type: none"> A Construction Working Width would be temporarily required for the construction of the RWRMs and the Treated Water Pipeline, and the subsequent reinstatement of the land. The Construction Working Width would generally be 50m in width but would be locally wider near features such as crossings, access and egress points from the public road network, Construction Compounds and Pipe Storage Depots.
<p>Construction Compounds Counties Tipperary, Offaly, Kildare and Dublin (within the administrative area of South Dublin County Council)</p>	<ul style="list-style-type: none"> Eight Construction Compounds would be temporarily required to facilitate the works to construct the Proposed Project. Five Construction Compounds would be located along the route of the Treated Water Pipeline at the following Infrastructure Sites: RWI&PS, WTP, BPT, BPS and TPR, with an additional three Construction Compounds located at Lisgarrieff (County Tipperary), Killananny (County Offaly) and Drummond (County Kildare). Construction Compounds would act as a hub for managing the works including plant/material/worker movement, general storage, administration and logistical support. The Principal Construction Compound at the WTP would require 30ha of land during construction. The other three Principal Construction Compounds would require land temporarily during construction ranging between approximately 12ha and 16ha. The four Satellite Construction Compounds at the other permanent Infrastructure Sites (excluding the FCV) would require land during construction ranging between approximately 3ha and 12ha.
<p>Pipe Storage Depots Counties Tipperary, Offaly and Kildare</p>	<ul style="list-style-type: none"> Nine Pipe Storage Depots would be temporarily required to supplement the Construction Compounds and would serve the installation of pipe between the WTP and the TPR. Pipe Storage Depots would take direct delivery of the pipe for storage before onward journey to the required location along the Construction Working Width. The Pipe Storage Depots would vary in size and require land temporarily during construction generally ranging between approximately 2ha and 7ha but with one site being larger at 11ha.

* Note all land take numbers in this table are affected by rounding to one decimal place.

5. The construction of the Proposed Project is anticipated to run from 2028 through 2032, with the first operational year anticipated to be 2033.
6. The assessment has considered potential impacts on people and communities resulting from the construction and operation of the Proposed Project, excluding potential consequential impacts on human health which are reported separately in Chapter 15 (Human Health).
7. This Population assessment considers both the social impacts on communities as well as the impact on the wider economy and tourism. The assessment is structured to address the following sub-topics, a change to which may result in effect on people and communities:
 - Employment
 - Economy
 - Community Amenity
 - Community Severance and Accessibility
 - Tourism
 - Land Use and Land-take.
8. This chapter should be read in conjunction with the following chapters of this EIAR, and their appendices, which expand upon aspects of the Proposed Project:
 - Chapter 4 (Proposed Project Description)
 - Chapter 5 (Construction & Commissioning)
 - Chapter 6 (Noise & Vibration)
 - Chapter 7 (Traffic & Transport)
 - Chapter 8 (Biodiversity)
 - Chapter 10 (Soils, Geology & Hydrogeology)
 - Chapter 11 (Agriculture)
 - Chapter 12 (Air Quality)
 - Chapter 15 (Human Health)
 - Chapter 16 (Landscape & Visual)
 - Chapter 18 (Material Assets).
9. This chapter is also supported by the following:
 - Appendix A14.1 (Population Baseline).
10. Figures which are referenced in the text are provided in Volume 5 of this EIAR.
11. The assessment reported in this chapter has considered the mitigation that has been embedded into the design to avoid or reduce environmental effects. Embedded mitigation is an intrinsic part of the Proposed Project design and therefore the assessment of effects assumes all embedded design measures are in place. Embedded mitigation relevant to this topic is included in Section 14.5.1.
12. This assessment has been undertaken and reported by a team of competent experts. Refer to Chapter 2 (The Environmental Impact Assessment Process) for a description of the qualifications and expertise of the specialists that have inputted to this chapter.

14.2 Methodology

13. The methodology used for this assessment has been based on best practice and in accordance with legislation and having regard to relevant guidelines and guidance, in particular the following:

- Guidelines on Information to be Contained in Environmental Impact Assessment Reports (Environmental Protection Agency (EPA) 2022) (hereafter referred to as ‘the EPA Guidelines’)
- European Commission (EC) Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment Report (EC 2017)
- Population and Human Health Assessment of Proposed National Roads – Standard (Transport Infrastructure Ireland (TII) 2024) (hereafter referred to as ‘the TII Population and Human Health Guidelines’)
- Design Manual for Roads and Bridges (DMRB) LA 112 – Population and Human Health (Highways England 2020) (hereafter referred to as ‘the DMRB LA 112 Guidelines’)
- EIAR Guidelines for the Consideration of Tourism and Tourism Related Projects (Fáilte Ireland 2023).

14.2.1 Scope of the Assessment

14. The assessment considered attributes and characteristics associated with a number of assessment topics. The assessment topics for the purpose of this assessment, together with their respective receptor types, are set out in Table 14.2.

15. The Proposed Project would deliver nationally important strategic infrastructure with individual elements designed with a lifespan of 80 to 100 years. The strategic importance of the Proposed Project for water supply in the Eastern and Midlands Region is such that there is no plan to decommission these structures and Uisce Éireann is committed to maintaining and repairing them into the future. On this basis it is not likely that the structures will be decommissioned and therefore, decommissioning of the Proposed Project has not been considered further in this assessment.

16. There would be no population effects from testing and commissioning activities over and above those assessed for the Construction and Operational Phases. Therefore, testing and commissioning of the Proposed Project has not been considered further in this assessment.

Table 14.2: Identification of Receptors According to Assessment Topic

EIAR Population Assessment Topics	Subject of Assessment
Employment	Impacts on local and national employment
Economy	Impacts on local and national economic supply chain activity
Community Amenity	Impacts on residential, commercial and community properties/facilities
Community Accessibility and Severance	Impacts on access to residential, commercial and community properties/facilities, including concentrated settlement areas
Tourism	Impacts on tourism attractions and tourism-specific businesses (including tourism accommodation)
Land Use and Land-take	Impacts on land associated with residential, commercial and community properties/facilities

14.2.1.1 Employment

17. The assessment has considered the impact of the Proposed Project on existing levels of employment within the counties through which it would be located (i.e. counties Clare, Limerick, Tipperary, Offaly, Kildare and (south county) Dublin). This has also been considered within a national context.

18. The number of direct, indirect and induced jobs was estimated by applying the methodology set out in the Additionality Guide (UK Homes and Communities Agency 2014), as described in the following sections. In line with best industry practice, this Guide was used as there is no equivalent Irish guide.
19. The Additionality Guide allows for additionality factors to be applied to estimates of (gross) direct employment (individuals directly employed by the Proposed Project) to determine the likely amount of indirect employment (individuals not directly employed by the Proposed Project but who provide services or goods to it (i.e. the supply chain)) and induced employment (individuals employed providing goods/services as a result of additional spending by employees of the Proposed Project). Through the application of additionality factors and economic multipliers, the net effects on employment can be quantified.
20. The factors provided by the Additionality Guide relevant to the assessment of effects on employment are:
 - Leakage: The proportion of benefits that accrue to those outside of the target group. This refers to the jobs that go to those who live outside the region (i.e. outside those counties in which the Proposed Project is located)
 - Displacement: This refers to those who are already employed and change jobs in order to take a role on the Proposed Project
 - Deadweight: Deadweight is the proportion of the impact that would arise even if the Proposed Project did not proceed to construction, and ultimately operation. This is the proportion of unemployed workers who would gain suitable alternative employment in the near term in areas more suited to their particular skills, such as in-demand workers
 - Economic multiplier effects: This relates to further economic activity associated with additional local income and supplier purchases as a result of the Proposed Project. These are known as indirect and induced effects.
21. Together with information regarding anticipated required staffing levels during the Proposed Project, these factors have been considered in relation to one another, in accordance with the Additionality Guide, to determine the (gross) direct, indirect and induced employment as a result of the Proposed Project. This has been done by following the formula outlined in Table 14.22.

14.2.1.2 Economy

22. The assessment of the impact of the Proposed Project on the economy and the effect this could have on people and communities took account of three types of economic supply chain effects that would be likely as a result of constructing the Proposed Project:
 - Direct effects: Project expenditure such as the employment of the appointed Contractor(s) and/or purchase of materials
 - Indirect effects: Inter-industry effects that occur due to spending by the parties involved with the construction or operation of the Proposed Project, for example, employment of sub-contractors for specialist services by the appointed Contractor(s)
 - Induced effects: Increased expenditure in the local economy resulting from increased income and the presence of construction workers.
23. The economic effects were assessed using the Additionality Guide in conjunction with the economic industry baseline information, including Gross Value Added (GVA)¹ (outlined in Section 2.1 of Appendix A14.1: Population Baseline), to determine potential increases in economic activity from the construction-related spend of the Proposed Project. This assessment generated an estimate of the potential additional economic impact that the Proposed Project spend would have within the local economy.

¹ Gross Value Added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy.

24. The most recent and correlated GVA and labour force data provided by the Central Statistics Office (CSO) is from 2022 and benchmarks the GVA of construction-related jobs at €91,145 per job² (CSO 2025a) (CSO 2025b). This figure was used to inform the assessment of effect on the economy (see Section 14.4.2.2). Information in relation to GVA and the economic baseline more generally is provided in Appendix A14.1 (Population Baseline).

14.2.1.3 Community Amenity

25. 'Community amenity' is a term used to describe the pleasantness and 'feel' of a community and the ability for people to enjoy the general character or quality of their surroundings. This assessment includes consideration of how the construction and/or operation of the Proposed Project may change how people perceive their communities or how they use community facilities and recreational resources.
26. The assessment of potential effects on community amenity is undertaken by considering the in-combination effect of the following environmental impacts from the Proposed Project, which are typically expected to contribute to a change in the 'amenity' of a place or area:
- A reduction in air quality (i.e. increased concentration of dust (typically during construction only); fine particulate matter (PM_{2.5}), coarse particulate matter (PM₁₀), nitrogen dioxide (NO₂)) as a result of the construction or operation of the Proposed Project
 - A reduction in the visual amenity associated with landscape views in proximity of the Proposed Project
 - An increase in the volume of traffic as a result of activities during the Construction Phase and Operational Phase of the Proposed Project
 - An increase in noise and vibration as a result of activities during the Construction Phase and Operational Phase of the Proposed Project.
27. Where there is a combination of at least two direct environmental impacts on a receptor, or group of receptors, this is classified as an in-combination effect on community amenity. For example, where there are both visual and air quality impacts on a receptor, or a group of receptors, it would be determined that these receptor(s) would be impacted by an in-combination amenity effect.
28. The assessment of potential impacts on community amenity considers the residual effect reported for each of the environmental impacts under consideration, which are as follows:
- Chapter 6 (Noise & Vibration)
 - Chapter 7 (Traffic & Transport)
 - Chapter 12 (Air Quality)
 - Chapter 16 (Landscape & Visual).
29. It should be noted that the assessment of potential impacts on community amenity only considers potential effects on local residential, commercial (i.e. local businesses) and community receptors (or amenities, for example, playing pitches, amenity parkland, walking trails, ornamental gardens, playgrounds). It does not include any consideration of any potential effects on beef, dairy and other types of farming businesses, nor does it consider any potential effects on important economic or natural resource (e.g. commercial forests, peatlands, windfarms, mines, etc.). Such potential effects as a result of the construction and/or operation of the Proposed Project are considered and assessed in Chapter 11 (Agriculture) and Chapter 18 (Material Assets) respectively.

² CSO Data: <https://data.cso.ie/table/PIA19> and <https://data.cso.ie/table/F7030> [Accessed: October 2025]

30. As such, this assessment focuses on the construction and operational effects of the Proposed Project on local residential, commercial or community receptors (or amenities, for example, playing pitches, amenity parkland, walking trails, ornamental gardens, playgrounds).
31. It should also be noted, and as outlined in Chapter 4 (Proposed Project Description) and Appendix A9.1 Annex A (Hydrological Modelling Report), the proposed abstraction of water, in respect to the Proposed Project, is in essence an abstraction from water normally used in the (Ardnacrusha) hydro-power plant, using the same existing water level control. At a practical level, this will mean that ESB, in keeping the water level within the Normal Operating Band on Lough Derg and within the upper and lower water level on Parteen Basin, will take account of, and respond to, the volume of water abstracted for the Proposed Project, alongside other relevant considerations such as, maintaining statutory compensation flow of 10m³/s down the old Shannon channel, predicted rainfall, the demand for power and operating practices. As such, navigation and beneficial uses focused on tourism and recreation would experience the same operating water level range as normal (if these facilities can currently be used throughout the range of water levels within the Normal Operating Band, this would remain the case with the Proposed Project in operation). Therefore, there would be no material change to the use of the River Shannon (including Lough Derg and Parteen Basin) for recreational activities as the operation of the Proposed Project would result in no change compared to current conditions. As such, the assessment of likely significant effects on the recreational use of the River Shannon (including Lough Derg and Parteen Basin) is not included in the scope of assessment on 'community amenity'.

14.2.1.4 Community Accessibility and Severance

32. Community accessibility and severance relates to the ability of users to access commercial and community facilities, recreational resources and residential properties. Linear infrastructure projects, as is the nature of the majority of the Proposed Project, present the potential for community severance and other access issues by way of road closures/diversions or land-take requirements during their construction and/or operation.
33. As outlined in Section 14.2.1.3 in regard to the assessment of potential effects on community amenity, the assessment of potential effects on community accessibility and severance only considers potential effects on local residential, commercial (i.e. local businesses) and community receptors (or amenities, for example, playing pitches, amenity parkland, walking trails, ornamental gardens, playgrounds). It does not include any consideration of any potential effects on beef, dairy and other types of farming businesses, nor does it consider any potential effects on important economic or natural resources (e.g. commercial forests, peatlands, windfarms, mines, etc.). Such potential effects as a result of the construction and/or operation of the Proposed Project are considered and assessed in Chapter 11 (Agriculture) and Chapter 18 (Material Assets) respectively.

14.2.1.5 Tourism

34. Given the extensive scale of the Proposed Project and the importance of tourism to the national economy (see Appendix A14.1: Population Baseline for more information), potential effects on tourism and tourism receptors (i.e. attractions and accommodation (except B&Bs) within 500m of the Proposed Project) have been considered for assessment.
35. It should be noted that B&B accommodation has not been considered in this assessment as it is considered that their typical or average occupancy would be similar to that of a typical residential dwelling and as such are considered alongside other residential receptors (as well as commercial and community receptors) in the assessment of community amenity and community accessibility and severance (see Section 14.2.1.3 and Section 14.2.1.4 for more details).
36. Effects on tourism during the Construction and Operational Phases of the Proposed Project were assessed by considering the following effects on tourism receptors:

- Amenity effects arising from the combination of environmental impacts such as air quality, noise, visual, and traffic and transport
- Accessibility/severance effects resulting from a disruption of access to tourism facilities and accommodation
- Visitor perception effects and the potential for a reduction in visitor numbers to the region due to the perceived scale of construction associated with the Proposed Project.

37. The assessment of effects on amenity and access/severance at tourism receptors follows the same steps as outlined in regard to Community Amenity (Section 14.2.1.3) and Community Accessibility and Severance (Section 14.2.1.4) respectively. For the assessment of effects on visitor perception, the findings of the assessment on issues of amenity and severance at tourism receptors, as reported within this chapter, were used as evidence to support the use of professional judgement to determine a holistic view on the likely significant effects on visitor perception as a result of the Proposed Project.

14.2.1.6 Land Use and Land-take

38. The assessment of potential effects on land use and land-take considers and assesses the potential effects associated with the temporary and permanent land acquisition requirements to construct and operate the Proposed Project.

39. In line with the parameters of other sub-sections of this assessment, the assessment of potential effects on land use and land-take only considers the potential effects of temporary and/or permanent land-take on local residential, commercial (i.e. local businesses) and community receptors (or amenities, for example, playing pitches, amenity parkland, walking trails, ornamental gardens, playgrounds). It does not include any consideration of any potential effects of temporary and/or permanent land acquisition on beef, dairy and other types of farming businesses, nor does it consider any such potential effects on important economic or natural resources (e.g. commercial forests, peatlands, windfarms, mines, etc.). Such potential effects as a result of the construction and/or operation of the Proposed Project are considered and assessed in Chapter 11 (Agriculture) and Chapter 18 (Material Assets) respectively.

40. The significance of effects on land use and land-take was considered through a combination of the magnitude of impact and the sensitivity of the receptors impacted. The sensitivity of lands impacted by the Proposed Project is assigned according to the nature and function of the receptor which it is associated with as outlined in Table 14.12.

41. It should be noted that issues concerning development/zoned lands are considered and outlined in the Planning Report that accompanies the EIAR as part of the planning application for the Proposed Project.

14.2.2 Study Area

42. The study areas for each assessment topic (as outlined in Section 14.2.1) are outlined in Table 14.3 and also presented in Figures 14.1 – 14.63 with the exception of the study areas for the assessment topics of 'Employment' and 'Economy', which are not shown due to limitations in scale and adequate visualisation of receptors on the aforementioned figures.

43. The study area for each assessment topic differs due to the nature of the impacts under consideration, for example, potential impacts on land use and land-take are limited to the footprint of the Proposed Project (i.e. within the Planning Application Boundary), while potential impacts on employment could be experienced on a county-wide spatial scale.

44. No formal national guidance is available on the appropriate study area to focus the assessment of population arising from water abstraction, treatment and associated pipeline infrastructure. As such, professional judgement was applied in determining the appropriate study areas as set out in Table 14.3.

Table 14.3: Study Area for Each Assessment Topic

Assessment Topic	Study Area	Phase of Proposed Project Under Consideration
Employment	<ul style="list-style-type: none"> Local Labour Market (i.e. The labour market within the counties in which the Proposed Project would be located (Clare, Limerick, Tipperary, Offaly, Kildare and Dublin (within the administrative area of South Dublin County Council))) 	Construction and Operational Phases
	<ul style="list-style-type: none"> National Labour Market 	
Economy	<ul style="list-style-type: none"> National economy 	
Community Amenity	<ul style="list-style-type: none"> Area within 500m from the Planning Application Boundary 	
Community Accessibility and Severance		
Tourism	<ul style="list-style-type: none"> Area within 500m from the Planning Application Boundary (amenity and severance effects) 	
	<ul style="list-style-type: none"> Nationally (visitor perception effects) 	
Land Use and Land-take	<ul style="list-style-type: none"> Within the Planning Application Boundary of the Proposed Project 	

45. It should be noted that there are differences in the established study areas used within each of the individual assessments that have assessed other specific potential environmental impacts on people and communities as outlined in the following chapters of this EIAR (Volume 3):

- Chapter 6 (Noise & Vibration)
- Chapter 7 (Traffic & Transport)
- Chapter 8 (Biodiversity)
- Chapter 10 (Soils, Geology & Hydrogeology)
- Chapter 11 (Agriculture)
- Chapter 12 (Air Quality)
- Chapter 15 (Human Health)
- Chapter 16 (Landscape & Visual)
- Chapter 18 (Material Assets).

14.2.3 Relevant Guidelines, Policy and Legislation

46. The methodology used to assess the likely significant effects is in accordance with legislation and having regard to relevant guidelines and guidance (and policy) including, but not limited to:

- Draft Water Services Strategic Plan 2050 (Uisce Éireann 2024a)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government 2018)
- Guidelines on Information to be Contained in Environmental Impact Assessment Reports (EPA 2022)
- Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU) (EC 2017)
- TII PE-ENV-01108 Population and Human Health Assessment of Proposed National Roads – Standard (TII 2024)
- DMRB LA 112 – Population and Human Health (Highways England 2020)

- Department of Public Expenditure and Reform – The Public Spending Code (Government of Ireland 2019)
 - Department of Public Expenditure, NDP Delivery and Reform – Infrastructure Guidelines (Government of Ireland 2023)
 - Additionality Guide (UK Homes and Communities Agency 2014)
 - UK Government HM Treasury’s ‘The Green Book’ (2022)
 - Fáilte Ireland’s EIAR Guidelines for the Consideration of Tourism and Tourism Related Projects (2023)
 - Water Services Strategic Plan (Irish Water 2015a)
 - National Water Resources Plan – Framework Plan (Irish Water’s 25 Year Plan for Our Water Assets) (Irish Water 2021)
 - Regional Water Resources Plan: Eastern and Midlands (Irish Water 2022)
 - National Planning Framework – Project Ireland 2040 (Government of Ireland 2018)
 - National Development Plan 2021-2030 (Government of Ireland 2021)
 - Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy (RSES) 2019-2031 (Eastern & Midland Regional Assembly 2019)
 - Regional Spatial & Economic Strategy (RSES) for the Southern Region (Southern Regional Assembly 2020)
 - Regional Planning Guidelines for the Mid West Region (2010-2022) (Mid-West Regional Authority 2010), Regional Planning Guidelines for the Midlands (2010-2022) (Midland Regional Authority 2010), Regional Planning Guidelines for the Greater Dublin Area (2010-2022) (Dublin Regional Authority and Mid East Regional Authority 2010)
 - Shannon Tourism Masterplan (Waterways Ireland 2020)
 - Lough Derg Visitor Experience Development Plan (Tipperary Local Community Development Committee 2020)
 - Clare County Development Plan 2023-2029 (Clare County Council 2023)
 - Limerick Development Plan 2022-2028 (Limerick City and County Council 2022)
 - Tipperary County Development Plan 2022-2028 (Tipperary County Council 2022)
 - Offaly County Development Plan 2021-2027 (Offaly County Council 2021)
 - Kildare County Development Plan 2023-2029 (Kildare County Council 2023)
 - South Dublin County Council Development Plan 2022-2028 (South Dublin County Council 2022).
47. The current adopted County Development Plans for Clare, Limerick, Tipperary, Offaly, Kildare and South Dublin County Council, and the key policies within these with respect to the Proposed Project, are detailed in Table 14.4. A full review of relevant planning policy is set out in the Planning Report that accompanies the planning application for the Proposed Project.
48. Any references to legislation include any amendments thereto.

Table 14.4: Key County Development Plan Policies Relevant to the Proposed Project

County/Local Government Administrative Area	County Development Plan	Key Policies with Respect to the Proposed Project
Clare	Clare County Development Plan 2023–2029	<p><u>CDP 11.28:</u> Strategic Water Supply Projects – ‘It is an objective of Clare County Council</p> <ul style="list-style-type: none"> To support investment and the sustainable development of strategic water supply projects of Uisce Éireann and leakage reduction programmes and initiatives through the National Water Resources Plan, the Eastern and Midland Regional Water Resources Plan and subject to appropriate environmental assessment and the planning process To carefully scrutinise any proposals for the abstraction of water from Lough Derg or the River Shannon which may have an impact on the proposed South Clare/University of Limerick Economic Strategic Development Zone, an objective of which is the reopening of the Errina Canal.’ <p><u>CDP 11.30:</u> Water Supply – ‘It is an objective of Clare County Council:</p> <ul style="list-style-type: none"> To support the implementation of Uisce Éireann Investment Plans and to advocate the provision, by Uisce Éireann, of adequate water supply to accommodate the target population and employment potential of the County and in accordance with the statutory obligations set out in the EU and national policy and in line with the Core Strategy and Settlement Hierarchy set out in this Plan; To support the role of Uisce Éireann Investment Plans in taking into account seasonal pressures on critical water supply service infrastructure, climate change implications and leakage reduction in the design of all relevant projects; To advocate for the on-going conservation and upgrade of water supply infrastructure in the County; To maximise the use of existing capacity in water supply services in the planning of new development.’
Limerick	Limerick Development Plan 2022–2028	<p><u>IN O5:</u> Water Services – ‘It is an objective of the Council to:</p> <ul style="list-style-type: none"> Support Irish Water in the provision of water and wastewater infrastructure and services in accordance with the Service Level Agreement, until such time as the Agreement is terminated. Collaborate with Irish Water in the protection of water supply sources.’
Tipperary	Tipperary County Development Plan 2022–2028	<p><u>Policy 15 – A:</u> ‘It is the objective of the Council to work in partnership with Irish Water in the performance of its functions and in the implementation of the Water Services Strategic Plan, Investment Plan and National Water Resources Plan (and any amendment thereof), to ensure that water infrastructure complies with appropriate regulations and to ensure and support the sustainable development of the county.’</p> <p><u>Policy 15 – B:</u> ‘It is the objective of the Council to co-operate with Irish Water in the delivery of the Eastern and Midlands Water Supply Project and to ensure the maximum benefit from this project to County Tipperary, in particular with respect to economic development potential and security of supply.’</p>
Offaly	Offaly County Development Plan 2021–2027	<p><u>WSP-01:</u> ‘It is Council policy to ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements, a cleaner environment and climate change mitigation.’</p> <p><u>WSP-03:</u> ‘It is Council policy to work in conjunction with Irish Water to protect existing water supply and wastewater infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new water supply and wastewater infrastructure to facilitate future growth in accordance with the Council’s Core Strategy and Settlement Strategy.’</p> <p><u>WSP-09:</u> ‘It is Council policy to collaborate with and support, as relevant and appropriate, Irish Water in its role as the lead authority for water services to provide an adequate and appropriate drinking water supply that complies with the EU (Drinking Water) Regulations and the Drinking Water Regulations 2014 (as amended), and any future amendments. In this respect, Offaly County Council will have regard to the Environmental Protection Agency 2019 publication ‘Drinking Water Report for Public Water Supplies 2018’ (and any subsequent update) in the establishment and maintenance of water sources in the county, and in conjunction with Irish Water, undertake recommendations made by the EPA arising from any failure to meet drinking water standards and any enlistment on the EPA’s remedial Action List.’</p> <p><u>WSP-10:</u> ‘It is Council policy to engage with Irish Water to endeavour to facilitate developments which have requirements for water by allowing potential surface and ground water resources of County Offaly and the potential water resources of the River Shannon to be utilised, where practicable and possible, subject to appropriate safeguards.’</p>

County/Local Government Administrative Area	County Development Plan	Key Policies with Respect to the Proposed Project
Offaly	Offaly County Development Plan 2021–2027	<u>WSP-13</u> : 'It is Council policy to protect the Irish Water Eastern and Midlands Water Supply Project pipeline corridor from inappropriate development that would prejudice the delivery of the project and to refer any planning applications within the development corridor to Irish Water for comment.'
		<u>WSO-03</u> : 'It is an objective of the Council to co-operate with Irish Water in the delivery of the Eastern and Midlands Water Supply Project and to ensure the maximum benefit from this project to County Offaly, in particular with respect to economic development potential and security of supply.'
		<u>WSO-04</u> : 'It is an objective of the Council to engage with Irish Water to examine significant raw water sources which may be made redundant by the Water Supply Project for the Eastern and Midlands Region with a view to reserving and protecting them for future back up or 'windfall' type economic development opportunities where high water use is required.'
Kildare	Kildare County Development Plan 2023–2029	<u>IN O1</u> : 'It is an objective of the Council to work with Irish Water to protect existing water infrastructure, reduce leakage, improve water quality and upgrade water supply infrastructure throughout Kildare.'
		<u>IN O2</u> : 'It is an objective of the Council to support Irish Water in delivering key water service projects in the county as set out in the Water Services Strategic Plan (2015) including: <ul style="list-style-type: none"> The Eastern and Midlands Regions Water Supply Project and to preserve the corridor for this scheme free of development.'
		<u>IN O4</u> : 'It is an objective of the Council to ensure that adequate water services will be available to service development prior to the granting of planning permission and to require developers to provide evidence of consultation with Irish Water regarding capacity in the network prior to applying for planning permission.'
South Dublin County Council	South Dublin County Council Development Plan 2022–2028	<u>IE2 Objective 1</u> : 'To work in conjunction with Irish Water to protect existing water and drainage infrastructure and to promote the ongoing upgrade and expansion of water supply and wastewater services to meet the future needs of the County and the Region.'
		<u>IE2 Objective 2</u> : 'To support Irish Water in delivering key water service projects in the County including: <ul style="list-style-type: none"> The Water Supply Project Eastern and Midlands Region ...'
		<u>IE2 Objective 4</u> : 'To support Irish Water in the delivery of the strategic objectives and strategic water and wastewater projects and infrastructure as set out in the Water Services Strategic Plan (2015), any subsequent plan, Irish Water's Capital Investment Plan 2020-2024, any subsequent Capital Investment Plans and the National Water Resources Plan.'
		<u>IE2 Objective 8</u> : 'To ensure on-going liaison and consultation with Irish Water to ensure that the water services infrastructure for the planned growth of the County, in line with the County's Core Strategy, is integrated into the relevant plans and capital programmes and to ensure that the design and layout of water services is fully considered to deliver sustainable growth.'

14.2.4 Data Collection Methods

49. Baseline data was collected and collated by carrying out a desk study, using the most up-to-date available data at the time of writing. The following sources and records represent the type of information sources that were used:

- 2022 Census from the CSO, comprising statistical data and information at county, settlement and small area (SAPS) geographical levels
- GeoDirectory Address Data Information (An Post and Tailte Éireann 2025)
- The aforementioned County Development Plans
- Aerial Mapping/Imagery (Google 2024)
- Design Drawings of the Proposed Project
- Population Assessments from Environmental Impact Assessments (EIAs) for other major infrastructure projects.

50. These sources of information were used to document sensitive receptors situated in close proximity to the Proposed Project. Sensitive receptors of relevance include residential, commercial, community and tourism receptors, the locations of which, in respect of the Proposed Project, are shown on Figures 14.1 – 14.63.
51. A brief high-level summary of the baseline environment is provided in Section 14.3 of this chapter with further detailed information contained in Appendix A14.1 (Population Baseline).

14.2.5 Consultation

52. Consultation responses from key stakeholders, landowners and the public were reviewed and considered in compiling this chapter. Chapter 2 (The Environmental Impact Assessment Process) of the EIAR sets out the approach the Proposed Project has taken with regard to environmental scoping, in particular the EIAR Scoping Methodology Report (Uisce Éireann 2023) in respect of the Proposed Project and also the Environmental Impact Statement Scoping Report³ (Irish Water 2016) relating to a previous iteration of the project.
53. The scoping consultation responses relevant to population received from stakeholders are provided in Table 14.5. Further detail on the Proposed Project consultation is included in Chapter 2 (The Environmental Impact Assessment Process) and responses received are in the Water Supply Project: Eastern and Midlands Region – Consultation Report, which forms part of the Strategic Infrastructure Development planning application for the Proposed Project.

Table 14.5: Key Issues Raised During Scoping Consultation

Consultee	Comment	Relevant EIAR Section
Laois County Council	Community gain fund – The nature of the fund is not defined in terms of its size, period of operation, locations in which it will be used etc. This approach runs of the risk of being seen to remove from the planning process community gain schemes that would be established under the scheme in an effort to narrow the scope of the planning proposals.	Proposals for the establishment of a Community Benefit Scheme (CBS) form part of the Planning Application documentation for the Proposed Project; however, this is not considered as a mitigation measure in regard to the EIAR.
	The road safety impacts on road users, and on vulnerable road users, particularly on county roads and the associated amenity impacts should be included.	Road safety issues, as well as issues involving vulnerable road users, are considered in Chapter 7 (Traffic & Transport). Potential impacts on amenity are considered and assessed in this chapter in Section 14.4.2.3, Section 14.4.2.5.1, Section 14.4.3.3 and Section 14.4.3.5.1.
Fáilte Ireland	It is important for the EIS to evaluate whether and how the interacting impacts of a project are likely to affect tourism resources.	Potential impacts on Tourism are considered and assessed in Section 14.4.2.5 and Section 14.4.3.5.
	Will the development stimulate or suppress demand for additional tourism development in the area?	
	Social Consideration – will the development change patterns and types of activity and land use? Will it affect the demographics, economy or social dynamics of the locality?	Potential impacts on Land Use and Land-take are considered and assessed in Section 14.4.2.6 and Section 14.4.3.6. Potential impacts on Community Amenity are considered and assessed in Section 14.4.2.3 and Section 14.4.3.3. Potential impacts on Community Accessibility and Severance are considered and assessed in Section 14.4.2.4 and Section 14.4.3.4.

³ As set out in Chapter 2 (The Environmental Impact Process), the Environmental Impact Statement Scoping Report (Irish Water 2016) was based on a previous iteration of the project; however, feedback received from stakeholders informed future scoping and design development and has been considered in this chapter where relevant to the Proposed Project.

Consultee	Comment	Relevant EIAR Section
Fáilte Ireland	Indicate the location of sensitive neighbouring tourism resources that are likely to be directly affected, and other premises which although located elsewhere, may be the subject of secondary impacts such as alteration of traffic flows or increased urban development.	The location and character of tourism receptors situated within 500m of the Proposed Project are outlined in Table A14.10 of Appendix A14.1 (Population Baseline). Potential impacts on Tourism are considered and assessed in Section 14.4.2.5.1 and Section 14.4.3.5.1.
	Identify and quantify, where possible, their potential receptors of impacts, noting in particular transient populations, such as drivers, walkers, seasonal and other non-resident groups.	Potential accessibility/severance impacts on tourism receptors are considered and outlined in Section 14.4.2.5.2 and Section 14.4.3.5.2.
	Describe any significant trends evident in the overall growth or decline of these numbers, or of any changes in the proportion of one type of activity relative to any other.	Potential impacts on Tourism are considered and assessed in Section 14.4.2.5 and Section 14.4.3.5.
	Indicate any commercial tourism activity which likely to be directly affected, with resultant environmental impacts.	Potential impacts on (tourism) amenity are considered and outlined in Section 14.4.2.5.1 and Section 14.4.3.5.1.
	Describe character of tourism facilities and assign significance and sensitivity to each.	The location and character of tourism receptors situated within 500m of the Proposed Project are outlined in Table A14.10 of Appendix A14.1 (Population Baseline). All tourism receptors are considered to be of high sensitivity. Potential impacts on Tourism are considered and assessed in Section 14.4.2.5 and Section 14.4.3.5.
	Determine the 'Do-Nothing' Impact and predicted impacts on tourism.	The 'Do-Nothing' scenario is outlined in Section 14.4.1.
	Will there be severance, loss of rights of way or amenities, conflicts, or other changes likely to ultimately alter the character and use of the tourism resources in the surrounding area?	Potential accessibility/severance impacts on tourism receptors are considered and outlined in Section 14.4.2.5.2 and Section 14.4.3.5.2. Potential impacts on (tourism) amenity are considered and outlined in in Section 14.4.2.5.1 and Section 14.4.3.5.1.
	Indicate the numbers of premises and visitors likely to be directly affected directly and indirectly.	
	Indicate the occupations, activities or interests of principal types of tourism in the area.	The location and character of tourism receptors situated within 500m of the Proposed Project are outlined in Table A14.10 of Appendix A14.1 (Population Baseline).
	Indicate the significance of the principal tourism assets or activities likely to be affected.	
	Describe any significant concerns, fears or opposition to the development known to exist among tourism interests.	The key concerns to tourism receptors as a result of the Proposed Project are outlined in Section 14.2.1.5
	Describe the location, type, significance, magnitude/extent of the tourism activities or assets that are likely to be affected.	The location and character of tourism receptors situated within 500m of the Proposed Project are outlined in Table A14.10 of Appendix A14.1 (Population Baseline). These are considered and assessed in Section 14.4.2.5 and Section 14.4.3.5.
	Describe how the new development will affect the balance between long-established and new dwellers in an area and its effect on the cultural or linguistic distinctiveness of an area.	Potential impacts on Community Amenity are considered and assessed in Section 14.4.2.3 and Section 14.4.3.3.
	Describe how changes in patterns of employment, land use and economic activity arising from the proposed development will affect tourism.	Potential impacts on Tourism are considered and assessed in Section 14.4.2.5 and Section 14.4.3.5. Potential impacts on visitor/tourism perception as a result of the construction and/or operation of the Proposed Project are assessed in Section 14.4.2.5.3 and Section 14.4.3.5.3.
	Describe the consequences of change, referring to indirect, secondary and cumulative impacts on tourism.	Potential impacts on Tourism are considered and assessed in Section 14.4.2.5 and Section 14.4.3.5. Cumulative Impacts are considered and outlined in Chapter 21 (Cumulative Effects & Interactions).

Consultee	Comment	Relevant EIAR Section
Fáilte Ireland	Describe the worst case for tourism if all mitigation measures fail.	The assessment outlined in Section 14.4.2.5.3 and Section 14.4.3.5.3 are pre-mitigation (worst case) impacts.
	Determine whether an Interpretative/Visitor's Centre at the WTP site in Birdhill is merited.	Potential impacts on visitor/tourism perception as a result of the construction and/or operation of the Proposed Project are assessed in Section 14.4.2.5.3 and Section 14.4.3.5.3.
	Consider the assessment of impacts of the proposed scheme on any existing or proposed active travel / Greenways projects.	Potential impacts on visitor/tourism perception as a result of the construction and/or operation of the Proposed Project are assessed in Section 14.4.2.5.3 and Section 14.4.3.5.3.
	Consider opportunities to incorporate active travel / Greenway linkages (and to potential Interpretative / Visitor's Centre) alongside or with CPO lands.	Potential impacts on visitor/tourism perception as a result of the construction and/or operation of the Proposed Project are assessed in Section 14.4.2.5.3 and Section 14.4.3.5.3.
	Assess the water levels in relation to water based (participatory) activities.	Potential impacts on visitor/tourism perception as a result of the construction and/or operation of the Proposed Project are assessed in Section 14.4.2.5.3 and Section 14.4.3.5.3.
Inland Fisheries Ireland	Impact to angling and the provision for safe access for anglers during construction/ operation should be addressed. Impact of reduced water levels in the lake as an amenity is also required.	The assessment of impacts to angling clubs in terms of amenity and accessibility is outlined in Section 14.4.2.3 and Section 14.4.2.4 respectively. Details of the water level of Parteen Basin are outlined in Chapter 4 (Proposed Project Description).
	Overall impact on angling and the provision of safe access for anglers for both construction/operation should be addressed.	The assessment of impacts to angling clubs in terms of amenity and accessibility is outlined in Section 14.4.2.3 and Section 14.4.2.4 respectively.
Health Service Executive (HSE)	Population should be extended to include human health as per the new EIA guidelines.	Potential impacts on human health are considered and assessed in Chapter 15 (Human Health).
	Requirement to assess significant impacts on Population and Human Health.	Potential impacts on human health are considered and assessed in Chapter 15 (Human Health) while potential impacts on population are outlined in this chapter.
	HSE considers that human health assessment should be broadened to consider how health gain can be incorporated into the development.	Potential impacts on human health are considered and assessed in Chapter 15 (Human Health).
	Objectives of the Healthy Ireland Strategy should be considered.	
	It is recommended that community gain funding includes health gain within the context of the Healthy Ireland strategy.	Proposals for the establishment of a CBS form part of the Planning Application documentation for the Proposed Project; however, this is not considered as a mitigation measure in regard to the EIAR.
	The provision of construction compounds to ensure potable water and food hygiene standards should be considered.	Table 5.11 in Chapter 5 (Construction & Commissioning) outlines the services that will be provided at Construction Compounds and Pipe Storage Depots.
	Access to any healthcare facilities during construction by the less mobile. Elderly and temporary access routes should be considered.	Potential accessibility/severance impacts on community receptors are considered and outlined in Section 14.4.2.4 and Section 14.4.3.4.
	Impact to food premises due to potential interruption of services (i.e. food delivery, waste disposal etc.) should be considered.	
Tipperary County Council	From a community perspective, a community gains package, similar to what Wind Energy projects or other 'poor neighbour' uses support would be of value. The funds should be held by the Council on behalf of the communities affected and the spend should be focused on these areas and in accordance with a plan that the communities prepare, facilitated and enabled by the Council.	Proposals for the establishment of a CBS form part of the Planning Application documentation for the Proposed Project; however, this is not considered as a mitigation measure in regard to the EIAR.
Waterways Ireland	Abstraction should not impact navigation levels or impede the right to navigation and controls are required during drought periods.	There will be no impact on navigation levels or impedance of the right to navigate watercourses impacted by the Proposed Project as outlined in Chapter 4 (Proposed Project Description).

Consultee	Comment	Relevant EIAR Section
Kildare County Council	To ensure that the proposed scheme is not just to transfer water to Dublin Region but to make water available to other population centres and industries along and adjacent to the pipeline route including those in Co. Kildare.	As outlined in Chapter 4 (Proposed Project Description), a key feature of the Proposed Project are the Take-Off Points whose purpose is to provide for potential future connections along the Water Supply Area.

14.2.6 Appraisal Method for the Assessment of Impacts

54. This assessment of potential impacts on people and communities during the construction and/or operation of the Proposed Project has been undertaken in accordance with legislation and having regard to relevant guidelines and guidance documents as outlined at the beginning of Section 14.2. These guidance documents informed the determination of receptor sensitivity, magnitude of change, and significance of impact.
55. For all assessment topics (with the exception of Community Amenity (and the sub-topic of ‘amenity’ within Tourism)), the significance of effects on receptors was determined by a combined consideration of sensitivity and magnitude criteria, as set out in in Table 14.6, which is broadly based on Figure 3.4 of the EPA Guidelines (2022).

Table 14.6: Significance of Environmental Effect (Adapted from EPA Guidelines (2022))⁴

Magnitude of Impacts	Sensitivity of Receptor				
	Negligible	Low	Medium	High	Very High
Negligible	Imperceptible	Not Significant	Not Significant	Not Significant	Not Significant
Low	Not Significant	Slight	Slight	Moderate	Significant
Medium	Not Significant	Slight	Moderate/ Significant	Significant	Very Significant
High	Not Significant	Moderate	Significant	Very Significant	Profound

56. ‘Significant’, ‘Very Significant’ and ‘Profound’ effects (as defined in Table 14.6), are considered ‘Significant’ for the purpose of defining significance thresholds in the EIAR. These are effects that could be determined to be either highly beneficial or unacceptable in social contexts and which are important to the decision-making process.
57. In population assessments, receptors are not sensitive to changing environmental conditions in the same way as environmental receptors. To address this, different assessment topics use different sensitivity and magnitude criteria where required throughout this chapter.
58. The quality, significance and duration of such effects from the Construction and Operational Phases (where applicable) of the Proposed Project are characterised as per the EPA Guidelines, as outlined in Chapter 2 (The Environmental Impact Assessment Process), unless otherwise stated in Section 14.4.

14.2.6.1 Employment

59. The appraisal method for the assessment of likely significant effects on employment is determined through a combination of the magnitude of impact and the sensitivity of the receptors (in this case the combined labour market across all the counties within the study area, as well as, but separately, the national (construction) labour market).

⁴ Table 14.6 represents a broad representation of Figure 3.4 of the EPA Guidelines (2022), with Figure 3.4 forming the basis for the impact assessment as outlined in Section 14.4 of this chapter.

60. Employment is a key population consideration, and has an important role in the health, well-being and wider livelihoods of individuals and populations more generally. As such, a high sensitivity categorisation has been applied to the labour market under assessment as shown in Table 14.7.

Table 14.7: Weight Attached to Employment Impacts in Policies

Sensitivity of Assessment Topic	
Sensitivity	Description
High	Accorded a high priority in local, regional or national policy.
Medium	Accorded a medium priority in local, regional and national policy.
Low	Accorded a low priority in local, regional and national policy.
Negligible	Not considered a priority in local, regional and national policy.

61. Table 14.8 shows the magnitude criteria used for the assessment of effects on employment within the study area as a result of the Proposed Project. These thresholds are based on professional judgement using evidence of county-level and national statistical data (see Appendix A14.1: Population Baseline for more information).

Table 14.8: Magnitude of Impacts for the Employment Assessment

Changes in Level of Employment as a Result of the Proposed Project	
Magnitude	Description
High	Greater than 1% change, representing a large and noticeable change to the level of employment within the study area.
Medium	0.5% – 1% change, representing a moderate change to the level of employment within the study area.
Low	0.2% – 0.5% change, representing a noticeable change to the level of employment within the study area.
Negligible	Less than 0.2% change, representing a negligible change to the level of employment within the study area.

14.2.6.2 Economy

62. The likely significant effects on the national economy were determined through a combination of the magnitude of impact and the sensitivity of the receptor (in the absence of relevant county/regional-level data and having regard to the fact the Proposed Project will serve almost 50% of the population of Ireland, the national economy is assessed).
63. The national economy provides the foundation for the health and well-being of a society and the people within that depend on it. As such, a high sensitivity categorisation has been assigned to the national economy as the receptor being assessed as per Table 14.9.

Table 14.9: Weight Attached to Economic Impacts in Policies

Sensitivity of Assessment Topic	
Sensitivity	Description
High	Accorded a high priority in local, regional or national policy.
Medium	Accorded a medium priority in local, regional and national policy.
Low	Accorded a low priority in local, regional and national policy.
Negligible	Not considered a priority in local, regional and national policy.

64. Table 14.10 shows the magnitude criteria used for the assessment of impacts on the economy within the study area. These thresholds were based on professional judgement using evidence of national statistics for economic sectors in the absence of more appropriate representative regional or county-level statistical data.

Table 14.10: Magnitude of Impacts for the Economic Impact Assessment

Changes in Economic Activity Across the Study Area as a Result of the Construction of the Proposed Project	
Magnitude	Description
High	Greater than 1% change, representing a large and noticeable change to the economy across the study area.
Medium	0.5% – 1% change, representing a moderate change to the economy across the study area.
Low	0.2% – 0.5% change, representing a noticeable change to the economy across the study area.
Negligible	Less than 0.2% change, representing a negligible change to the economy across the study area.

14.2.6.3 Community Amenity

65. As mentioned above in Section 14.2.1.3, the assessment of potential effects on community amenity is informed by the residual effects reported within each of the following chapters of this EIAR in relation to the following contributing environmental topics:
- Chapter 6 (Noise & Vibration)
 - Chapter 7 (Traffic & Transport)
 - Chapter 12 (Air Quality)
 - Chapter 16 (Landscape & Visual).
66. The level of significance with respect to each environmental effect is outlined according to their specific assessment requirements as presented in the aforementioned chapters of this EIAR. All reported residual effects are considered, from Imperceptible/Not Significant to Significant/Profound effects (as per the significance criteria outlined in the EPA Guidelines; see Chapter 2: The Environmental Impact Assessment Process). As such, specific sensitivity and magnitude criteria are not required for the assessment of community amenity given the reliance on reported residual effects from contributing assessments.
67. To determine the impact on community amenity, there needs to be an alignment of receptors across each of the different contributing environment assessments (i.e. Chapters 6, 7, 12 and 16) in order to determine which receptors apply to which reported residual impact. An alignment exercise has been undertaken in order to inform this assessment and establish the likely significant effects on community amenity. Information on the type of receptors being assessed can be found within each of the EIAR chapters listed above.
68. The significance of the effect on community amenity is determined by considering the contributing environmental effects in-combination with one another and assigning an overall significance in accordance with the EPA Guidelines as outlined in Chapter 2 (The Environmental Impact Assessment Process). To do this Table 14.11 has been used to determine the overall significance of effect on amenity. This amenity matrix is closely aligned with the EPA Guidelines; however, it has amalgamated the term 'Significant' to encompass the EPA terms 'Profound', 'Very Significant' and 'Significant' while, the term 'Not Significant' encompasses the EPA terms 'Not Significant' and 'Imperceptible'.
69. The amenity matrix can be used for either negative or positive impacts, but not a combination of both. Where the nature of two or more contributing environmental effects alternates between positive and negative, professional judgement has been used to assign the overall significance of the effect on amenity.
70. Whilst the community amenity assessment imposes no duration criteria of its own, where a Significant effect on amenity is identified, the temporal aspects from the environmental effects were examined to determine whether the effects are likely to occur simultaneously and result in a Significant indirect effect.

Table 14.11: In-Combination Amenity Effect Significance Matrix

Environmental Effect 1	Environmental Effect 2	Environmental Effect 3	Environmental Effect 4	Combined Effect
Significant	Significant	Significant	Significant	Significant
Significant	Significant	Significant	Moderate	Significant
Significant	Significant	Significant	Slight	Significant
Significant	Significant	Significant	Not Significant	Significant
Significant	Significant	Moderate	Moderate	Significant
Significant	Significant	Moderate	Slight	Moderate/Significant
Significant	Significant	Moderate	Not Significant	Moderate/Significant
Significant	Significant	Slight	Slight	Moderate
Significant	Significant	Slight	Not Significant	Moderate
Significant	Significant	Not Significant	Not Significant	Moderate
Significant	Moderate	Moderate	Moderate	Moderate/Significant
Significant	Moderate	Moderate	Slight	Moderate
Significant	Moderate	Moderate	Not Significant	Moderate
Significant	Moderate	Slight	Slight	Moderate
Significant	Moderate	Slight	Not Significant	Moderate
Significant	Moderate	Not Significant	Not Significant	Moderate
Significant	Slight	Slight	Slight	Slight/Moderate
Significant	Slight	Slight	Not Significant	Slight/Moderate
Significant	Slight	Not Significant	Not Significant	Slight
Significant	Not Significant	Not Significant	Not Significant	Not Significant/Potential direct impact on amenity
Moderate	Moderate	Moderate	Moderate	Moderate/Significant
Moderate	Moderate	Moderate	Slight	Moderate/Significant
Moderate	Moderate	Moderate	Not Significant	Moderate
Moderate	Moderate	Slight	Slight	Moderate
Moderate	Moderate	Slight	Not Significant	Moderate
Moderate	Moderate	Not Significant	Not Significant	Moderate
Moderate	Slight	Slight	Slight	Slight/Moderate
Moderate	Slight	Slight	Not Significant	Slight/Moderate
Moderate	Slight	Not Significant	Not Significant	Slight
Moderate	Not Significant	Not Significant	Not Significant	Not Significant
Slight	Slight	Slight	Slight	Slight/Moderate
Slight	Slight	Slight	Not Significant	Slight/Moderate
Slight	Slight	Not Significant	Not Significant	Slight
Slight	Not Significant	Not Significant	Not Significant	Not Significant
Not Significant				

14.2.6.4 Community Accessibility and Severance

71. The appraisal method for the assessment of likely significant effects on community accessibility and severance is determined through a combination of the magnitude of impact and the sensitivity of the receptors impacted.

72. The sensitivity of residential, commercial and community land is assigned in line with the TII Population and Human Health Guidelines and the DMRB LA 112 Guidelines as presented in Table 14.12.

Table 14.12: Sensitivity Assessment for Community Accessibility and Severance

Sensitivity	Description
High	<ul style="list-style-type: none"> Residential or commercial buildings Buildings used by the community (e.g. schools, community halls, medical centre) Community land that is widely used or for which there is no available or accessible alternative Religious sites and places of worship.
Medium	<ul style="list-style-type: none"> Residential or commercial land without structures (e.g. gardens or car parks) Community land without structures that is not widely used.
Low	<ul style="list-style-type: none"> Derelict or unoccupied buildings or land Land without structures not widely used for which equivalent and accessible alternatives are available.

73. Table 14.13 outlines the criteria to determine the level of magnitude of impact. These criteria were based upon the TII Population and Human Health Guidelines and the DMRB LA 112 Guidelines in addition to professional judgement and past experience of working on other major infrastructure projects.

Table 14.13: Magnitude of Impacts for Community Accessibility and Severance Effects on Residential, Commercial and Community Receptors

Magnitude	Description
High	Introduction (adverse) or removal (beneficial) of severe severance giving rise to a permanent, material change in accessibility.
Medium	Introduction (adverse) or removal (beneficial) of severe severance giving rise to a limited/moderate change in accessibility which may be permanent or temporary. During construction this would be for a substantial period, for example at least two years.
Low	Introduction (adverse) or removal (beneficial) of severance, whilst retaining adequate accessibility provision. During construction this would be for a notable period, for example at least one year.
Negligible	Very minor introduction (adverse) or removal (beneficial) of severance whilst retaining ample accessibility provision.

14.2.6.5 Tourism

74. The assessment of likely significant effects on the amenity of tourism receptors follows the same process as outlined in Section 14.2.6.3 for community amenity.

75. The assessment of likely significant effects of accessibility and severance on tourism receptors follows the same process as that outlined in Table 14.12 and Table 14.13 for the assessment topic 'Community Accessibility and Severance'.

76. In the absence of appropriate guidance, the assessment of significant effects on visitor perception as a result of the construction and/or operation of the Proposed Project is determined using professional judgement (and past experience of working on other major infrastructure projects) together with the reported potential effects on amenity and accessibility/severance in respect to tourism receptors.

14.2.6.6 Land Use and Land-take

77. The appraisal method for the assessment of likely significant effects on land use and land-take is determined through a combination of magnitude of impact and the sensitivity of the receptors impacted.

78. The sensitivity of residential, commercial and community land is assigned in line with the TII Population and Human Health Guidelines and the DMRB LA 112 Guidelines as presented in Table 14.14.

Table 14.14: Sensitivity Assessment for Community Accessibility and Severance (and Land Use and Land-take)

Sensitivity	Description
High	<ul style="list-style-type: none"> Residential or commercial buildings Buildings used by the community (e.g. schools, community halls, medical centre) Community land that is widely used or for which there is no available or accessible alternative Religious sites and places of worship.
Medium	<ul style="list-style-type: none"> Residential or commercial land without structures (e.g. gardens or car parks) Community land without structures that is not widely used.
Low	<ul style="list-style-type: none"> Derelict or unoccupied buildings or land Land without structures not widely used for which equivalent and accessible alternatives are available.

79. Table 14.15 outlines the criteria to determine the level of magnitude of impact. These criteria were based upon the TII Population and Human Health Guidelines and the DMRB LA 112 Guidelines in addition to professional judgement and past experience of working on other major infrastructure projects.

Table 14.15: Magnitude of Impacts for Land Use and Land-take Effects on Residential, Commercial and Community Receptors

Magnitude	Description
High	The permanent loss of a resource, or loss of key characteristics that makes it unviable.
Medium	Partial loss of/damage to key characteristics, features or elements (e.g. partial removal or substantial amendment to access or area of land, compromising viability of the asset).
Low	A discernible change in attributes, quality or vulnerability; minor loss of, or alteration to, one or more key characteristics, features or elements. For example, amendment to access or acquisition of land resulting in minor changes to operating conditions.
Negligible	Very minor loss of or alteration to one or more characteristics, features or elements. For example, acquisition of non-operational land or buildings not directly affecting the viability of the asset. In addition, that there is no noticeable difference in the provision of private property, local facilities or services.

14.2.7 Construction Flexibility

80. At this stage of the development of the Proposed Project there are a number of points of detail which cannot be finalised. This is due to factors such as unknown site constraints or obstacles that may affect the construction of the permanent infrastructure. Although a high level of ground investigation has been obtained to inform the planning application for the Proposed Project, further site investigations will be undertaken following grant of planning permission. This will inform a confirmed design for construction. This is a standard delivery approach and as a result, for a linear project of this nature, scale and complexity, it is typical that a level of construction flexibility is required. This flexibility in construction is necessary to provide a mechanism to overcome these matters during the later stages of the Proposed Project. The elements which are subject to construction flexibility are summarised in Table 14.16 and this also explains how this flexibility has been accounted for within the assessment reported in this chapter. Chapter 4 (Proposed Project Description) and Chapter 5 (Construction and Commissioning) in Volume 2 of this EIAR provides further detail.

81. The construction works necessary to deliver the permanent design (including the construction flexibility defined in Table 14.16) would take place within the Construction Working Width which defines the extent of the Planning Application Boundary. For the assessment reported in this EIAR this means that the construction works could take place anywhere within the Construction Working Width.

82. The assessment reported in this chapter has taken account of this construction flexibility and assessed all the likely significant effects that could arise. For this assessment, the likely significant effects reported in this chapter would not change regardless of the alignment or location of infrastructure elements within

the defined construction flexibility in Table 14.16 (i.e. the difference in effects would be imperceptible for the purpose of the assessment).

Table 14.16: Definition of Design Flexibility

Design Element	Construction Flexibility	How this has been Applied / Assessed in this Chapter
Pipeline	Treated Water Pipeline and RWRMs horizontal alignment – to allow for construction flexibility to overcome site constraints or obstacles the pipeline could be anywhere within a 20m Pipeline Corridor as defined in Chapter 4 (Proposed Project Description).	The assessment assumes construction activities would take place along the length and breadth of the Construction Working Width, irrespective of the final location of the Treated Water Pipeline and RWRMs within the 20m corridor.
Pipeline	Treated Water Pipeline vertical alignment – to allow construction flexibility to overcome site constraints or obstacles, the vertical alignment of the pipeline could vary between 1.2m and 4.4m to the crown of the pipe. Exceptions would be at proposed trenchless crossing locations (which due to the construction approach would be deeper than 4.4m to crown) and where it has been identified that for hydraulic purposes, the crown of the pipeline would need to be deeper than 4.4m. These have been included in the vertical alignment set out in the Planning Application for the Proposed Project and consequently have been assessed for significant environmental effects as reported in this EIAR. These include e.g. TWB 27100 - 27700 and TWC 2600 - 2750. In these instances, the construction flexibility would be the crown of the pipe not being deeper than that shown in the Planning Application Drawings and not shallower than 1.2m. The excavation needed for the pipeline is assumed to be the largest needed for the lowest vertical parameter set out.	This construction flexibility would not affect the population assessment.
Valves	The location of valves, and associated pipeline features, that need to be above the pipeline could change if there is a change in the vertical or horizontal alignment of the pipeline, as a result of the construction flexibility defined in the two rows above. The construction flexibility would allow them to move within the 20m Pipeline Corridor. However, the location of these pipeline features would be limited to remaining within the land parcels as identified and assessed within the EIAR (but still remaining within the 20m Pipeline Corridor).	The assessment assumes construction activities would take place along the length and breadth of the Construction Working Width, irrespective of the final location of the valves within the 20m corridor.
Outfall connections	To construct the smaller connection pipes between washout valves and washout outfalls, a small amount of construction flexibility would be required to overcome onsite obstacles or constraints. To allow for this, the connecting pipe could be anywhere within a 10m corridor.	The assessment assumes construction activities would take place along the length and breadth of the Construction Working Width, irrespective of the final location of the connecting pipe the 10m corridor.
Outfall locations	The outfall headwalls and discharge point would have to move with the alignment of the outfall pipeline, as set out above, and so the discharge point could move within the same 10m construction flexibility. To allow for the headwalls to move 10m either side of the current pipeline alignment, a total construction flexibility width of 20m has been allowed for the headwalls.	The assessment assumes construction activities would take place along the length and breadth of the Construction Working Width, irrespective of the final location of the outfalls within the defined construction flexibility.

14.2.7.1 Variation in Construction Methods

83. In addition to the construction flexibility defined in Table 14.16 there may also be the potential for variation in the method of construction to be used to build the Proposed Project. This variation would be necessary to deal with, for example, uncertainties in ground conditions or on-site constraints. Chapter 5 (Construction & Commissioning) includes further detail on these, including the reasoning why different techniques may be required. This could include:

- Use of raft foundations or concrete piled foundations at the WTP
- Use of auger bore or pipe jacking for trenchless crossings
- Using trenchless crossing or open excavation for the crossing of low voltage power lines
- Different construction techniques for working in poor ground include peat materials.

84. The assessment reported in this chapter has been based on any of these construction techniques being adopted.
85. In addition, as set out in Appendix A5.3 (Methods of Working in Peat), four slightly different methods for constructing the pipeline in areas of peat soils have been defined. To allow for variation in ground conditions it has been assumed for the purpose of the assessment reported in this EIAR that either Method 2, 3 or 4 could be used in areas where the depth of peat is greater than 1m. Where the depth of peat is less than 1m, Method 1 is proposed to be used and it is not expected that there would be any deviation from this methodology. The environmental effects from Methods 2, 3, and 4 would be similar. However, Methods 3 and 4 would result in additional permanent infrastructure in the form of stone pillars (Method 3) or piled supports (Method 4) below the pipeline. Consequently, Method 4 would require piling and as such, would have a slighter greater environmental impact. Therefore, the EIAR is based on the application of Method 4 where the depth of peat is greater than 1m. However, in areas where Methods 2, 3, or 4 could be used, the environmental assessment has considered whether these different methods would result in different likely significant effects and therefore the assessment reported in this chapter has identified the likely significant effects from any of the three techniques. For this assessment, the likely significant effects reported in this chapter would not change regardless of the working in peat method used (i.e. the difference between the methods would be imperceptible for the purpose of the assessment). This is in line with the conclusions of other topic chapters which have informed this assessment.

14.2.8 Difficulties Encountered in Compiling Information

86. Difficulties were encountered during the compilation of the baseline and assessment of effects sections where appropriate regional or county-level economic data is not available to inform the assessment. Due to this gap in available regional or county-level economic data, national-level data was used as a substitute and the Proposed Project has been assessed on that basis. This limitation applies primarily to Sections 14.4.2.2 and 14.4.3.2 of this assessment, but is not considered to be a material limitation to the assessment as it is necessary to consider the make-up of the economy in the wider country to gain an accurate population baseline. It is therefore concluded that the information that has informed the assessment is sufficient to identify the likely significant effects.

14.2.9 Cumulative Effects Assessment

87. As noted in Chapter 2 (The Environmental Impact Assessment Process), intra-project cumulative effects are described within respective topic chapters, while inter-project cumulative effects are described in Chapter 21 (Cumulative Effects & Interactions). The EIA Directive includes the consideration of existing projects within the cumulative effects assessment, and this is addressed through a consideration of the incremental impact of the Proposed Project within the context of the existing baseline as described, and where applicable, the carrying capacity of the environment.
88. Population can be impacted from multiple sources. Intra-project effects of note in relation to population include air quality impacts including dust emissions, visual impacts associate with landscape views, traffic impacts, and noise and vibration impacts. Consideration of these intra-project effects is an integral part of assessing the effect on population. The assessment of effects on population has therefore been informed by relevant information collated by other environmental topics, notably the EIAR chapters set out in Section 14.1. These intra-project effects for population are also summarised in Chapter 21.

14.3 Baseline Environment

14.3.1 Summary of Baseline Environment

89. The Proposed Project is routed across the country from Ardnacrusha, County Clare to Peamount, County Dublin, crossing the country largely through rural areas, away from main settlements or areas of concentrated populations, as shown on Figures 14.1 – 14.63 in Volume 5 of this EIAR. Settlements along its route largely comprise of dispersed rural communities and the rural catchment of larger towns.
90. In respect of Counties Clare and Limerick, the Proposed Project is not in proximity to any large settlement areas aside from the small villages of Ardnacrusha, O'Briensbridge and Montpelier.
91. The nature of the settlements in proximity to the Proposed Project varies as it is routed across the country. The largest settlement located in its proximity (however, located outside of the study area for this assessment) in Tipperary is Nenagh, which is an important centre for residential, commercial, educational, community and recreational needs for the hinterland surrounding the town as well as north/mid Tipperary more generally. Nenagh has a population of 9,895⁵ according to the 2022 census.
92. Killaloe/Ballina is located on the River Shannon and is an important centre for marine tourism and employment while also having a considerable number of community receptors. While also located outside of the study area for the Proposed Project, it is one of the main launch bases for recreational activities on Lough Derg and Parteen Basin (within the study area). Smaller settlements in Tipperary within 500m of the Proposed Project include Birdhill, the closest settlement to the RWI&PS (Figure 14.6), Ballycommon (Figure 14.12), Ardcroney (Figure 14.15) and Cloughjordan close to the BPT (Figure 14.18).
93. Within County Offaly, the Proposed Project largely travels across a rural environment. Communities which the Proposed Project passes within close proximity of (and within the study area for this assessment) include Killeigh (Figure 14.38), Geashill (Figure 14.41) and Mount Lucas (Figure 14.44).
94. In County Kildare, the largest settlement within proximity to the Proposed Project (and within the study area for this assessment) is Celbridge (as shown in Figure 14.61), a large residential settlement with a population of 20,601⁵ in 2022. Celbridge is an important employment and commercial centre. Other, smaller, community settlements such as Derrinturn (Figure 14.53) and Straffan (Figure 14.60) are also situated nearby.
95. The Proposed Project terminates at Peamount in County Dublin at a site adjacent to an existing reservoir adjacent to Peamount Hospital (Figure 14.63). To the south is the village of Newcastle (Figure 14.62), a growing suburb of Dublin, as well as the similar areas of Grange Castle and Baldonnell.
96. Appendix A14.1 (Population Baseline) outlines details of the commercial, community and tourism receptors along the route of the Proposed Project while Figures 14.1 – 14.63 in Volume 5 of this EIAR present their approximate location.
97. The location and identification of these receptors has been primarily informed by the GeoDirectory, which is a definitive reference dictionary of addresses (updated on a quarterly basis) for all 1.9 million buildings that receive post in the Republic of Ireland as administered and managed by An Post and the Ordnance Survey Ireland (OSI). Stakeholder engagement (particularly in regard to the location and presence of angling and other fishery clubs/groups) has also informed Appendix A14.1 (Population Baseline) and the associated figures. Residential receptors are not listed due to their private nature; however, their approximate positions are included on Figures 14.1 – 14.63 in Volume 5 of this EIAR.

⁵ CSO Data: <https://data.cso.ie/table/SAP2022T1T1ATOWN22> [Accessed: October 2025]

14.3.1.1 Population Change

98. In April 2022, Census 2022, as carried out by the CSO, reported a total population of approximately 5.15 million in Ireland at the time it was undertaken⁶. This is the first time the population has risen above five million since the census of 1851, when the comparable population was 5.11 million. The population has been rising steadily since the 1960s as a result of a high birth rate, a decreasing death rate and a decrease in net outward migration with projections indicating that the population will continue to increase into the long term.
99. During the eleven-year period from 2011 to 2022, the total population of Ireland increased by 12.2%. County Kildare and South County Dublin experienced increases above this national rate, with population growth of 17.8% and 13.5% respectively. These changes in population are illustrated in Table 14.17.

Table 14.17: Population Change Between the 2011 and 2022 Census Within the Study Areas of the Proposed Project⁷

County Within the Study Area	Sum of Population (2011)	Sum of Population (2016)	Sum of Population (2022)	Population Change 2011 – 2022 (%)
Clare	117,196	118,817	127,938	9.2%
Limerick	191,809	194,899	209,536	9.2%
Tipperary	158,754	159,553	167,895	5.8%
Offaly	76,687	77,961	83,150	8.4%
Kildare	210,312	222,504	247,774	17.8%
South County Dublin	265,205	278,767	301,075	13.5%
Ireland (Total)	4,588,252	4,761,865	5,149,139	12.2%

100. Examining the Electoral Divisions (EDs)⁸ through which the Proposed Project passes allows a more accurate estimate of the population that is likely to be directly affected by its construction and operation. The population in proximity to the Proposed Project using EDs, summarised by county, is set out in Table A14.2 of Appendix A14.1 (Population Baseline).

14.3.1.2 Age Structure

101. As can be seen in Table 14.18, the percentage of the population aged 45 and over has generally increased in the counties that the Proposed Project is located in, as well as nationally, overall showing an ageing of the population.

⁶ CSO Data: <https://data.cso.ie/table/FY001> [Accessed: October 2025]

⁷ CSO Data: <https://data.cso.ie/table/FY003B> [Accessed: October 2025]

⁸ Electoral Divisions (EDs) are the smallest legally defined administrative areas in the State for which Small Area Population Statistics (SAPS) are published from the Census.

Table 14.18: Age Structure Within the Counties (2011–2022)

County Within the Study Area	Year	Sum of Population ⁵	0–4 (%)	5–14 (%)	15–29 (%)	30–44 (%)	45–59 (%)	60–74 (%)	75 and Over (%)
Clare	2011 ⁹	117,196	7.59	14.65	17.98	22.81	19.07	12.69	5.16
	2016 ¹⁰	118,817	6.64	14.87	16.23	21.41	20.37	14.61	5.82
	2022 ¹¹	127,938	5.61	13.92	17.10	19.34	21.21	15.64	7.17
Limerick	2011	191,809	7.4	12.96	21.81	22.54	18.07	12.13	5.06
	2016	194,899	6.73	13.57	19.30	22.34	18.65	13.73	5.65
	2022	209,536	5.53	13.31	19.03	21.22	19.43	14.65	6.84
Tipperary	2011	158,754	7.53	14.13	18.44	22.11	19.15	12.67	5.97
	2016	159,553	6.82	14.52	16.55	21.24	19.99	14.41	6.47
	2022	167,895	5.78	14.05	16.54	19.59	20.63	15.83	7.59
Offaly	2011	76,687	8.14	15.28	19.30	22.61	18.28	11.35	5.05
	2016	77,961	7.22	15.52	17.29	21.90	19.38	13.02	5.68
	2022	83,150	5.81	14.83	17.47	20.50	20.19	14.57	6.62
Kildare	2011	210,312	8.99	15.53	20.21	25.78	17.44	9.04	3.01
	2016	222,504	7.78	16.29	18.07	24.78	18.77	10.80	3.51
	2022	247,774	6.25	15.29	18.46	22.74	20.56	12.04	4.65
South County Dublin	2011	265,205	8.69	14.42	21.81	24.33	17.34	10.20	3.21
	2016	278,767	7.80	15.19	18.74	24.91	17.34	12.02	4.00
	2022	301,075	6.20	15.05	18.83	23.49	18.45	12.84	5.14
Ireland (Total)	2011	4,558,252	7.77	13.58	20.52	23.73	17.96	11.41	5.03
	2016	4,761,865	6.96	14.18	18.35	23.29	18.82	12.86	5.55
	2022	5,149,139	5.74	13.92	18.27	21.88	19.82	13.86	6.51

102. A more detailed breakdown of the percentage change in age structure within the counties through which the Proposed Project would pass is presented in Table A14.3 in Appendix A14.1 (Population Baseline).

14.3.1.3 Economy and Employment

103. The spatial balance of population in the country has been increasingly weighted towards the Greater Dublin Area (GDA), comprising the counties of Dublin, Meath, Kildare and Wicklow. There are multiple reasons for this, namely:

- That Dublin has been the centre of government/authority in Ireland for most of recent history
- It is home to the largest maritime/shipping port as well as international airport in the country, and comprises low-lying fertile land which is suitable for commercial agriculture as well as other development (i.e. commercial and/or industrial)
- It is inhabited by a large population as a result of greater employment/economic opportunities when compared to other parts of the country.

⁹ CSO Data (2011): <https://data.cso.ie/table/CD204> [Accessed: October 2025]

¹⁰ CSO Data (2016): <https://data.cso.ie/table/SAP2016T1T1ACTY> [Accessed: October 2025]

¹¹ CSO Data (2022): <https://data.cso.ie/table/SAP2022T1T1ACTY> [Accessed: October 2025]

104. In 2022, 8.3% of the national population was recorded as unemployed in the census¹². This represents a 10.7% decrease in the 11-year period since 2011 when unemployment was 19%. Compared to the previous census in 2016 when it was 12.9%, the unemployment rate has reduced by 4.6% in 2022. Within the study area, unemployment rates in 2022 ranged from 7.3% in County Kildare to 9.4% in County Offaly.

105. The percentage of the population achieving a third level education is rising. Nationally, 45% of the population of working age (i.e. aged 15 and over) had a third level education in 2022¹³ (from 39% in 2016 and 35% in 2011). In the study area, the percentage ranged from 37% in County Offaly (from 31% in 2016 and 27% in 2011) to 49% in County Kildare (from 43% in 2016 and 38% in 2011).

106. A full account of the existing baseline, complemented by statistical evidence, is presented in Appendix A14.1 (Population Baseline).

14.3.2 Future Baseline

14.3.2.1 Population Change

107. Ireland's population is projected to increase from approximately 5.15 million in 2022 to approximately 6 million in 2050. This trend can also be seen at a county level as shown in Table 14.19.

Table 14.19: Projected Population Figures

County Within the Study Area	Sum of Population (2022)	Sum of Projected Population (2026) ¹⁴	Sum of Projected Population (2031) ¹⁴
Clare	127,938	131,500	137,000
Limerick	209,536	235,500	256,500
Tipperary	167,895	177,000	184,000
Offaly	83,150	86,500	90,000
Kildare	247,774	254,000	266,500
South County Dublin	301,075	314,000	329,000
Ireland (Total)	5,149,139	5,334,900	5,614,500

14.3.2.2 Age Structure

108. Projections point to younger age cohorts declining in relative terms by 2051 while older age cohorts will continue to grow in absolute and relative terms. Accordingly, Ireland's population is ageing. Table 14.20 shows the projected population aged 65 years and over.

Table 14.20: Projected Population Aged 65 Years and Over By Age Group and Year ('000)¹⁵

Year	65 – 69 Years	70 – 74 Years	75 – 79 Years	80 – 84 Years	85 Years and Over
2032	308.1	259.1	208.3	154.9	139.8
2042	380.4	330.6	273.0	206.1	226.9
2052	439.7	421.2	343.2	272.0	333.0

¹² CSO Data: <https://data.cso.ie/table/FY056B> [Accessed: October 2025]

¹³ CSO Data: <https://data.cso.ie/table/F8038> [Accessed: October 2025]

¹⁴ Informed by the relevant various County Development Plans as referenced in Section 14.2.3.

¹⁵ Informed by the Transitional Local Authority Population Projections to 2031 as outlined Implementation Roadmap for the National Planning Framework (NPF) (2018b)

14.3.2.3 Economy and Employment

109. Real economic growth is '*projected to average around 1½ per cent per year between 2030 and 2050, converging to just 1 per cent by 2050*' (Department of Finance 2023). This is lower than the levels of growth Ireland has achieved for many decades. The expected levelling off is due to a number of factors, including increased demographic pressures arising from an ageing population leading to a declining workforce.

14.3.2.4 Communities

110. The make-up or composition of communities and settlements within the study area will change as future building development and public services increase over time, resulting in the urban fabric of these settlements altering in comparison to how they are found currently.

14.3.2.5 Future Baseline Considerations

111. In line with the national population growth, Uisce Éireann forecast that by 2044 the population in the Eastern and Midlands Region will need 34% more water than today (Irish Water 2021, Irish Water 2022). This situation of a growing water supply deficit and lack of supply resilience is not considered sustainable.

112. The aim of the Proposed Project is to deliver a sustainable source of water necessary to support Ireland's growing population, including the demand for housing. In the long term, the Proposed Project would facilitate future water supply connections to communities along its route, leading to wider benefits in the Eastern and Midlands Region. These benefits can include job creation, improved standards of service and quality of life.

14.4 Assessment of Effects

113. The following sections present an assessment of the potential significant effects on people and communities associated with the Construction and Operational Phases of the Proposed Project. The assessment has been undertaken with respect to the scope and appraisal methods that have been set out in Section 14.2 for the following assessment topics:

- Employment
- Economy
- Community Amenity
- Community Accessibility and Severance
- Tourism
- Land Use and Land-take.

114. This section presents an assessment in the absence of mitigation measures, with the exception of embedded mitigation that has been incorporated into the design (e.g. avoiding sensitive features through the siting of the Proposed Project during the optioneering stages). Mitigation measures have been proposed in Section 14.5 to prevent or reduce the potential significant effects, and the residual effects after the application of mitigation measures are reported in Section 14.6.

14.4.1 Do-Nothing Scenario

115. The Do-Nothing alternative describes the circumstance where no development occurs. Under a 'Do-Nothing' scenario, the capacity of the Greater Dublin Area and wider Eastern and Midland regions to provide a sustainable water supply in line with forecasted population growth will be heavily compromised, as set out in the National Water Resources Plan – Framework Plan (Irish Water's 25 Year Plan for Our Water Assets) (Irish Water 2021) and the Regional Water Resources Plan – Eastern and Midlands (Irish Water 2022). The Do-Nothing scenario would mean that the Eastern and Midlands Region would continue to rely on the River Liffey for its water supply, which would lead to a projected peak deficit of 280 million litres per day (Mld) of treated water in the Water Supply Area in 2050. In the context of the vulnerability of the environment to climate change, the risks to the availability of water detailed in the EPA's Critical Infrastructure Vulnerability to Climate Change report (EPA 2021) would remain. Further water shortages in the east of Ireland would reduce the available supply, further distorting the supply-demand ratio and could potentially lead to an unstable water supply for the Eastern and Midlands Region.
116. In the long term, the Proposed Project would facilitate potential future water supply connections to communities in a Water Supply Area along its route. This would bring economic benefits to the whole Eastern and Midlands Region and growth in the region, supporting job creation, improved standards of service and quality of life. These benefits will not be realised without the investment in infrastructure provided by the Proposed Project.
117. In light of the above issues, significant negative societal and economic impacts are anticipated under a 'Do-Nothing' scenario.

14.4.2 Construction Phase

118. This assessment has taken account of all details relating to the Construction Phase of the Proposed Project as set out in Chapter 5 (Construction & Commissioning), such as the required construction activities and the location of construction works and Construction Compounds and Pipe Storage Depots within the Planning Application Boundary.

14.4.2.1 Employment

119. The construction of the Proposed Project is anticipated to run from 2028 through 2032, with the first operational year anticipated to be 2033. Throughout the Construction Phase different skillsets would be required at different stages for each of the Infrastructure Sites (the RWI&PS, WTP, BPT, BPS, FCV and TPR), RWRMs, Treated Water Pipeline, and the 38 kV Uprate Works.
120. As outlined in Chapter 5 (Construction & Commissioning), a likely profile of the construction workforce required at the peak construction period has been established for the construction of the Proposed Project. This information is repeated below for ease of reference (Table 14.21) and provides the basis for determining the nature and extent of effects on employment as a result of the construction of the Proposed Project. Table 14.21 sets out the number of construction workers required for each component of the Proposed Project; in total, a peak of approximately 1,065 construction workers are required.

Table 14.21: Number of Persons Deployed on Site – Construction Phase (Peak)

Works Area	No. of Persons
RWI&PS	50
WTP	150
BPT	60
BPS	60
FCV	20

Works Area	No. of Persons
TPR	60
RWRMs	50
Treated Water Pipeline from the WTP to the BPT	200
Treated Water Pipeline from the BPT to the TPR	400
38 kV Uprate Works	15
Total:	1,065

121. Given the assumptions around the required arrangement to construct the Proposed Project (i.e. that the construction works would be undertaken across a number of geographic sections (see Section 5.3 of Chapter 5: Construction & Commissioning for more information)), for the purposes of this Population assessment, it is anticipated that these works in these geographic sections would be carried out by medium to large sized civil engineering/construction firms who would be largely based outside of the study area and each have an inherent construction workforce of their own. This may potentially limit the opportunity to create jobs locally.

122. While the level of employment within the Irish construction sector has risen in recent years, it is widely reported that there is a labour shortage within this sector of the economy in relation to the capacity to deliver projects planned by both public and private sector (SOLAS 2024). As such, the majority of the jobs created are expected to be 'new' jobs within and outside of the study area.

123. The Additionality Guide was used to calculate the potential impacts on employment during the Construction Phase, in line with the steps and factors of the Additionality Guide outlined in Section 14.2.1.1. Table 14.22 sets out the estimated number of direct, indirect and induced jobs likely to result from the construction of the Proposed Project.

Table 14.22: Additionality Guide Calculations for the Proposed Project

Category:	Additionality Consideration:	Description/Assumption:	Value	No. of Jobs ¹⁶
A	No. of full-time equivalent (FTE) jobs resulting from the Proposed Project	As outlined within Table 14.21.		1,065
N/A	Deadweight	Deadweight is the proportion of the effect that would arise anyway even if the Proposed Project did not proceed to construction. Construction jobs are currently in very high demand as a result of high demand in the domestic residential housing market alongside the Irish Government's initiatives on building further new (large-scale) domestic housing and critical infrastructure during the period of economic recovery following the COVID-19 pandemic. Due to these factors, there are little unemployed construction workers in the Irish Labour Market leading some commentary to state that there is a skills shortage and as such it is not unreasonable to assume that a large majority of the workforce required for the Proposed Project would gain employment elsewhere if the Proposed Project did not proceed to construction.	0.75 (75%)	799
B	Leakage Method: (A x B)	Informed by project information and client discussions, it is assumed that the majority of construction workers would be appointed from outside the study area (i.e. those counties through which the Proposed Project is situated) and therefore leakage outside of the study area is considered to be 'very high' (75%) in accordance with the Additionality Guide.	0.75 (75%)	799
C	Gross Local Direct Effect Method: (A – B)	Gross local direct effects refer to the effect of the Proposed Project in the study area. This would mean consideration of wider consequential effects, as well as immediate effects.		266

¹⁶ Rounding has been applied to the nearest whole number.

Category:	Additionality Consideration:	Description/Assumption:	Value	No. of Jobs ¹⁶
D	Displacement Method: (C x D)	Displacement refers to those who are already employed and choose to change employment in order to take up a role with the Proposed Project. Displacement is anticipated to be low during the Construction Phase given that the nature of the work will be construction or labour related, while also specialised.	0.10 (10%)	27
E	Net Local Direct Effect Method: (C – D)	Net local direct effects refer to the effects that could be attributed to the Proposed Project that would have not occurred otherwise in the study area.		239
F	Economic Multiplier (Type II)	The industry multiplier for the construction industry in Ireland was informed by information made public by the Construction Industry Federation (CIF).	0.9 (90%)	N/A
G	Indirect and Induced employment Method: (E x F)	Indirect employment refers to jobs created to produce construction inputs in supplier industries. Induced employment refers to jobs emerging from increased consumer spending of those in newly created direct and indirect jobs.		215
H	Total Net Jobs Method: (E + G)	Total net jobs refers to direct, indirect and induced employment within the study area.		454

124. Of 1,065 construction workers required to construct the Proposed Project at the peak of the Construction Phase (see Table 14.21), it is estimated that approximately 266 of these would be jobs locally filled by individuals who already reside in the study area (i.e. the counties that the Proposed Project would pass through) and who had no previous employment immediately prior to taking up the position in the construction workforce for the Proposed Project.

125. In terms of the number of indirect and induced jobs that are created locally (i.e. within the study area) as a result of the construction of the Proposed Project, using the construction industry multiplier cited by the Construction Industry Federation (of Ireland) (CIF 2020) it is estimated that approximately 215 indirect/induced jobs would be created. In total, approximately 454 employment opportunities are anticipated to be created locally as a result of the Construction Phase of the Proposed Project.

126. With respect to outside the study area, it is estimated that approximately 799 direct jobs would be created, filled by those who reside outside of the study area (i.e. nationally, excluding the counties in which the Proposed Project is situated) and who had no previous employment immediately prior to taking up the position in the construction workforce for the Proposed Project. It is anticipated that there could also be approximately 719 indirect and induced jobs, allowing for a total of approximately 1,518 direct and indirect/induced jobs being created outside of the study area.

127. In summary and as outlined in Table 14.23, the Additionality Guide calculations for the Proposed Project estimate that approximately 454 (direct, indirect and induced) jobs will be produced within the study area (i.e. the counties in which the Proposed Project is located), with over one thousand (approximately 1,518) direct, indirect and induced jobs which could be created outside of the study area (i.e. nationally, excluding the counties in which the Proposed Project is situated) during the Construction Phase of the Proposed Project.

Table 14.23: Number of Direct, Indirect and Induced Jobs as a Result of the Construction of the Proposed Project

Employment Type	Estimated No. of Jobs
Within the study area (i.e. the counties in which the Proposed Project is located)	
New direct jobs	239
New indirect and induced jobs	215
Total number of direct, indirect and induced jobs within study area	454

Employment Type	Estimated No. of Jobs
Outside the study area (i.e. nationally, excluding the counties in which the Proposed Project is located)	
New direct jobs	799
New indirect and induced jobs	719
Total number of direct, indirect and induced jobs outside of the study area	1,518

128. With regard to the effect on employment locally, the creation of 239 direct jobs represents a 0.76% increase in the construction workforce across all the counties within the study area (see Table A14.7 in Appendix A14.1: Population Baseline). According to Table 14.8, this constitutes a medium magnitude impact. As the construction labour market has been assigned a high sensitivity, the potential effect on employment within the study area during the Construction Phase is considered to be Positive, Significant and Short-term.

129. Outside of the study area, taking a national stance (excluding the counties which the Proposed Project would pass through), approximately 799 direct jobs are estimated to be created by the construction of the Proposed Project. This represents a 0.59% increase in the number of individuals employed in the construction labour market nationally. In line with Table 14.8, this is a medium magnitude impact, meaning that the effect on employment outside of the study area (i.e. nationally, outside the study area of the Proposed Project) during construction is considered to be Positive, Significant, and Short-term.

14.4.2.2 Economy

130. As outlined in Section 14.2.6.2, the assessment of effects on the economy is determined by using the Additionality Guide in conjunction with the most recent national economic data/information on the construction sector in Ireland.

131. As outlined in Section 2.1 of Appendix A14.1 (Population Baseline), as of 2022, the CSO benchmarks the GVA of each construction-related job at €91,145. As it is estimated that a peak construction workforce of 1,065 is required to construct the Proposed Project in its entirety (Table 14.21), this allows for an increase of GVA spend within the Irish economy of approximately €97.1 million per year of the construction programme that this level of construction workforce is in place.

132. Over the period 2011 to 2022, the GVA contribution of the construction sector to the national economy was approximately €113,013 million (i.e. €113 billion)¹⁷, averaging €9,417 million (i.e. €9.4 billion) per year. Within this context, the average GVA contribution of the construction sector to the national economy would increase by 1.03% as a result of the activities of the peak construction workforce for every year that it is required to construct the Proposed Project.

133. Not only will there be a requirement for increased water demand to accommodate the needs of Ireland's growing population as set out in Section 14.3.2, but projections also include expansion plans for a number of major existing large non-residential water users, such as the construction sector (Irish Water 2015b). Ireland's construction industry is projected to expand by an annual average rate of 4.3% between 2023 and 2026 (Construction Network Ireland 2022).

134. The 1.03% increase, giving consideration of the criteria in Table 14.10, represents a 'high' change in magnitude. As the national economy is considered to be of high sensitivity, the effect on the national economy as a result of the construction of the Proposed Project is considered to be Positive, Very Significant, and Short-term.

¹⁷ CSO Data: <https://data.cso.ie/table/PIA19> [Accessed: October 2025]

14.4.2.3 Community Amenity

135. As set out in Section 14.2.1.3, community amenity effects arise from a combination of air quality, noise (and vibration), traffic and visual impacts.
136. The key commercial and community receptors within 500m of the Proposed Project are outlined in Table A14.12 in Appendix A14.1 (Population Baseline), with those located within 100m of the Proposed Project being presented in Table A14.11 in Appendix A14.11 (Population Baseline). Residential receptors are not listed due to their private nature; however, their approximate positions are displayed on Figure 14.1 – 14.63.
137. Chapter 12 (Air Quality) assessed and reported residual effects of dust and local emissions from construction traffic during the Construction Phase as Imperceptible (effect is not significant).
138. Chapter 6 (Noise & Vibration) identified a number of construction noise impacts for noise sensitive locations at varying distances to the Proposed Project. Significant residual noise effects during the Construction Phase of the Proposed Project are reported as follows:
- Temporary Infrastructure Sites – After implementing mitigation measures, construction works related to Construction Compounds and Pipe Storage Depots would cause Moderate to Significant effects between 15m and 30m of these sites. There are three Pipe Storage Depots with Noise Sensitive Locations (NSLs) within this 15m to 30m range. Residual Moderate to Significant effects would occur at the three Pipe Storage Depots identified
 - Night-time works at trenchless crossings – After implementing mitigation measures, the number of crossing locations experiencing a Significant to Very Significant effect decreases from 10 to six. This would occur where NSLs are within 110m of the crossing locations. Additionally, there are six crossing locations where NSLs between 110m and 190m from the crossing locations would experience a Moderate to Significant residual effect
 - Groundborne vibration – After implementing mitigation measures, groundborne vibration associated with rock breaking and tunnelling at trenchless crossings at specific locations during the Construction Phase would cause Moderate (human) residual effects (effects are considered significant) on nearby residential and commercial receptors (see Chapter 6 (Noise & Vibration) for details).
139. Chapter 6 (Noise & Vibration) states that these significant residual effects represent a conservative scenario at the closest NSLs during the most noise-intrusive phases of each of the works. The residual effect at NSLs would vary based on their distance from the works and also the duration of the works. Every care will be taken during the Construction Phase to mitigate construction noise as far as practicable following the mitigation methods set out in this EIAR (i.e. Chapter 6: Noise & Vibration).
140. All other residual effects as reported within Chapter 6 (Noise & Vibration) are reported as Negative, Slight to Moderate, or less (such effects are not significant), depending on the construction activity under consideration. See Chapter 6 (Noise & Vibration) for further information.
141. Chapter 7 (Traffic & Transport) reported residual significant negative effects (i.e. post-mitigation) on Junctions 18 (Offaly), 30 (Offaly) and Junction 50 (Kildare) (Significant), due to the increase in queues and delays at these junctions during peak periods. There would also be significant residual effects on three Haul Roads - R421 (Offaly), R400 (Offaly), and Link R422 (Laois) – due to an increase in annual average daily traffic and/or increase in heavy duty vehicles using the roads during peak periods. However, it is important to note that these reported effects are based on the peak construction period, which would be temporary. The effects would therefore be lower over the course of the entire five-year construction period.

142. All other residual effects as reported within Chapter 7 (Traffic & Transport) are reported as Negative, Moderate, or less (such effects are not significant), depending on the topic under consideration with relevance to people and communities. See Chapter 7 (Traffic & Transport) for further information.

143. Chapter 16 (Landscape & Visual) reported no significant effects for the Construction Phase of the Proposed Project. Table 14.24 presents the residual visual effects of the Proposed Project during its Construction Phase as reported in Chapter 16 (Landscape & Visual).

Table 14.24: Construction Phase Residual Visual Effects

Component of Proposed Project	Reported Visual Residual Effect
Pipeline Corridor	Not Significant
RWI&PS	Not Significant
WTP	Not Significant
BPT	Not Significant
BPS	Not Significant
FCV	Not Significant
TPR	Not Significant
38 kV Uprate Works	Slight – Imperceptible (effect is not significant).

144. In summary, significant residual effects have been reported in respect to the following contributing environmental effects:

- Noise and Vibration (Chapter 6):
 - Moderate to Significant (negative) residual effects are expected to occur at NSL located between 15m and 30m of three Pipe Storage Depots
 - Significant to Very Significant (negative) residual effects are anticipated to occur during night-time works at six trenchless crossing locations, where NSLs are within 110m of these locations
 - Moderate to Significant (negative) residual effects are considered likely to occur during night-time works at a further six trenchless crossing locations, where NSLs are within 110m and 190m of these crossing locations
 - Moderate (negative) (human) residual effects (effects are considered significant) are anticipated to occur on nearby residential and commercial receptors as a result of groundborne vibration from undertaking rock breaking and tunnelling at trenchless crossings at specific locations during the Construction Phase.
- Traffic and Transport (Chapter 7):
 - Significant (negative) residual effects are expected at Junctions 18 (Offaly), 30 (Offaly) and 50 (Kildare) during the Construction Phase of the Proposed Project during peak periods, due to the increase in queues and delays at these junctions
 - Significant (negative) residual effects are expected on the R421 (Offaly), R400 (Offaly), and Link R422 (Laois) due to an increase in annual average daily traffic and/or increase in heavy duty vehicles using the roads during peak periods.

145. There are no Temporary Infrastructure Sites (i.e. Construction Compounds and Pipe Storage Depots) that have identified significant noise effects, or trenchless crossings proposed in proximity to Junctions 18 (Offaly), 30 (Offaly) and 50 (Kildare) or the Haul Roads that would have temporary significant effects as identified in Chapter 7: Traffic and Transport. Similarly, the anticipated significant negative effects in relation to groundborne vibration are expected to occur away from these specified junctions also. As such, there is no alignment of impacts on the same receptors where the aforementioned significant residual

effects are expected to occur, and therefore there is no potential for any significant negative effect on community amenity as a result.

146. In a worst-case scenario, where there is an alignment of such impacts on the same common receptors situated in close proximity to construction activities associated with the Proposed Project (i.e. within 500m), the reported residual air quality, noise (and vibration), traffic and visual effects during the Construction Phase would combine to create a Negative, Slight and Temporary effect (effect is not significant) on the community amenity of residential, commercial and community receptors within 500m of the Proposed Project.

14.4.2.4 Community Accessibility and Severance

147. Effects on community accessibility and severance can occur as a result of land-take requirements on access routes close to or serving receptors. As specified in Chapter 5 (Construction & Commissioning), the method of construction at a road crossing would be one of two types:

- Trenchless crossing (or horizontal directional drilling in relation to power connections)
- Conventional open-cut trenching.

148. There is expected to be no impact on accessibility/severance from the trenchless technology method of construction as the roadway/access would remain intact throughout the duration of construction activities in its proximity. However, some impacts on accessibility/severance may be expected as a result of the conventional open-cut trenching method of construction.

149. The roads subject to the conventional open-cut trenching method of construction are presented in Appendix A5.4 (Schedule of Crossings), mostly comprising of regional, local and unnamed routes. As set out in Section 5.27 of Chapter 5 (Construction & Commissioning), the majority of these conventional open-cut trench crossings would require a road closure of only approximately 48 hours.

150. There are two types of methods being employed in relation to road crossings using the conventional open-cut trenching method of construction, namely:

- Where a road can be closed with a diversion on the local road network, these diversions would be agreed in advance of works taking place at any road crossing with the Local Authority. The length of time a road needs to be closed, and a diversion put in place, would depend on the road width and standard. Sign boards would be set up in advance of any diversions taking place giving dates of the disruption. Diversion routes would cater for every type of vehicle that could be expected on the road that is to be closed
- Where a road needs to be closed and there is no available diversion on the local road network, for example a dead-end access servicing one or more properties, an alternative route or diversion would be provided by providing a temporary road bypass (4m in width) across the Construction Working Width for the duration of the crossing. The temporary bypass would be made of a 300mm deep layer of stone hardcore compacted with stone dust to provide a clean level surface for trafficking. Prior to the temporary road bypass taking place, all property owners would be notified of the pending temporary traffic changes and signage would be put in place before the temporary road bypass is put into effect. On completion of the road crossing, the existing road would be reinstated to its previous standard and then re-opened to through-traffic and the area used for the temporary road bypass would be reinstated.

151. Receptors within 500m of these roads include residential or commercial buildings, as well as community facilities and as such the sensitivity has been classified as high.

152. On the basis of the above information, it is considered that the magnitude of impact would be negligible/low. Therefore, the significance of effects on accessibility/severance on residential, commercial and community receptors in proximity to the Proposed Project during the Construction Phase is Negative, Not Significant/Slight and Temporary (effect is not significant).

153. An exception to this reported effect rating would be those routes outlined in Table 14.25 (derived from Table 3.3 in Appendix A5.4: Schedule of Crossings), which are subject to closures for longer periods of time (i.e. longer than 48 hours). These road closures are required to construct the ducting for underground cabling for the provision of power to the BPS and a Line Valve located at TWA – 10660. It should be noted however that accommodations will be made for residents and customers of commercial receptors along these routes, similar to those detailed above, so that access to homes and businesses are maintained throughout the closure period.

154. Therefore, for the following routes in proximity to the Proposed Project, the magnitude of impact is considered to be low and the sensitivity is high, and therefore the significance of effect on receptors along these routes is determined to be Negative, Slight/Moderate, and Temporary (effect is not significant):

- Unnamed Local Road (Castletown, Co. Offaly)
- Unnamed Local Road (Fortel, Co. Offaly)
- L7004 (Ballygowan, Co. Offaly)
- Unnamed Local Road (Rathgibbon North, Co. Offaly)
- L3003 (Coagh Upper, Co. Offaly)
- Unnamed Local Road (Tonagh, Co. Offaly).

Table 14.25: Roads Subject to Longer Closures

Reason for Road Closure	Road Number	Location	Approximate Length of Road Closure (m)	Approximate Duration of Closure (days)	Approximate Duration of Closure (weeks)*
Power Connection to the BPS	Unnamed Local Road	Castletown, Co. Offaly	1,250	14	3
	Unnamed Local Road	Fortel, Co. Offaly	3,700	40	8
	L7004	Ballygowan, Co. Offaly	830	10	2
	Unnamed Local Road	Rathgibbon North, Co. Offaly	1,900	19	4
	L3003	Coagh Upper, Co. Offaly	1,350	14	3
Power Connection to Line Valve	Unnamed Local Road	Tonagh, Co. Offaly	300	5	1

155. In certain instances, the Proposed Project intersects with designated walking routes or cycle routes. For example, the Nenagh Hub Cycle Loop incorporates local and regional roads which do not coincide with roads subject to longer road closures, as shown in Table 14.25, but the cycle route does coincide with haul routes close to Nenagh, Ballycommon, Knigh Hill, Borrisokane, Cloughjordan and Knockanacree Woods. As such, whilst the cycle route may experience some increased traffic for a temporary period during the Construction Phase of the Proposed Project, it is not expected to be directly impacted by way of any curtailments/diversions.

156. Access to amenity areas, such as the walking trails at Mount Lucas Windfarm and the Grand Canal (within the Planning Application Boundary), as well as Knockanacree Woods (situated less than 200m to the south of the Treated Water Pipeline and proposed BPT), is also expected to be maintained throughout

the Construction Phase of the Proposed Project by way of temporary diversions or provision of alternative access, where necessary. Therefore, there is expected to be no direct impact on the accessibility of amenity areas during the Construction Phase of the Proposed Project.

157. In regard to angling fishing activities in proximity to the Proposed Project, specifically in relation to issues of accessibility and severance to watercourses during the Construction Phase, Table A14.14 in Appendix A14.1 (Population Baseline) outlines known fisheries (angling) groups / clubs situated in proximity to the Proposed Project. In addition, Figure 4.2 – 4.60 in Volume 5 of the EIAR show the location of proposed watercourse crossings, which are also listed in Appendix A5.4 (Schedule of Crossings).

158. It is considered that these known fisheries (angling) groups are situated in locations away from the Proposed Project and so direct impacts are likely to be avoided. As such, it is considered unlikely that their associated activities would be impacted by the construction of the Proposed Project. In the unlikely event that such impacts are felt by these groups/clubs, it is considered likely that they therefore undertake activities throughout a wide geographical sphere and as such there is likely to be a number of suitable alternative locations to undertake similar activities. Therefore, no impacts are anticipated on fisheries (angling) groups in relation to issues of accessibility and severance to watercourses during the Construction Phase of the Proposed Project.

14.4.2.5 Tourism

159. Table 14.26 summarises the tourism receptors located within 500m of the Proposed Project.

Table 14.26: Tourism Receptors Within 500m of the Proposed Project

Proposed Project Component	Tourism Receptor Within 500m of Proposed Project
Water Supply Project	
Treated Water Pipeline from the BPT to the TPR (Pipeline) Counties Tipperary, Offaly, Kildare and Dublin	<ul style="list-style-type: none"> Barberstown Castle (a historic 13th century castle and hotel complex) is situated approximately 300m south of the Proposed Project (at Chainage TWE – 8525) Main entrance and portion of grounds at Cliff At Lyons (a privately owned luxury hotel comprising a collection of historic rose-clad buildings, including a mill and former dovecote) is situated approximately 500m south of the Proposed Project (at Chainage TWE – 12500).
38 kV Uprating Works – Power Supply to RWI&PS and WTP	
Proposed 38 kV Uprate Works Ardnacrusha – Birdhill Ardnacrusha – Birdhill – Nenagh (Power Supply) Counties Clare, Limerick and Tipperary	<ul style="list-style-type: none"> Limerick – Killaloe Canal (and Errina Lock).

14.4.2.5.1 Impacts on Amenity

160. Effects on amenity arise from a combination of air quality, noise (and vibration), traffic and visual impacts as discussed in Section 14.2.1.3. The consideration and assessment of such effects has been undertaken in respect to community amenity in Section 14.4.2.3 and the findings of that assessment are also applicable to tourism receptors situated in proximity to the Proposed Project (see Table A14.10 in Appendix A14.1: Population Baseline). Please refer to Section 14.4.2.3 for further details.

14.4.2.5.2 Impacts on Accessibility/Severance

161. None of the tourism receptors within 500m of the Proposed Project (i.e. Barberstown Castle and Cliff At Lyons) are situated within the Planning Application Boundary of the Proposed Project and therefore there is not expected to be any direct accessibility/severance effects as a result of direct land-take requirements during the Construction Phase of the Proposed Project.

162. The access roads to Barberstown Castle and Cliff At Lyons are subject to both trenchless crossing methods and the conventional open-cut trenching method of construction (separately) in order for the Proposed Project to cross these points; however the potential effects of these road crossings have already been assessed in Section 14.4.2.4 and so are not repeated here.
163. Therefore, while the sensitivity of these tourism receptors is considered high, the magnitude of change is considered to be negligible. As such, the significance of effects on accessibility/severance on tourism receptors in proximity to the Proposed Project during the Construction Phase is considered to be Neutral and Temporary (effect is not significant).

14.4.2.5.3 *Impacts on Visitor Perception*

164. It can be anticipated that given the extensive scale and nature of the Proposed Project, as well as the attention that it is likely to create/receive in local, regional and national media, there is the potential for effects on visitor/tourist perception of the area within proximity to the Proposed Project during its construction.
165. The Infrastructure Site components of the Proposed Project (i.e. the RWI&PS, WTP, BPT, BPS, FCV and TPR) are all situated in predominantly rural locations that are away from main settlement areas and transport routes. Therefore, it is considered that, while the duration of construction activities at these sites is likely to be longer than other components of the Proposed Project, such activities are likely to be predominantly obscured from view and remain largely unnoticed to any tourists/visitors to the area in their proximity.
166. The Treated Water Pipeline is considered to be the most visible component of the Proposed Project during the Construction Phase as it is linear in nature and is required to be constructed across a wide geographical area, requiring many different types of crossings (i.e. road, rail, watercourse, and power lines – see Appendix A5.4: Schedule of Crossings for further details).
167. Having said this, the construction of this component of the Proposed Project is likely to be undertaken under multiple construction work fronts along its length with associated construction activities progressing along these work fronts rather than being stationary at any one location for a prolonged period. As such, it is anticipated that the construction of the Treated Water Pipeline will be felt as transient by local people and visitors/tourists alike. The Construction Compounds and Pipe Storage Depots would be static however, but these would be short-term in duration and would be scaled down as the Proposed Project progresses.
168. As outlined in Section 14.4.2.5.1 and Section 14.4.2.5.2 respectively of this assessment, there is considered to be:
- A Negative, Slight and Temporary effect (effect is not significant) on amenity at tourism receptors during the Construction Phase of the Proposed Project
 - A Negative, Not Significant/Slight and Temporary effect (effect is not significant) on the indirect accessibility/severance of tourism receptors also. As outlined in Section 14.4.3.5.2, there is anticipated to be no direct effects on accessibility/severance at tourism receptors as they are situated away from the Planning Application Boundary of the Proposed Project.
169. In addition, and as shown in Diagram A14.3 and Table A14.7 in Appendix A14.1 (Population Baseline), the construction sector has been expanding in recent years and there is considered to be a high level of construction activity nationally; as such, the Proposed Project would be consistent with this upward trend of economic activity.

170. Therefore, it is considered that the magnitude of impact on visitor perception would be negligible as a result of the construction of the Proposed Project. As such, the significance of effects is reported as Neutral and Temporary (effect is not significant).

14.4.2.6 Land Use and Land-take

171. As set out in Appendix A3.1 (Pipeline Routing Report), the pipeline corridor of the Proposed Project was established by way of a detailed route selection process which considerably reduced the number of constraints the pipeline corridor would encounter if such a process had not been undertaken. From a population assessment point of view, this route selection process actively sought to avoid residential, commercial and community receptors situated along any proposed routing options, in so far as possible.

172. The outcome of this detailed route selection process is that the Proposed Project requires very little direct land acquisition from residential, commercial or community receptors that are currently in everyday use. Table A14.11 in Appendix A14.1 (Population Baseline) outlines those commercial and community receptors situated within 100m of the Planning Application Boundary of the Proposed Project, as well as identifying those receptors within the Planning Application Boundary. As can be seen in Table A14.11 in Appendix A14.1 (Population Baseline) only the following receptors are located within the Planning Application Boundary, and thereby potentially directly impacted by land acquisition:

- Commercial receptors: Concast Precast Group
- Community receptors: Mount Lucas Windfarm (Walking Trails) and the Grand Canal (Walking Trail).

173. In the case of Concast Precast Group, while located within the Planning Application Boundary, it is proposed for the Proposed Project to cross their lands by way of trenchless technology to allow for no above ground disturbance. As such, there are expected to be no impacts on Concast Precast Group as a result of land acquisition.

174. In respect to the walking trails in Mount Lucas Windfarm and the Grand Canal, these are both located within the Planning Application Boundary and are directly impacted by the Proposed Project through impacts to accessibility and severance. Such impacts have been considered and assessed in Section 14.4.2.4 of this chapter and as such, are not repeated here.

175. All other commercial and community receptors listed in Table A14.11 in Appendix A14.1 (Population Baseline) are not expected to be directly impacted as a result of land acquisition requirements associated with the Proposed Project, but rather indirectly from an amenity standpoint (see Section 14.4.2.3 for further details of the consideration and assessment of such effects).

176. However, three vacant and derelict buildings associated with a former/derelict filling station on the north-western side of the R445 would be demolished to allow for the construction of the WTP access road and associated junction, and also during construction of the WTP site, which would require the demolition of an additional derelict structure; further information on this is provided within Chapter 5 (Construction & Commissioning). As such, the sensitivity of this site is considered to be low/negligible¹⁸.

177. Therefore, given the existing disused and vacant nature of these buildings, it is considered that the quality of the potential effect of this land acquisition is positive (due to the fact that the disused site would be cleared and remediated for future use), while the magnitude of change is considered to be medium. As such, the significance of effect is determined to be Positive, Not Significant, and Permanent (effect is not significant).

¹⁸ A fifth building would be demolished along the route of the Treated Water Pipeline to provide access across the Grand Canal. This has been assessed within Chapter 11 (Agriculture) as it is associated with an agricultural land holding.

178. It is worth noting that Construction Compound 6 (Drummond) is to be situated immediately to the south of a commercial receptor (i.e. Monaghan Mushrooms (Food Production Facility) / Carbury Compost) during the Construction Phase of the Proposed Project. Construction Compound 6 (Drummond) will be temporary in nature (it is to exist in support of the construction of the Treated Water Pipeline and construction operations will cease at this site when the construction work front progresses away from this area) and requires no direct land-take from the commercial receptor. As such, there is not anticipated to be any direct impacts on this commercial receptor from a land-take perspective. Having said this, this facility may experience some temporary changes in the amenity of the area in its immediate vicinity, potential changes/effects of which have been considered and assessed in Section 14.4.2.3. More information on the composition and purpose of Construction Compound 6 (Drummond) is provided in Chapter 5 (Construction & Commissioning).

179. No other commercial, residential or community receptors are expected to be impacted by temporary or permanent land acquisition requirements as a result of the Proposed Project.

180. As mentioned previously above in Section 14.2.1.6, issues concerning development/zoned lands are considered and outlined in the Planning Report that accompanies this EIAR as part of the planning application for the Proposed Project.

14.4.2.7 Summary of the Construction Effects

181. Table 14.27 provides a summary of the population effects during the Construction Phase. In the absence of mitigation measures, there would be no adverse significant effects during construction. There would be significant beneficial effects on employment (within the study area) and the national economy from construction of the Proposed Project.

Table 14.27: Summary of Construction Effects

Assessment Topic	Receptor Being Assessed	Sensitivity	Nature of Impact(s)	Magnitude of Impact	Significance of Effect (Pre-Mitigation)
Employment	Combined construction labour market within the counties in which the Proposed Project is situated	High	Positive	Medium	Positive, Significant and Short-term
	National construction labour market	High	Positive	Medium	Positive, Significant and Short-term
Economy	National economy	High	Positive	High	Positive, Very Significant and Short-term
Community Amenity	Residential, commercial and community receptors within 500m of the Proposed Project	N/A*	Negative	N/A*	Negative, Slight, and Temporary (effect is not significant)

Assessment Topic	Receptor Being Assessed	Sensitivity	Nature of Impact(s)	Magnitude of Impact	Significance of Effect (Pre-Mitigation)
Community Accessibility and Severance	Residential, commercial and community receptors situated within 500m of a proposed road crossing for the construction of the Proposed Project	High	Negative	Negligible/Low	Negative, Not Significant/Slight, and Temporary (effect is not significant)
	Residential, commercial and community receptors along or within 500m of the following routes: <ul style="list-style-type: none"> • Unnamed Local Road (Castletown, Co. Offaly) • Unnamed Local Road (Fortel, Co. Offaly) • L7004 (Ballygowan, Co. Offaly) • Unnamed Local Road (Rathgibbon north, Co. Offaly) • L3003 (Coagh Upper, Co. Offaly) • Unnamed Local Road (Tonagh, Co. Offaly). 	High	Negative	Low	Negative, Slight/Moderate and Temporary (effect is not significant)
Tourism	(Tourism) Amenity	N/A*	Negative	N/A*	Negative, Slight, and Temporary
	(Tourism) Accessibility and Severance	High	Neutral	Negligible	Neutral and Temporary (effect is not significant)
	Visitor Perception	High	Neutral	Negligible	Neutral and Temporary (effect is not significant)
Land Use and Land-take	Derelict buildings in proximity to WTP site	Negligible/ Low	Positive	Medium	Positive, Not Significant, and Permanent

* N/A as the assessment of amenity (communities and tourism) is based on the residual effects from other topic assessments (air quality, noise and vibration, landscape and visual, and traffic and transport)

14.4.3 Operational Phase

182. This assessment has taken account of all details relating to the Operational Phase of the Proposed Project as set out in Chapter 4 (Proposed Project Description), including the parameters of the necessary operational activities at the Infrastructure Sites as well as the location of Line Valves, Washout Valves, Air Valves, manways, FCV and potential future connections within the Planning Application Boundary.

14.4.3.1 Employment

183. Staff numbers during the Operational Phase of the Proposed Project are expected to be very low (approximately 38 positions as outlined in Chapter 4: Proposed Project Description). Furthermore, some of these positions are likely to be filled by existing Uisce Éireann staff, further reducing the number of vacant positions likely to be created and made available to the labour market.
184. While the sensitivity is considered to be high, the magnitude of impact is considered to be negligible/low on employment locally. As such, the significance of effect is reported to be Positive, Not Significant/Slight and Long-term (this effect is not significant).
185. For outside of the study area, taking a national stance (excluding the counties which the Proposed Project would pass through), the magnitude of change is considered to be negligible. Therefore, the significance of effect is reported as Positive, Not Significant and Long-term (effect is not significant).

14.4.3.2 Economy

186. As stated in Section 14.4.3.1, staff numbers during the Operational Phase are expected to be very low (approximately 38 positions as outlined in Chapter 4: Proposed Project Description) thereby the economic activity associated with such employment is expected to be limited. Furthermore, the wider economic benefits that the Operational Phase of the Proposed Project is expected to generate (i.e. additional water resource supply and resilience) at a county and regional level within the Water Supply Area, but particularly the Greater Dublin Area Water Resource Zone, would not be realised by the Proposed Project alone but by the support of subsequent water supply projects (subject to future consents) in order to make those a reality. It is not possible, however, to quantify these benefits (i.e. the benefit of additional, more secure/resilient resource supply) in the context of EIA; however, such benefits are explored and documented within the Water Supply Project Eastern and Midlands Region Preliminary Business Case (Uisce Éireann 2024b) and the Water Supply Project Eastern and Midlands Region Project Need Report (Irish Water 2015b).
187. Having said this, both the National Water Resources Plan – Framework Plan (Irish Water’s 25 Year Plan for Our Water Assets) (Irish Water 2021) and the Regional Water Resources Plan – Eastern and Midlands (Irish Water 2022) identify and outline the anticipated population (and associated demand) growth in the Eastern and Midlands Region for the next 25 to 30 years:
- ‘The [National Planning Framework] envisages 26% growth in Dublin City and suburbs between now and 2040 with various rates for the remainder of the country ranging from 16% to 61% based on settlement size.’ (National Water Resources Plan – Framework Plan (Irish Water’s 25 Year Plan for Our Water Assets) (Irish Water 2021))*
- ‘The overall regional population growth is 25% from 2019 to 2044. All [study areas] in the Eastern and Midlands Region have a projected growth rate that exceeds the 12% national rate observed in the 10-year period from 2006 to 2016’ (Regional Water Resources Plan – Eastern and Midlands (Irish Water 2022)).*
188. Furthermore, the National Planning Framework (NPF) First Revision recognises ‘water services infrastructure’ as one of the ‘Strategic Investment Priorities’ to achieving the ‘National Strategic Outcomes’ of the National Development Plan. The NPF First Revision also identifies the Proposed Project as ‘critical strategic infrastructure’ for Dublin and its metropolitan area but also the Eastern and Midlands region as a whole (Government of Ireland 2025).

189. As the Proposed Project essentially facilitates anticipated demand requirements and resilience in supply for the Eastern and Midlands Region into the future (and almost 50% of the population of Ireland as a result) the magnitude of change is considered to be medium/high. Therefore, the effect on the economy (high sensitivity) during the Operational Phase of the Proposed Project is anticipated to be Positive, Significant and Long-term.

14.4.3.3 Community Amenity

190. As set out in Section 14.2.1.3, community amenity effects arise from a combination of air quality, noise (and vibration), traffic and visual impacts.

191. Chapter 12 (Air Quality) assessed residual air quality effects of Operational Phase traffic emissions (on human receptors) to be Imperceptible (effect is not significant).

192. Chapter 6 (Noise & Vibration) identified a number of residual noise effects on human receptors during the Operational Phase of the Proposed Project. These varying residual noise effects are outlined in Table 14.28.

Table 14.28: Reported Noise and Vibration Residual Effects by Proposed Project Components During the Operational Phase

Component of Proposed Project	Reported Noise and Vibration Residual Effect
Proposed 38 kV Uprate Works	Neutral, Imperceptible and Long-term (effect is not significant)
Pipeline	Neutral, Imperceptible and Long-term (effect is not significant)
RWI&PS	Negative, Not Significant and Long-term
WTP	Negative, Not Significant and Long-term
BPT	Negative, Not Significant and Long-term
BPS	Negative, Not Significant and Long-term
FCV	Negative, Not Significant and Long-term
TPR	Negative, Not Significant and Long-term
Car Parking	Negative, Not Significant and Long-term
Traffic	Negative, Imperceptible to Not Significant and Long-term (effect is not significant)

193. Chapter 7 (Traffic & Transport) reported the following residual effects during the Operational Phase of the Proposed Project:

- Not Significant – Operational Phase Assessment on the Road Network (effect is not significant)
- Slight – Operational Phase Junction Assessment (effect is not significant)
- Slight – Moderate Operational Phase Pedestrian and Cyclist Accessibility Assessment (effect is not significant).

194. Chapter 16 (Landscape & Visual) outlined different residual effects for the Operational Phase of the Proposed Project, depending on which component of the Proposed Project is being considered. These are outlined in Table 14.29.

Table 14.29: Reported Visual Operational Effects by Proposed Project Component

Component of Proposed Project	Reported Visual Residual Effect
Pipeline Corridor	Imperceptible (effect is not significant)
38 kV Uprate Works	Imperceptible (effect is not significant)
RWI&PS	Slight – Moderate (effect is not significant)
WTP	Slight (effect is not significant)
BPT	Imperceptible – Slight (effect is not significant)
BPS	Imperceptible – Slight (effect is not significant)
FCV	Slight (effect is not significant)
TPR	Imperceptible – Slight (effect is not significant)

195. In summary, no significant residual effects were reported in respect to the assessments of potential effects on air quality (Chapter 12), noise and vibration (Chapter 6), traffic and transport (Chapter 7) or visual (Chapter 16). As such, there is no potential for any significant negative effect on community amenity as a result.

196. In a worse-case scenario, where there is an alignment of such impacts on the same common receptors situated in close proximity to the Proposed Project (i.e. within 500m), the reported residual air quality, noise (and vibration), traffic and visual effects during the Operational Phase would combine to create an Neutral, Imperceptible to Negative, Not Significant, and Long-term effect on the community amenity of residential, commercial and community receptors within 500m of the Proposed Project.

14.4.3.4 Community Accessibility and Severance

197. As the Operational Phase of the Proposed Project would constitute underground pipeline elements and associated above-ground infrastructure facilities (predominantly within defined site boundaries), it has been determined that this phase of the Proposed Project would not pose any potential impacts in regard to community accessibility and severance.

198. Therefore, it is considered that the magnitude of impact on community accessibility and severance during the Operational Phase of the Proposed Project would be negligible. As such, the significance of effects is reported as Neutral and Permanent (effect is not significant).

199. It should be noted that following the completion of the Construction Phase of the Proposed Project the land required to facilitate pipeline construction activities would be returned to the original landowner with a 20m wide Permanent Wayleave retained by Uisce Éireann for access/maintenance purposes.

200. The ownership of this 20m wide Permanent Wayleave would return to the landowner, with access permission granted to Uisce Éireann for the lifetime of the Proposed Project, in order to access the above-ground pipeline infrastructure and undertake maintenance work when necessary.

201. There would be no physical delineation of the 20m wide Permanent Wayleave from adjoining lands and landowners would be free to determine the use of land within the wayleave, subject to a number of restrictions, such as landowners not being permitted to build over the wayleave or plant larger species of trees due to the potential impact from their roots on the pipeline.

202. Some elements of the pipeline (primarily the various forms of above-ground valves) are also expected to be visible above ground which could also have an impact on land use. More information on the impact on this for agricultural land and other receptors considered to be important economic or natural resources can be found in Chapter 11 (Agriculture) and Chapter 18 (Material Assets) respectively.

14.4.3.5 Tourism

203. As outlined in Section 14.2.1.5, the tourism assessment considers the following impacts on tourism receptors: amenity impacts, access/severance impacts and visitor perception impacts; Table 14.26 outlines the tourism receptors located within 500m of the Proposed Project.

14.4.3.5.1 *Impacts on Amenity*

204. Effects on amenity arise from a combination of air quality, noise (and vibration), traffic and visual impacts as discussed in Section 14.2.1.3. The consideration and assessment of such effects has been undertaken in respect to community amenity in Section 14.4.3.3 and the findings of that assessment are also applicable to tourism receptors situated in proximity to the Proposed Project (see Table A14.10 in Appendix A14.1: Population Baseline). Please refer to Section 14.4.3.3 for further details.

14.4.3.5.2 *Impacts on Accessibility/Severance*

205. As the Operational Phase of the Proposed Project would constitute underground pipeline elements and associated above-ground infrastructure facilities (predominantly within defined site boundaries), it has been determined that this phase of the Proposed Project would not pose any potential impacts in regard to accessibility and severance on tourism receptors.

206. Therefore, while the sensitivity of tourism receptors is considered high, the magnitude of change is considered to be negligible. As such, the significance of effects on accessibility/severance on tourism receptors in proximity to the Proposed Project during the Operational Phase is considered to be Neutral and Permanent (effect is not significant).

14.4.3.5.3 *Impacts on Visitor Perception*

207. During the Operational Phase of the Proposed Project, the infrastructure components will either be located underground and/or within defined site boundaries with appropriate vegetation screening/architectural design that will reduce the visual change in the landscape brought on by their construction (see Chapter 16: Landscape & Visual for more information). As such, the Proposed Project will be largely obscured from view to tourists/visitors (and residents) within the area in which they are located.

208. Therefore, it is considered that the magnitude of impact on visitor perception would be negligible as a result of the operation of the Proposed Project. As such, the significance of effects is reported as Neutral and Permanent (effect is not significant).

209. It should be noted that a 'Visitor/Interpretive Centre' comprises part of the Proposed Project and is to be situated within the site for the WTP. The Visitor/Interpretive Centre is to contain a reception area and foyer, lecture theatre, display/exhibition area and offices. It is considered that this facility would be a welcome addition to the list of other existing tourism/public amenities on offer to tourists/visitors to the area. Further detail on the proposed 'Visitor/Interpretive Centre' can be found in Chapter 4 (Proposed Project Description).

14.4.3.6 Land Use and Land-take

210. Potential effects on land use/land-take as a result of the Proposed Project are outlined in Section 14.4.2.6: potential effects are experienced at the beginning of the Construction Phase and are of a permanent duration. As such, no further potential effects are reported in regard to the Operational Phase of the Proposed Project.

14.4.3.7 Summary of the Operational Effects

211. Table 14.30 provides a summary of the population effects during the Operational Phase. In the absence of mitigation measures, there would be no adverse significant effects during operation. There would be a significant beneficial effect on the national economy from operation of the Proposed Project.

Table 14.30: Summary of Operational Effects

Assessment Topic	Receptor Being Assessed	Sensitivity	Nature of Impact(s)	Magnitude of Impact	Significance of Effect (Pre-Mitigation)
Employment	Combined labour market within the counties in which the Proposed Project is situated	High	Positive	Negligible/Low	Positive, Not Significant/Slight, Long-term (effect is not significant)
	National labour market	High	Positive	Negligible	Positive, Not Significant, Long-term
Economy	National Economy	High	Positive	Medium/High	Positive, Significant and Long-term
Community Amenity	Residential, commercial and community receptors within 500m of the Proposed Project	N/A ¹	Negative	N/A ¹	Neutral, Imperceptible to Negative, Not Significant, and Long-term (effect is not significant)
Community Accessibility and Severance	Residential, commercial and community receptors within 500m of the Proposed Project	High	Neutral	Negligible	Neutral and Permanent (effect is not significant)
Tourism	(Tourism) Amenity	N/A ¹	Negative	N/A ¹	Neutral, Imperceptible to Negative, Not Significant, and Long-term (effect is not significant)
	(Tourism) Accessibility and Severance	High	Neutral	Negligible	Neutral and Permanent (effect is not significant)
	Visitor Perception	High	Neutral	Negligible	Neutral and Permanent (effect is not significant)
Land Use and Land-take	Residential, commercial and community receptors within the Planning Application Boundary of the Proposed Project	No Impact			

¹ N/A as the assessment of amenity (communities and tourism) is based on the residual effects from other topic assessments (air quality, noise and vibration, landscape and visual, and traffic and transport).

14.5 Mitigation and Monitoring Measures

14.5.1 Embedded Mitigation

212. The environment team has worked in close collaboration with the infrastructure design team to avoid or reduce environmental impacts through the Proposed Project design. This is referred to as embedded (or design) mitigation. Embedded mitigation is inherent to the Proposed Project design, and forms part of the project description and construction methodology described in Chapters 4 (Proposed Project Description) and 5 (Construction & Commissioning). As such, embedded mitigation is considered in the assessment of pre-mitigation effects in Section 14.4. Chapter 3 (Consideration of Reasonable Alternatives) details the reasonable alternatives that have been considered throughout the design development of the Proposed Project, including the environmental factors which have influenced the decision making.

14.5.2 Specific Mitigation and Monitoring Measures

213. Specific mitigation measures are proposed to prevent or reduce significant adverse effects. Where appropriate, consideration has been given to the appropriateness of monitoring measures, the purpose of which is to check that the mitigation measures required to prevent or reduce significant adverse effects are delivered and perform as intended, in accordance with the requirements of the EIA Directive.

214. This Population assessment (particularly the assessment of 'Community Amenity') has been informed by the residual effects reported in Chapter 6 (Noise & Vibration), Chapter 7 (Traffic & Transport), Chapter 12 (Air Quality) and Chapter 16 (Landscape & Visual). The reported residual effects in these chapters take into account embedded mitigation and good practice measures, as well as any additional topic-specific mitigation identified within the respective chapters.

215. The negative effects reported in this chapter are considered to already have sufficient mitigation in place, where applicable, to reduce residual effects on people and communities to a level that has been determined to be Not Significant. No (negative) residual significant effects have been identified for any of the assessment topics under consideration, therefore no further specific additional mitigation measures are proposed in respect of this Population assessment.

216. Mitigation and monitoring measures for the topic assessments that inform this Population assessment are included in the Construction Environmental Management Plan which has been produced to support this EIAR (refer to Appendix A5.1).

14.6 Residual Effects

217. Only impacts resulting in likely significant effects, as set out in the methodology in Section 14.2, are described below and summarised in Table 14.31.

218. During the Construction Phase, as summarised in Table 14.27, Positive, Significant and Short-term effects are anticipated in respect to 'Employment' and the expected benefits the Proposed Project will bring in terms of additional construction jobs to both the local construction labour market (within the counties that the Proposed Project is situated) and the national construction labour market. There are expected to be 239 direct jobs created during the Construction Phase of the Proposed Project, representing a 0.76% increase in the construction workforce locally; while 799 direct jobs are estimated to be created in the national construction labour market as a result of the construction of the Proposed Project, representing a 0.59% increase in the number of individuals working in this sector.

219. There is also anticipated to be Positive, Very Significant and Short-term effects on the national economy during the Construction Phase of the Proposed Project, as it is anticipated that the construction of the Proposed Project will contribute an 1.03% increase in GVA to the national economy as a result of the activities of the peak construction workforce for every year that it is required to construct the Proposed Project.
220. No negative potential effects on people and communities during the Construction Phase of the Proposed Project were considered to be significant as detailed in Section 14.4 (see Table 14.27).
221. During the Operational Phase, Positive, Significant and Long-term effects are anticipated in regard to the economy given the positive benefits that the Proposed Project will bring, once operational, in terms of facilitating anticipated demand requirements and resilience in supply for the Eastern and Midlands Region into the future (and almost 50% of the population of Ireland as a result).
222. No negative potential effects on people and communities during the Operational Phase of the Proposed Project were considered to be significant as detailed in Section 14.4 (see Table 14.30).
223. Table 14.31 provides a summary of the residual effects as reported within this Population assessment. In summary, there would be likely significant beneficial (positive) effects on employment and the economy during the Construction Phase of the Proposed Project. In addition, there would be likely significant beneficial (positive) effects on the economy during the Operational Phase of the Proposed Project. No likely significant negative effects are anticipated for any of the assessment topics within this Population assessment.

Table 14.31: Summary of Likely Significant Effects for Population

Assessment Topic	Receptor Being Assessed	Significance of Effect (Pre-Mitigation)	Mitigation and Monitoring	Residual effect (Post-Mitigation)
Construction Phase				
Employment	Combined construction labour market within the counties in which the Proposed Project is situated.	Positive, Significant and Short-term (an 0.76% increase in the construction workforce across all the counties within the study area).	N/A – Positive effect therefore no mitigation is required.	Positive, Significant and Short-term
	National construction labour market	Positive, Significant and Short-term (a 0.59% increase in the number of individuals employed in the construction labour market nationally).		Positive, Significant and Short-term
Economy	National economy	Positive, Very Significant and Short-term (an 1.03% increase in the contribution of the construction sector to the national economy from construction activities associated with the Proposed Project).		Positive, Very Significant and Short-term
Operational Phase				
Economy	National economy	Positive, Significant and Long-term (The Proposed Project would facilitate anticipated demand requirements and resilience in supply for the Eastern and Midlands Region).	N/A – Positive effect therefore no mitigation is required	Positive, Significant and Long-term

14.7 References

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