

13. Population and Human Health

13.1 Introduction

This section describes the social and economic factors that have the potential to affect people and communities of the proposed development. These factors could include, for example, changes in employment levels and economic opportunities, changes in community demographics and demand for public services, and the amenity value of the local area.

The social and economic factors that have the potential to affect human health were also assessed. This could include nuisance odour or noise caused from construction processes or more serious potential impacts from, for example, pollution of fresh water sources.

13.1.1 Policy & Plan Context

National, Regional and Local Plans and Policies relevant to the population and human health chapter are summarised as follows:

- County and Regional Development Plans for the immediate and adjacent counties in the study area;
- Tourism plans and strategies for the region, specifically the Shannon River such as 'Discover Ireland: Shannon' and 'Ireland's Ancient East';
- Lakeland and Inland Waterways Strategic Plan 2010 – 2016; and
- Irish Water, Water Services Strategic Plan (Oct 2015).

The Water Services Strategic Plan (WSSP) was published by Irish Water in October 2015. The WSSP is Ireland's first integrated national plan for the delivery of water services and is an essential part of ensuring the availability of safe drinking water. It also outlines how the environment is protected from the impacts of wastewater discharges, and how efficient modern systems meet the need of customers, contributing to economic growth and development.

13.1.2 Study Area

This proposed development is defined by the c.170km treated water pipeline component, extending from Parteen Basin on the River Shannon, directly south of Lough Derg in County Tipperary, through the midland counties of Offaly and Kildare, and terminating in the vicinity of Peamount Reservoir and environs in South County Dublin. The extent of the proposed development, particularly the c.170km treated water pipeline component, requires crossing a significant section of the country.

The assessment considered effects at a local level which may affect people that live in immediate proximity to the proposed development, along with larger urban centres nearby such as Limerick, Clare, Tipperary, Offaly, Laois, Kildare, and Dublin.

13.2 Baseline Information

13.2.1 Desktop Study

An initial desktop study of the emerging infrastructure development sites and preferred pipeline corridor was completed, and included available information on the socio-economic parameters within the project's study area.

A further study will be completed to assess the direct and indirect impacts that occur due to physical works, such as land-take and changes in access to properties. The study area for such impacts is typically defined as land within 500m of the land take boundary of the proposed development, however potential receptors up to 1km will be considered in order to establish a baseline that includes receptors that may be impacted by any pipeline route changes. For development-wide effects such as employment, economy and tourism, the study area comprises counties Tipperary, Offaly, Kildare, and Dublin however consideration of such development wide effects will also be given to county Laois as it is expected to benefit from the proposed development even though the preferred pipeline corridor is not located within its borders.

The broader benefits of proposed development will also be discussed within this section of the EIS and will include consideration of the following: employment, economy and tourism, land-use, community severance and accessibility, and amenity. The supply of treated water to the Region and its impact on future domestic, commercial and industrial water requirements and consequent economic growth will also be discussed.

Employment

Employment is an important socio-economic consideration as the creation and sustainment of employment opportunities can help to reduce poverty and facilitate economic and social development in communities. Construction and operational effects deemed relevant to the proposed development include direct jobs created/sustained as well as indirect and induced employment benefits. The effects will be assessed at a regional level (within the counties associated with the proposed development) as well as the national level.

Economy and Tourism

This assessment of economy and tourism will consider the potential for impacts on, and stimulation of, the local, regional and national economy. The assessment of local and regional economy will consider the towns and villages along the pipeline corridor and the assessment of the regional economy will consider the wider counties through which the proposed development influences.

Land-use

Direct changes in land-use as a result of land take, severance or changes in access will be assessed in order to capture the effects on existing residential, commercial, community, agricultural land and property. In addition, the introduction of new or large-scale infrastructure will be considered since this can affect the way that land may be used in the future, such as the potential to enhance or reduce the viability of subsequent development. These indirect effects on development land will be assessed within 1km of the proposed development.

Community Severance & Accessibility

Changes to access to community services and facilities resulting from the proposed development will be assessed, alongside any changes to non-motorised transport links (footways and cycle ways) or public transportation routes. The proximity of services and facilities such as schools, nursing homes and emergency services within the study area will be given detailed consideration. The assessment will cross reference to the traffic and transport assessment of the EIS in order to capture any potential severance effects. Changes to access to water services along the pipeline corridor during construction or operational phase will be assessed in order to measure the potential impact on these services within a local or extended context. Access to water

services can impact significantly on the quality of life of individuals whilst also limiting the level of economic development in an area.

Amenity

Amenity effects concern the ability of people to enjoy their surroundings and the general character or quality of their community. The potential combined amenity effect resulting from the proposed development such as noise and vibration, air quality and odour, and landscape and visual effects will be considered to assess how the overall public perception of the local area could be affected.

13.2.2 Future Survey Needs

As part of a wider desktop review that will inform the EIS baseline data gathering process, a comprehensive literature review of existing data sets and reports will be undertaken, including but not limited to the following:

- Relevant & most recent County Development Plans;
- Local Area Plans relevant to the study area;
- Midland Regional Planning Guidelines (RPG) 2010-2022;
- National Climate Change Strategy 2007-2012;
- National Spatial Strategy 2002-2020 (including the new National Planning Framework);
- Capital Investment Plan 2016-2021;
- Rebuilding Ireland – Action Plan for Housing and Homelessness;
- Aerial photography analysis; and
- Geospatial data analysis using GIS mapping.

A site visit of the study area will be completed to assess any potential sensitive sites and to clarify and confirm the validity of the information gathered in the course of the literature and desktop review.

13.2.3 Consultation

Consultation will be undertaken with the following organisations by way of stakeholder meetings and discussion:

- Fáilte Ireland;
- Local Chambers of commerce;
- Project EIA Specialists including hydrology, agricultural, landscape, ecology, noise, odour and traffic specialists;
- Public utility providers including Irish Water, GNI, ESB, Eir etc;
- Local employers including agricultural and fishing enterprises; and
- Local heritage and tourism officials.

13.3 Potential Impacts

13.3.1 Potential Construction Phase Impacts

The following impacts associated with the construction phase will be assessed:

Employment

- Contractors will require a sizeable workforce to complete and oversee the works. In addition to this direct employment, indirect and induced employment opportunities will be created at both local and regional level.

Economy and Tourism

- Non-labour construction expenditure will provide economic benefits at both local and regional level.
- Businesses and tourist attractions in the immediate proximity of proposed development face the possibility of some disruption during construction, potentially resulting in loss of trade. Agricultural-related economic activity could also be disrupted.

Land-use

- Construction works will take place predominantly on existing agricultural land therefore the assessment will cover the temporary loss of land and disturbance to agricultural production as a result of severance/changes in access. Direct impacts on residential, commercial and community land and property will also be considered.
- Additional temporary land take may be required to facilitate access/haul routes and storage depots to facilities construction activity.

Community Severance & Accessibility

- The proposed pipeline corridor is linear in nature and will dissect land plots/farms, potentially resulting in community severance, although this is likely to be minimal since the proposed route corridor will be located away from built up /densely populated areas.
- During the construction phase of the project there is likely to be a substantial increase in the level of construction related traffic causing disruption to local inhabitants within the vicinity of the construction sites. Local schools, emergency services and public transport links will be given detailed consideration in this regard.

Amenity

- Increased levels of traffic, noise, and dust may cause disruption to people, groups or other activities, although this is likely to be minimal since the proposed route corridor will be located away from built up areas.

13.3.2 Potential Operational Phase Impacts

The following impacts associated with the operation phase will be assessed:

Employment

- Employment opportunities may result from the water treatment plant operation as well as pipeline operation and maintenance.

Economy & Tourism

- The pipeline is of paramount importance for local, regional, and national macroeconomic development as stable water services are a primary pre-condition for economic and community development.
- Local communities located along the pipeline will benefit from a more effective and efficient water service, which will facilitate future development.
- If consideration of community gain is stipulated as part of planning conditions for the proposed development, this could provide benefits in a number of areas including tourism, environment, education, training, sports and leisure.

Land-use

- Minimal permanent effects are expected once the proposed development is operational. While the land used for construction will be returned to its previous use, the section of land containing the pipeline (the

permanent wayleave) will not be available for a change in land use, potentially impacting on the surrounding land's suitability for development.

Community Severance & Accessibility

- During the operational phase, minimal impacts on community severance are anticipated since the pipeline itself will be situated underground and out of public view. There is potential for some permanent effects through the prohibiting of future development with the permanent wayleave.

Amenity

- A permanent impact on amenity during the operational phase is not expected since the proposed development will be constructed underground and away from built up areas.
- Improvement in the quality of life for existing residents of rural communities given the improved water supply.

13.3.3 Broader Benefits of the Proposed Development

The primary benefits of the proposed development relate to the provision of secure and high quality water supplies to facilitate economic growth and employment creation in the areas/communities in the immediate proximity of the pipeline corridor, thus facilitating economic growth and employment generation. This area is defined as the Benefiting Corridor.

13.4 Proposed Methodology & Assessment Scope

A comprehensive study of the potential direct and indirect socio-economic impacts of the proposed development, as set out above, will be included in the EIS.

This assessment will be informed primarily by i) an extended study of the environmental baseline, ii) a site visit, and iii) public consultation.

The final socio-economic assessment will be carried out in accordance with relevant national and EU legislation and guidance.

Consideration will also be given to:

- Fáilte Ireland guidelines on the treatment of Tourism in an Environmental Impact Assessment (2007);
- UK Government Treasury Green Book (2003); and
- Additionality Guide (English Partnerships) (2008).

In line with the above guidance, the assessment will cover potential impacts on traffic and transport and will describe the existing conditions and the likely potential impacts associated with the construction and operation of the proposed development. The impact assessment process will involve:

- Assigning the receptor sensitivity;
- Identifying and characterising the magnitude and significance of any potential impacts;
- Incorporating measures to avoid and mitigate (reduce) these impacts; and
- Assessing the significance of any residual effects after mitigation.

The sensitivity of all types of socio-economic receptors impacted by the proposed development will be considered, with priority being assigned to residential dwellings and primary public services. GIS mapping will be used to capture relevant information. The sensitivity of the receptors will be assessed in conjunction with the magnitude of potential effects to draw conclusions on the overall significance of effects.

13.5 Human Health Assessment

In the development of the EIS, the human health assessment will consider individual specialist assessments, such as air quality, noise, vibration and water. Within this context, pollutant pathways and subsequent potential impacts on human health will be assessed. The main objective of the human health assessment in the context of the Population and Human Health Chapter will be to:

- Confirm that all pathways relevant to human health have been identified within the specialist assessments or other separate assessments (such as Flood Risk Assessment);
- Confirm that the EIS or other separate assessments appropriately address the potential for risk or vulnerabilities of the proposed development to accidents or natural disasters (such as flooding and sea level rise);
- Confirm that appropriate consideration of the inter relationships of human health impacts is presented in the EIS; and
- Confirm that the assessments have appropriately considered the need for key mitigation measures.

At a broad level, it is envisaged that the main elements of the human health assessment will include:

- Presenting details of feedback from the consultation phases of the project relating to human health issues;
- Gathering of the main statements relevant to human health from the EIS assessments, project description and any other separate assessments, into one coherent section so that it can be easily read and understood by the public and stakeholders; and
- Provide clear references for the EIS specialist assessments and separate assessments that fully address impacts and key mitigation measures relevant to human health.