

## 14. Agronomy

### 14.1 Introduction

This section refers to the potential impacts on agricultural land both as individual land parcels and farm holdings supporting a variety of enterprises. Any infrastructural project such as the construction of a pipeline adjacent to or through agricultural land will have an impact on the individual farms affected and may have an impact at a local, regional or national level.

A high level overview of the baseline conditions is included, together with the proposed methodology and a scope of the work likely to be required to undertake a detailed assessment of the impact of the proposed development as part of the EIS.

#### 14.1.1 Policy & Plan Context

National, Regional and Local Plans and Policies will be considered as part of this section of the EIS, including:

- County and Regional Development Plans for the immediate and adjacent counties in the study area;
- NRA Code of Practice Guide to Process for National Road Project Planning and Acquisition of Property for National Roads;
- Soils and Subsoils digital data from Environment Protection Agency; and
- Irish Water, Water Services Strategic Plan (Oct 2015).

#### 14.1.2 Study Area

This proposed development covers an extensive study area that extends from Parteen Basin on the River Shannon, directly south of Lough Derg in County Tipperary, through Tipperary and 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 project, particularly the c.170km treated water pipeline component, requires crossing a significant section of the country.

The agronomy assessment will cover effects at a local level which may affect landowners who live in immediate proximity to the proposed development, along with larger urban centres nearby. There are four counties (Tipperary, Offaly, Kildare, and Dublin) that are directly impacted by the proposed development in total, which collectively encompass c.950 landowners.

## 14.2 Baseline Information

### 14.2.1 Desktop Study

An initial desktop study has been carried out on the emerging infrastructure development sites and route corridor which used professional judgement, orthophotography mapping with indicative landownership information, windshield surveys and publically available information to collate information on the agricultural environment of the project's study area.

On confirmation of the infrastructure site locations and pipeline route, a further desktop review of all available data relating to the agricultural environment will be undertaken and will be supplemented with any additional information which may exist to support the development of the EIS.

### 14.2.2 Future Survey Needs

Field visits and assessments will be undertaken for the landowners within the preferred 200m pipeline corridor which may be subject to revision in response to environmental surveys, consultation and design development.

The study will enable an assessment of the impact of the proposed development on the agricultural environment. The agricultural assessment will detail the likely significant impacts at construction and operational stages and propose mitigation measures as required.

The macro impact of the proposed development will be assessed with regard to the amount of agricultural land required on a temporary and a permanent basis and the impact on any farms of significance or of regional importance.

### 14.2.3 Consultation

Consultation on any agronomy impacts of the proposed development will be undertaken with the following organisations:

- Bord Bia;
- Department of Agriculture Food, and the Marine;
- Agricultural Consultants Association;
- Irish Farmers Association;
- Teagasc; and
- Landowners.

## 14.3 Potential Impacts

An agronomy assessment will be conducted to identify impacts of the proposed development on the agricultural environment. The impact will be assessed at:

- National level;
- Regional level;
- Local level; and
- Individual farm level.

### National Level

Impacts that would be of national significance would have an effect on agricultural production or production within a major section of agriculture at a national scale. Such impacts would be unlikely from a single infrastructural project and would more likely occur through policy decisions for example, the imposition on control on fertiliser usage or the imposition of control on emissions in relation to greenhouse gases.

No such national impacts are predicted as a result of this development at this stage.

### Regional Level

Impacts that would be of regional significance would have an effect on regional agricultural production or production within a section of agriculture at a regional scale. Impacts might be described as regionally significant where, for example, a large area of land devoted to specialist crop production was required for a development, the absence of which land would have a regional impact on production levels.

No such regional impacts are predicted as a result of this development at this stage.

### **Local Level**

Impacts might be described as locally significant where an enterprise of local importance perhaps with employment consequences is interrupted or has to cease production.

### **Individual Farm Level**

Individual farm impacts include loss of land; impairment of use of retained land; or disturbance during the construction phase of the project or ongoing negative effects on the enterprise.

#### **14.3.1 Potential Construction Phase Impacts**

Temporary impacts are those which might occur at individual farm level during the pre-construction phase or during the construction phase.

Each infrastructural project has the potential to give rise to a variety of impacts during the construction phase.

The construction of the proposed development, at the margins of or through agricultural land would be likely to have the following temporary construction impacts:

- Temporary loss of use of land adjacent to the construction site;
- Temporary loss of services (for example water, power, etc.);
- Nuisance caused by increased traffic volume due to construction;
- Nuisance caused by noise emanating from the construction site;
- Nuisance caused by dust emanating from the construction site;
- Impact on shelter;
- Disturbance to farm operations:
- Interruption to drainage systems; and
- Restriction on use of land for specialist crop production or animal husbandry adjacent to construction site.

#### **14.3.2 Potential Operational Phase Impacts**

The potential for operational (permanent) impacts exists and may include the following:

- Permanent loss of land with a consequent increase in fixed overheads on retained lands;
- Possible severance of land with an interruption of access to possible severed lands; and
- Injurious affection to the retained land; e.g.
  - Restriction of the use potential of retained lands this can arise where the user of the new infrastructure might suffer risk or damage from activities traditionally carried out on remote farmland, e.g. spraying or some harvesting activities.

### **Significance of Impacts**

In rating the significance of impacts from an agricultural perspective, criteria as recommended by the EPA will be adopted. Impacts will be described as major, moderate or minor. The degree of impact will be assessed having regard to the sensitivity of the receptor and the magnitude and duration of the impact.

#### 14.4 Proposed EIS Methodology & Assessment Scope

It is proposed that an assessment of agronomy will be carried out in accordance with the EPA's current EIS guidance documents and established best practice, and will be tailored specifically to this project based on professional judgement and local circumstance:

The assessment will cover potential impacts on agronomy 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.

An assessment of the existing agricultural environment will be carried out through a desktop survey of available land plot mapping. This mapping will include a study area outline for each land parcel and orthophotography mapping with indicative landownership information.

The impact of the proposed scheme on individual farm holdings will be assessed by undertaking meetings and walkover surveys with the landowners/farmers, and discussed in terms of:

- Land take;
- The degree of severance;
- Types of farm enterprise;
- Impact on farm buildings;
- Impact on shelter;
- Disturbance during works; and
- Disturbance post work.